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Monograph

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An integrative systematic revision of the wishbone spiders (Araneae: Anamidae: *Aname* L. Koch, 1873) of subtropical and tropical eastern Australia, with the description of 55 new species

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Abstract. Spiders of the genus *Aname* L. Koch, 1873, commonly referred to as wishbone spiders, are a ubiquitous and extremely diverse component of the Australian mygalomorph fauna. Distributed across most of mainland Australia, and with an estimated endemic fauna in excess of 300 species, it is perhaps the world's most diverse mygalomorph spider genus. Unsurprisingly, this group presents an enormous taxonomic challenge, with 80% or more of the fauna still undescribed, and a large proportion of species occurring in arid, semi-arid or otherwise remote parts of inland Australia. To address these shortfalls, this study represents the first in a planned series of major revisions to rapidly advance our knowledge of the Australian wishbone spiders. Here, we revise the *Aname* fauna of subtropical and tropical eastern Australia, applying an integrative approach of unprecedented monographic scope for a taxonomic study on Australian Mygalomorphae, bringing together morphological monography, live habitus information, burrowing biology and molecular phylogenetics resulting from extensive field work. Our expanded molecular phylogeny is augmented with 131 new barcode (*COI*) sequences from eastern Australian *Aname* species, and we provide descriptions, natural history observations and distributional data for a total of 68 eastern species. Of these, 10 represent redescriptions of previously described and valid species: *A. barrema* Raven, 1985, *A. blackdownensis* Raven, 1985, *A. camara* Raven, 1985, *A. carina* Raven, 1985, *A. distincta* (Rainbow, 1914), *A. longitheca* Raven, 1985, *A. inimica* Raven, 1985, *A. pallida* L. Koch, 1873, *A. robertsorum* Raven, 1985, and *A. warialda* Raven, 1985. Three represent species previously considered junior synonyms that have now been revalidated: *A. attenuata* (Rainbow & Pulleine, 1918) stat. rev., *A. giraulti* (Rainbow, 1914) stat. rev., and *A. villosa* Rainbow & Pulleine, 1918

stat. rev. One species (*Aname collinsorum* Raven, 1985) is now considered a junior synonym of *Aname giraulti* (Rainbow, 1914) syn. nov. Finally, 55 species are newly described: *Aname albicula* sp. nov., *A. ammolithica* sp. nov., *A. aurantella* sp. nov., *A. aurensis* sp. nov., *A. barakula* sp. nov., *A. bifaceta* sp. nov., *A. boreovillosa* sp. nov., *A. braemar* sp. nov., *A. briggsi* sp. nov., *A. broadwater* sp. nov., *A. calida* sp. nov., *A. callitra* sp. nov., *A. cassowariensis* sp. nov., *A. consuelo* sp. nov., *A. convoluta* sp. nov., *A. corundaria* sp. nov., *A. cudmore* sp. nov., *A. dingo* sp. nov., *A. distorta* sp. nov., *A. eddieorum* sp. nov., *A. ethabuka* sp. nov., *A. ferruginea* sp. nov., *A. flexicaudula* sp. nov., *A. fossoria* sp. nov., *A. fuscochelicera* sp. nov., *A. gilbertensis* sp. nov., *A. harmoniosa* sp. nov., *A. hughenden* sp. nov., *A. inglewood* sp. nov., *A. insolita* sp. nov., *A. intermedia* sp. nov., *A. lambkinae* sp. nov., *A. lawrenceae* sp. nov., *A. litoralis* sp. nov., *A. magnifica* sp. nov., *A. mariala* sp. nov., *A. mulgana* sp. nov., *A. namoi* sp. nov., *A. nigrochelicera* sp. nov., *A. nigrotarsa* sp. nov., *A. occivillosa* sp. nov., *A. olkola* sp. nov., *A. platensis* sp. nov., *A. pyroensis* sp. nov., *A. rubrochelicera* sp. nov., *A. rupicola* sp. nov., *A. savannella* sp. nov., *A. savannensis* sp. nov., *A. scutithea* sp. nov., *A. serpentina* sp. nov., *A. tropicana* sp. nov., *A. truncata* sp. nov., *A. vigilata* sp. nov., *A. viridiensis* sp. nov., and *A. warrego* sp. nov.

Keywords. Monograph, Mygalomorphae, new species, open-holed trapdoor spider, Queensland, taxonomy.

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Introduction

Spiders of the genus *Aname* L. Koch, 1873 are perhaps the most ubiquitous mygalomorph spiders in Australia (Raven 1985a; Rix *et al.* 2021). They occur across the entire continental mainland, including on islands off both the eastern and western coastlines, and from the Wheatbelt, Nullarbor Plain and Murray-Darling Basin in the south, to Cape York, Arnhem Land and The Kimberley in the north. At home in most arid, semi-arid, sclerophyllous and monsoon tropical environments, they are only absent from the wettest and coldest mesic climates in south-eastern Australia (Rix *et al.* 2021). While a total of 53 species have currently been described (World Spider Catalog 2025), ongoing research indicates that the endemic fauna is estimated to be in excess of 300 species, making *Aname* perhaps the world's most diverse mygalomorph spider genus. This group therefore presents a considerable taxonomic challenge, with 80% or more of the fauna still undescribed, and a large proportion of species occurring in arid, semi-arid or otherwise remote parts of inland Australia where collecting has been sporadic.

The genus *Aname* belongs to the family Anamidae, commonly referred to as open-holed trapdoor spiders, a family that underwent a recent relimitation (see Harvey *et al.* 2018; as the then subfamily Anaminae within the family Nemesiidae) that confirmed generic limits and set the foundation for subsequent revisionary and phylogenetic work on individual genera (Harvey *et al.* 2020b; Rix *et al.* 2020a, 2020b, 2021, 2023). As the name implies, anamid spiders generally construct open, silk-lined burrows in soil, a behaviour that they have inherited from the common ancestor of the higher clade to which they belong, the Nemesioidina (Opatova *et al.* 2020; Wilson *et al.* 2023a). The other common name also applied to the Anamidae (particularly to *Aname*) – wishbone spiders – alludes to their underground burrow structure, as many species construct Y-shaped burrows with hidden secondary entrances or ‘escape chutes’ for predator evasion and potentially flood avoidance (Raven 1981; Main 1982; Harvey *et al.* 2018).

These higher-level biological commonalities hide an underappreciated and poorly documented degree of variation among *Aname* species, in both behaviour and morphology. For instance, burrow structures

within *Aname* are often clade-specific, with different groups using different amounts of silk in and around the burrow, inhabiting different microhabitats or substrates, and constructing burrows of different structural angles and depths (JDW, MSH, MGR pers. obs.; see Figs 6–14). In appearance, species vary from pallid to almost black, sometimes with reflective setae adorning the dorsal parts of the body, and adults can range from less than a centimetre to up to three centimetres in body length (Figs 6–14). Although detailed specific investigations into the life histories of these spiders have not yet been conducted, they likely share a number of characteristics typical of mygalomorph spiders, such as being relatively poor dispersers that are long-lived, with long generation times (Raven 1985b; Pérez-Miles *et al.* 2017; Opatova *et al.* 2020). These characteristics make them intrinsically vulnerable to habitat destruction, fragmentation or modification, as well as a suite of other potential threats (Harvey 2002; Rix *et al.* 2017b). Indeed, the potential vulnerability of *Aname* species, coupled with their prevalence in arid and semi-arid regions that are high activity areas for the resources and agricultural sectors, underscores the need for an accurate understanding of species limits and distributions within the genus.

A recent continent-wide phylogenetic and biogeographic study revealed the evolutionary patterns underlying Australia's rich *Aname* diversity (Rix *et al.* 2021). Based on that work, *Aname* is currently understood to comprise three major 'radiations' that are subdivided into eight named species-groups plus additional unnamed lineages (Fig. 1). Many of these groups have diversified over large tracts of the continent, resulting in overlapping lineage mosaics, with species from different species-groups often co-occurring in a given region (Rix *et al.* 2021). This biogeographic pattern, of overlapping lineages leading to areas of high alpha diversity within a single genus, is a now well-recognised phenomenon among Australian mygalomorph spiders (see Wilson *et al.* 2018; Rix *et al.* 2020, 2020b). However, two genera exemplify this pattern: *Aname* within the Nemesioidina, and the idiopid trapdoor spider genus *Idiosoma* Ausserer, 1871 within the Domiothelina. Both genera have diversified and are extremely speciose throughout the Australian continental arid zone, and both contain in excess of 150 species (Rix *et al.* 2017a, 2021).

The biogeographic analysis of Rix *et al.* (2021) indicated a north-western Australian origin for the genus *Aname*, with the highest phylogenetic diversity found in north-western and mid-western Western Australia, and multiple independent incursions into the arid zone by different species-groups belonging to separate radiations. Just two species-groups were recorded by Rix *et al.* (2021) from eastern Australia – the *pallida*-group (a lineage in the 'Temperate-Eastern Radiation' recorded only from eastern Australia), and the *whitei*-group (a lineage in the 'Continental Radiation' that occurs across the continent, and was represented in eastern Australia by one putative species in the biogeographic analysis). While eastern Australia represents a more phylogenetically depauperate fauna compared to the western half of the continent, it was also very poorly sampled in the 2021 study, with just eight out of the 174 putative species coming from the eastern states or territories (i.e., Queensland, New South Wales, the Australian Capital Territory, and Victoria). Recent smaller taxonomic treatments on *Aname* have also had a largely western focus (Harvey *et al.* 2012, 2020a, 2022; Castalanelli *et al.* 2020; Wilson *et al.* 2023b), with the last description of an *Aname* species from eastern Australia dating back to Raven (1985a), who described eleven species from Queensland and New South Wales and brought the total number of described species from the eastern states to 16. Eastern Australia thus represents a significant gap in our current knowledge of both *Aname* diversity and phylogenetic relationships.

This study represents the first of a series of planned major revisions seeking to rapidly advance our knowledge of the Australian wishbone spiders. We address the current eastern-Australian knowledge gap by conducting a comprehensive revision of the *Aname* of subtropical and tropical eastern Australia, from roughly north of the Hunter Valley biogeographical barrier in New South Wales (Bryant & Krosch 2016) to Cape York Peninsula in Queensland, and west to the Queensland border. We apply an integrative revisionary approach of unprecedented scope for a taxonomic study on Australian Mygalomorphae,

bringing together morphological monography, live habitus information, burrowing biology and molecular phylogenetics resulting from extensive field work. In doing so, we present a new, expanded molecular phylogeny for the genus, augmented with 131 new barcode (*COI*) sequences from eastern Australia (Fig. 1), and we describe a total of 68 eastern Australian species. Of these, 10 represent previously valid species, three represent revalidated species that were previously in synonymy, and 55 represent species new to science. We highlight the remarkable diversity of morphologies and behaviours that can be found among eastern Australian *Aname* (Figs 6–14), showcasing that, far from being a ‘backwater’ of diversity, north-eastern Australia hosts as diverse and complex a fauna as the rest of the continent.

Material and methods

Overview

Our objective in this revision was to achieve comprehensive yet practical results, adhering to a workplan designed to optimise the rate of species discovery and description while minimising unnecessary efforts.

First, we formulated initial species hypotheses based on male specimens in Australia’s major natural history collections. We used male specimens exclusively during this step because of the confounding effects of sexual dimorphism, and because males possess several taxonomically informative, external, secondary sexual structures, which can be most efficiently used for species delimitation (Figs 2–3). Additionally, a subset of recently collected male specimens were sequenced for the mitochondrial cytochrome *c* oxidase subunit I (*COI*) barcoding gene, aiding in the later association of male specimens with conspecific females.

Aside from primary type material, old female and juvenile specimens from natural history collections were not used during this revision, except in a very few unambiguous cases where it was clear as to which species hypothesis a female belonged. This was because confidently identifying legacy female specimens to species based on morphology alone generally requires dissection of the genitalia, and doing this for hundreds of specimens was deemed inefficient and unnecessary. Instead, we conducted extensive fieldwork through selected parts of inland Queensland, strategically chosen to allow sampling of the maximum number of species hypotheses within the shortest possible time frame (Fig. 1). This allowed us to sample adult female specimens corresponding to our male-based species hypotheses and to document natural history information for individual species as well as for the genus more broadly. We also received donations of fresh adult female specimens collected during faunal surveys in Queensland. All female specimens collected during fieldwork or donated were sequenced for the *COI* barcoding gene, facilitating their linkage to sequenced males, aiding in species delimitation, and contributing to the existing phylogeny of the genus *Aname*. When male and female specimens of a species hypothesis could not be linked conclusively via DNA sequences, we employed a combination of spatial proximity, similar morphology, and an understanding of the relationships between specific morphologies and phylogenetic associations to match them. Females that could be confidently identified as distinct morphospecies, despite not being associated with any of the male-based species hypotheses, were described as separate species based on female morphology (usually with support from DNA sequences). Finally, following the association of male and female morphology, DNA sequences, and natural history data for as many species hypotheses as possible, newly discovered species were formally described. ChatGPT (OpenAI, 2024) was used to research potential species epithets for new species.

Species concept

We adopted the unifying species concept of De Queiroz (2007), which regards species as hypotheses to be evaluated based on multiple lines of evidence. We considered species as morphological hypotheses, defined by groups of geographically proximate specimens sharing a unique morphological trait (autapomorphy) that allows for their diagnosis and that is supported by molecular data (where available),

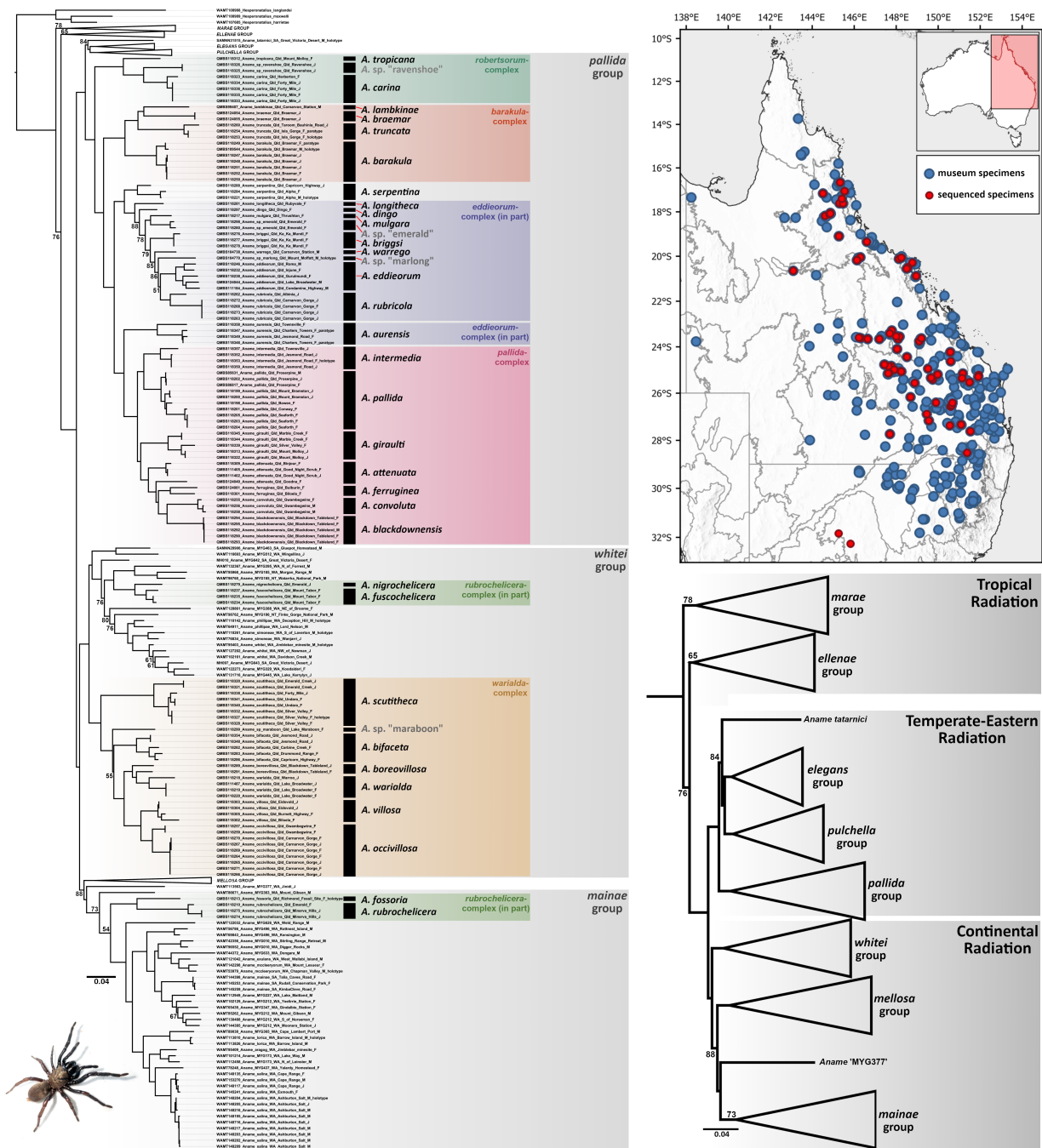


Fig. 1. Phylogeny and general map of eastern Australian *Aname* L. Koch, 1873. Left: IQ-TREE Maximum Likelihood phylogeny for the genus *Aname* with species groups sensu Rix *et al.* (2021) highlighted in grey, species complexes as defined in this study highlighted in colour, and showing the phylogenetic position of many of the species described herein, as well as some potential species (those with nicknames in quotation marks) that may turn out to be distinct, but did not meet our standards for description. Species groups that are not represented in eastern Australia are collapsed. Support values on the phylogeny show the results of 1000 ultrafast bootstrap replicates, and are only shown in cases where support was below 90%. Top-right: a map of subtropical and tropical eastern Australia, showing the locality of all *Aname* specimens included in this study. Bottom-right: a smaller phylogeny highlighting the higher-level relationships between species groups of *Aname* as recovered in this study.

following a concept/process very similar to that detailed by Hedin & Milne (2023). That is, morphological hypotheses were further refined using molecular data, ensuring that species represent monophyletic units where possible and/or show COI divergences generally indicative of species-level entities. In cases of incongruence between morphological and molecular datasets, we weighed the strength of each line of evidence against each other to make our final decision. Critically, the non-monophyly of a morphological species hypothesis based solely on COI data was not considered irreconcilable, as it may reflect high levels of population structure within the species and the limited deeper-time resolution of COI.

Fieldwork and specimen donations

The major fieldwork for this project was conducted during April–May 2023 and comprised two 10-day expeditions by JDW and MGR. The first expedition followed a broad return loop from Brisbane to Emerald, covering a large area of south-eastern and central inland Queensland. The second expedition followed an inland route roughly from Cairns to Chillagoe, Undara, Charters Towers and Townsville, focusing on northern inland Queensland. These represented two major regions where many species hypotheses from multiple species complexes exist in proximity, thus maximising our ability to efficiently sample and study the natural history of as many species and lineages as possible. Sampling locations were chosen initially based on the sampling localities of previously sorted museum male specimens (see Fig. 1 for a general map of museum specimens and sequenced specimens). Then, the exact sampling locations were chosen based on accessibility, varying habitat types, and the integrity of the habitat. Burrows were located through visual inspection, photographed, and subsequently excavated to retrieve specimens. Habitus shots against a white background were taken for all collected specimens, which were then preserved in 75% ethanol for morphological examination, except for one or a few legs, which were preserved in cold 100% ethanol for DNA extraction and sequencing. As well as these major fieldtrips, additional specimens were collected on several minor fieldtrips (over the period 2022–2023) to other specific areas throughout Queensland (e.g., the Central Mackay Coast, Brigalow Belt South and New England Tableland bioregions), with specimens donated by other researchers also greatly augmenting our dataset of specimens with fresh tissues for sequencing.

Morphological descriptions

Specimens examined in this study are housed in various institutions: the Queensland Museum, Brisbane (QMB); the Australian Museum, Sydney (AMS); the Western Australian Museum, Perth (WAM); and the Zoological Museum Hamburg (ZMH). Specimens were examined and photographed in 75% ethanol. All specimens listed in this revision were examined or could be confidently matched to species based on illustrations or descriptions in the literature. When detailing specimen locations, coordinates are rounded to the nearest minute to reduce conservation risks associated with poaching and live trade for the hobbyist pet market (see Marshall *et al.* 2022; Lassaline *et al.* 2023). Lists of material are ordered based on latitude, with the most northern specimens listed first.

For taxonomic figures of each species, we imaged the holotype specimen (usually a male), along with a specimen of the opposite sex (if available and able to be linked). In some cases, particularly when the holotype was significantly degraded due to long-term preservation, we also imaged a second specimen of the same sex to provide a more accurate representation of the species' morphology. Digital auto-montage images were captured using a Leica M165C stereo microscope with a mounted DFC425 or K5C digital camera, and processed using Leica Application Suite version 3.7 or X Industry Core software (Leica, Wetzlar, Germany). For male specimens, the left leg I and left pedipalp, as well as the right copulatory organ (bulb/embolus), were dissected for photography. For females, the left leg I and genital plate were dissected. In cases where the appendage on the standard side was damaged or missing, we utilised the corresponding appendage from the opposite side, and in these cases, images are reflected in the taxonomic plates for easy comparison. To image the female genitalia, we first shaved setae from the female genital plate, then cleared it in lactic acid for several hours, until the spermathecae were

clearly visible. When making comparisons between figures of different species, if the relevant parts of the figures being compared are the same, they are only listed for the figure pertaining to the first species (e.g., ‘Fig. 15J–Q; cf. Fig. 25J–Q’ will be listed as ‘Fig. 15J–Q; cf. Fig. 25’, and ‘Fig. 18L; cf. Figs 21L, 29L, 33L’ will be listed hereafter as ‘Fig. 18L; cf. Figs 21, 29, 33’). Furthermore, in cases where figures vary from the standard set of images (e.g., Figs 76, 117), figure parts are labelled to be consistent with other figures, sometimes leading to non-sequential letter sequences for these figures.

Figure 2 and Table 1 illustrate and describe the standard measurements taken for all specimens described in this study, and show the location of most structures referenced in the diagnoses and descriptions.

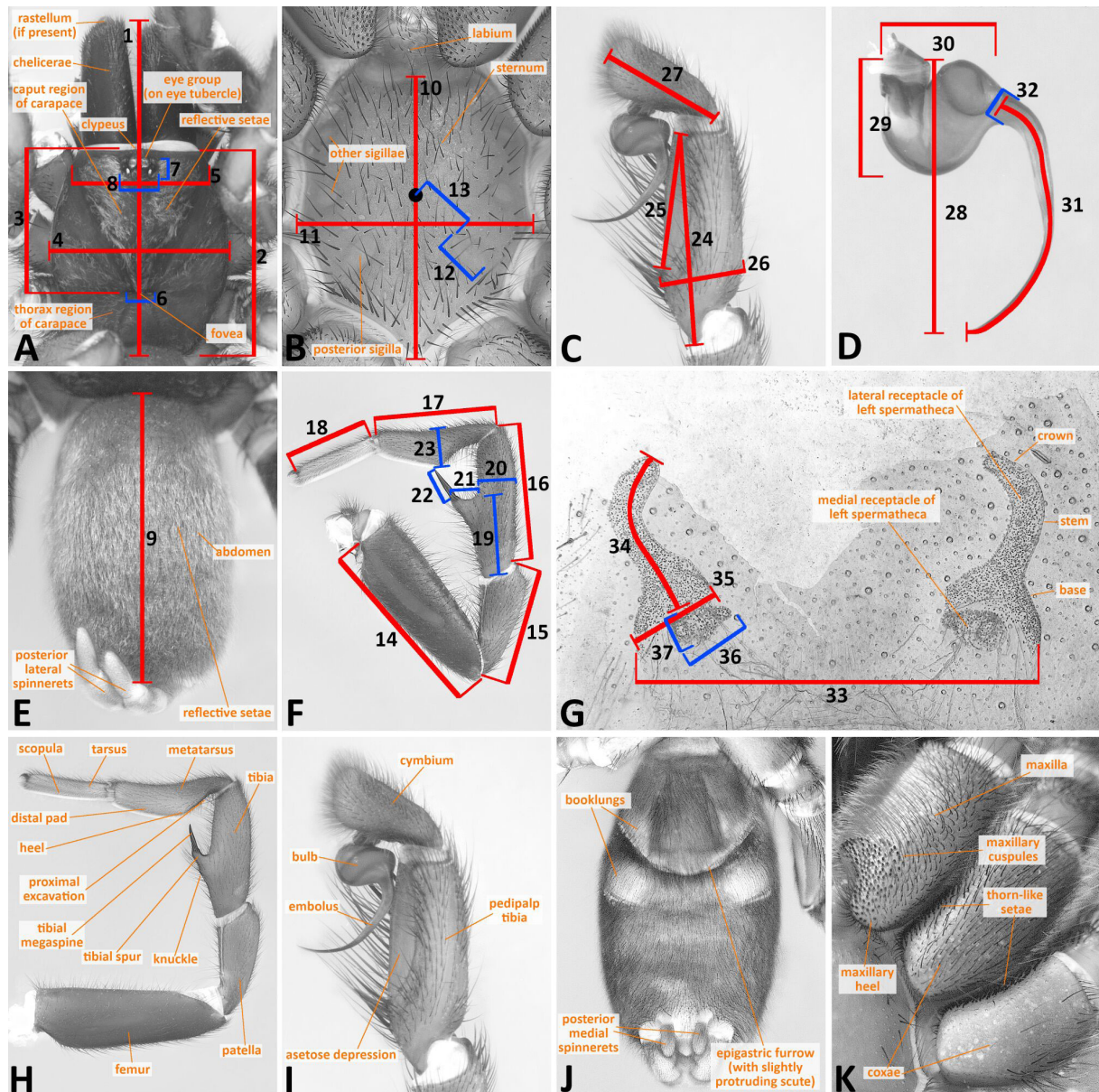


Fig. 2. Standard measurements and referenced morphological structures used in this revision (see Table 1). **A.** Dorsal prosoma (measurements taken on males/females). **B.** Sternum (males/females). **C.** Retrolateral pedipalp (males). **D.** Copulatory organ (males). **E.** Dorsal abdomen (males/females). **F.** Retrolateral leg I (15–18 males/females; 19, 21–23 males). **G.** Dorsal view of spermatheca (females). **H.** Retrolateral leg I (males). **I.** Retrolateral pedipalp of male. **J.** Ventral abdomen (males/females). **K.** Ventral view of left maxilla and coxae I–II (males/females).

Table 1. Name of measurements labelled as numbers in Figure 2, and referenced in species diagnoses and descriptions.

No.	Name
1	Prosoma length (summed with abdomen length to get total body length)
2	Carapace length
3	Clypeus to fovea length
4	Carapace width
5	Caput width
6	Fovea width
7	Eye group length
8	Eye group width
9	Abdomen length
10	Sternum length
11	Sternum width
12	Posterior sigilla length
13	Central sternum to posterior sigilla length
14	Femur I length
15	Patella I length
16	Tibia I length
17	Metatarsus I length
18	Tarsus I length
19	Tibia I length to distal face of spur (TIS sensu Castalanelli <i>et al.</i> 2020)
20	Tibia I width (TID sensu Castalanelli <i>et al.</i> 2020).
21	Tibial spur height (TISH sensu Castalanelli <i>et al.</i> 2020).
22	Tibial megaspine length
23	Metatarsus I width (MID sensu Castalanelli <i>et al.</i> 2020)
24	Pedipalp tibia length (PTL sensu Castalanelli <i>et al.</i> 2020)
25	Asetose depression length (PDL sensu Castalanelli <i>et al.</i> 2020)
26	Pedipalp tibia width
27	Cymbium length
28	Copulatory organ length
29	Bulb length
30	Bulb width
31	Embolus length
32	Embolus width
33	Female genitalia width
34	Lateral vesicle length
35	Lateral vesicle width
36	Medial vesicle length
37	Medial vesicle width

Some of these were previously defined by Castalanelli *et al.* (2020) and for those structures we have maintained the abbreviations defined in that study for consistency (see Table 1). The following additional abbreviations are used throughout the text: D=dorsal; Fe=femur; Me=metatarsus; Pa=patella; PL=prolateral; Ta=tarsus; Ti=tibia; V=ventral. All measurements are given in millimetres.

The structure of the taxonomic plates used here is a modified version of Harvey *et al.* (2022) and is consistent with Wilson *et al.* (2023b). To enhance accessibility in such a large revision, we provide an

initial key to species-complexes plus miscellaneous species, with accompanying images of important diagnostic features (Figs 3–5). Complexes were defined based on morphology and do not always correspond to monophyletic clades according to the most recent phylogeny. Species descriptions are organised first by species complex, then alphabetically within each complex, with miscellaneous species (i.e., those not belonging to any of the complexes defined here) listed last in alphabetical order. Each section pertaining to a major species complex begins with a figure showing burrows, habitus shots and distribution maps for that complex (Figs 6–12). Figures 13 and 14 show distribution maps for the minor species complexes and miscellaneous species, respectively. The section for each species complex begins with diagnostic information, a key to species of that complex, and natural history information specific to that complex.

Molecular phylogenetics

To phylogenetically place new *Aname* species, we constructed an updated phylogeny for the genus by integrating the multi-locus molecular dataset presented in Rix *et al.* (2021), and augmented with sequences from Wilson *et al.* (2023b), with additional *COI* barcode sequences generated for this study. The multi-locus markers included three mitochondrial and four nuclear loci: cytochrome *c* oxidase subunit I (*COI*), 12S ribosomal RNA (12S), 16S ribosomal RNA (16S), histone H3 (*H3*), 18S ribosomal RNA (18S), 28S ribosomal RNA (28S), and elongation factor 1-gamma (*EF-1 γ*). Newly obtained sequences (identified in [Supplementary File 1](#)) were amplified using Folmer *et al.* (1994) primers, with PCR conditions consistent with previous studies on Anamidae by the authors (Harvey *et al.* 2018). DNA extraction and PCR were conducted at the WAM Molecular Systematics Unit. Editing of sequence chromatograms and alignment was performed using the Geneious software package (Biomatters Ltd). Alignment utilised the MAFFT Version 1.3.6 plug-in within Geneious (Katoh *et al.* 2002), with all sequence data deposited in GenBank (refer to [Supplementary File 1](#)). Phylogenetic analysis employed maximum likelihood (ML) in the WIQ-TREE online interface (Nguyen *et al.* 2015; Trifinopoulos *et al.* 2016). ModelFinder (Kalyaanamoorthy *et al.* 2017) was used for selecting models of DNA evolution, with the alignment partitioned by locus and, for protein-coding genes (*COI*, *H3*, *EF-1 γ*), by codon. Node support was assessed through 1000 ultrafast bootstrap replicates (Minh *et al.* 2013). The resulting ML tree was visualised using FigTree Version 1.4.42 (<http://tree.bio.ed.ac.uk/software/figtree>). Maps were created using QGIS (<https://qgis.org>), and all figures were generated using GIMP (<https://www.gimp.org/>).

Results

Overview

Through the integrative approach detailed above, we were able to identify a total of 68 species hypotheses in the genus *Aname* from subtropical and tropical eastern Australia. This total fauna included all but three of the species previously described from this region; however, *A. kirrama* Raven, 1984, *A. tigrina* Raven, 1985, and *A. diversicolor* (Hogg, 1902) were not included in this revision for several reasons. Firstly, the holotypes of *A. kirrama* and *A. tigrina* have been examined, but neither appear to fall within the bounds of the genus *Aname* sensu Harvey *et al.* (2018). We intend to deal with these species later, following examination of more specimens, at which point their generic position can be clarified. Based on the illustrations of Hogg (1902), *A. diversicolor* appears to belong to the *eddieorum*-complex, a species complex defined in this study (see Figs 1, 3B, 7). Based on the shape of its palpal tibia and leg I (especially its rounded metatarsal heel), it appears to be a close relative of other western species in this species complex, such as *A. mulgana* sp. nov. and *A. briggsi* sp. nov., and may turn out to be conspecific with one of these. However, the type locality of *A. diversicolor*, determined to be Deka Station, Blackall, Queensland by Harvey & Main (1996), is not within the range of any of the *eddieorum*-complex species described herein, the illustrations of Hogg (1902) are not adequate to confirm the identity of the species, the holotype has been lost, and we were not able to resample at the type locality. As such, we have not

included this species in this revision, and suggest that resampling the type locality for an *eddieorum*-complex species (ideally a male specimen) will be necessary to redescribe this species and confirm its identity.

Furthermore, although the primary types of all previously-described species dealt with here were examined, some female paratype specimens were not, and, given the high levels of sympatry of species in eastern Australia, we cannot assume that all of these paratypes belong to the species to which they were originally assigned. We therefore list them below, and do not consider them further in the taxonomic treatments.

Unassigned paratypes

Aname barrema Raven, 1985

AUSTRALIA – **Queensland** • 2 ♀♀; Stanthorpe; 28°39' S, 151°56' E; 28 Mar. 1974; B. Pinase leg.; QMB S1246 • 5 ♀♀; Doondi Station; 28°17' S, 148°33' E; 9 Sep. 1979; R.J. Raven leg.; QMB S1242 • 3 ♀♀; Braemar State Forest; 27°13' S, 150°50' E; 15–19 Oct. 1979; R.J. Raven leg.; excavated from burrow, nest covered over; QMB S1240 • 1 ♀; Chinchilla; 26°45' S, 150°38' E; 10 Oct. 1972; R.J. McKay leg.; QMB S1241.

Aname carina Raven, 1985

AUSTRALIA – **Queensland** • 1 ♀; Holloway Beach; 16°51' S, 145°44' E; 9 Apr. 1978–8 Apr. 1980; A. Williamson leg.; QMB S1256.

Aname warialda Raven, 1985

AUSTRALIA – **New South Wales** • 1 ♀; Bundarra; 30°11' S, 151°04' E; 12 Mar. 1980; QMB S1293. – **Queensland** • 1 ♀; Gore; 28°18' S, 151°29' E; 28 Jan. 1941; W.W. McDowell leg.; QMB W1195 • 1 ♀; Moombah [E of St George]; 27°59' S, 149°18' E; 9–11 Jan. 1979; R.J. Raven leg.; QMB S1295.

We divide the species described herein into seven major morphological species complexes: the *pallida*-complex, *eddieorum*-complex, *barakula*-complex, *robertsororum*-complex, *barrema*-complex, *warialda*-complex, and *rubrochelicera*-complex (see Figs 1, 3, 5, 6–12); five minor complexes (for which only male morphology, and no natural history information, is known): the *callitra*-complex, *aurantella*-complex, *mariala*-complex, *flexicaudula*-complex, and *savannella*-complex (see Figs 4–5, 13); along with several miscellaneous species with otherwise unique morphologies (see Figs 1, 4–5, 14).

Molecular phylogenetics

We were able to add a total of 131 new *COI* sequences to the previous *Aname* phylogeny. These represent 33 of the species described in this revision, as well as five putative new species that are not described here because adult specimens are not available, or because there was insufficient evidence to confirm their status as a distinct species (Fig. 1). Consistent with Rix *et al.* (2021), all spiders sequenced here fall within either the '*pallida* group' or the '*whitei* group'. However, our expanded dataset reveals new detail of the diversity and finer-scale phylogenetic relationships found within eastern Australian clades.

The *pallida* group can be subdivided into five main clades, which approximately correspond to five of the morphological species complexes defined above. These include a clade corresponding to the *pallida*-complex + *A. aurensis* sp. nov. (of the *eddieorum*-complex), primarily distributed along the Queensland coast; the remainder of the *eddieorum*-complex + *A. serpentina* sp. nov., generally found slightly further inland than the *pallida*-complex; the *barakula*-complex, located in south-eastern Queensland; and the

robertorum-complex, found in northern Queensland. Within the *whitei* group, species were recovered in three separate clades. One corresponds with the monophyletic *warialda*-complex, widespread throughout Queensland and northern New South Wales, while the other two correspond to two separate parts of the *rubrochelicera*-complex. Species found in different clades often coexist sympatrically, as evident from the distribution maps of the major complexes (Figs 6–12). For instance, during our central Queensland fieldtrip, we encountered several localities where members of the *pallida*- and/or *eddieorum*-complexes, *warialda*-complex, and *rubrochelicera*-complex were all present.

Although the new phylogeny has shed light on the phylogenetic diversity, species limits and relationships of eastern *Aname*, the well-documented limitations of the new *COI* sequences must be acknowledged (see Moritz & Cicero 2004), and it is for this reason that we have chosen to maintain the species complexes that were formed based on morphology, despite some being polyphyletic units in the current phylogeny. An exemplar-based, multi-locus approach is required in future to refine our understanding of deeper phylogenetic relationships among eastern Australian *Aname* species.

Taxonomy

Class Arachnida Cuvier, 1812
 Order Araneae Clerck, 1757
 Family Anamidae Simon, 1889
 Subfamily Anaminae Simon, 1889

Genus *Aname* L. Koch, 1873

Aname L. Koch, 1873: 465.

Dekana Hogg, 1902: 138 (synonymised by Raven 1981: 328).

Dolichosternum Rainbow & Pulleine, 1918: 168 (synonymised by Raven 1981: 328).

Sungenia Rainbow & Pulleine, 1918: 162 (synonymised by Raven 1981: 328).

Type species

Aname: *Aname pallida* L. Koch, 1873, by monotypy.

Dekana: *Dekana diversicolor* Hogg, 1902, by original designation.

Dolichosternum: *Dolichosternum attenuatum* Rainbow & Pulleine, 1918, by monotypy.

Sungenia: *Chenistonia atra* Strand, 1913, by monotypy.

Diagnosis

Modified from Harvey *et al.* (2018): species of *Aname* can be diagnosed from all other Australian anamid genera by the presence of a ventral asetose depression on the palp tibia of males (see Fig. 2I and Figs 3–4 for further examples). They can be further distinguished from *Chenistonia* Hogg, 1901, *Proshermacha* Simon, 1908, *Teyloides* Main, 1985, *Teyl* Main, 1975, and *Namea* Raven, 1984 (all members of the subfamily Teylinae) by the presence of a short cymbium without a medial constriction, and further from *Namea* and *Teyl* by the presence of a tibial megaspor. Both adult males and females can further be distinguished from *Chenistonia*, *Proshermacha*, *Teyloides*, *Teyl*, and *Namea* by the presence of a relatively broad (extending laterally and anteriorly) patch of cuspules on the maxillae.

Description

See Harvey *et al.* (2018).



Fig. 3. Example male morphologies for major species complexes in subtropical and tropical eastern Australia, to be used in conjunction with the diagnostic key to species complexes and miscellaneous species. **A.** *pallida*-complex. **B.** *eddieorum*-complex. **C.** *barakula*-complex. **D.** *robertsorum*-complex. **E.** *barrema*-complex. **F.** *warialda*-complex. **G.** *rubrochelicera*-complex. Image sets show, from left to right: i=dorsal prosoma; ii=sternum; iii, iv=retrolateral tibia I; v, vi=retrolateral metatarsus I; vii, viii=retrolateral pedipalp; ix, x=copulatory organ.



Fig. 4. Example male morphologies for minor species complexes and miscellaneous species in subtropical and tropical eastern Australia, to be used in conjunction with the diagnostic key to species complexes and miscellaneous species. **A.** *callitra*-complex. **B.** *aurantella*-complex. **C.** *mariala*-complex. **D.** *flexicaudula*-complex. **E.** *savannella*-complex. **F.** *A. platensis* sp. nov. (*pallida*-complex). **G.** *A. distorta* sp. nov. **H.** *A. lawrenceae* sp. nov. **I.** *A. savannensis* sp. nov. (*rubrochelicera*-complex). **J.** *A. camara* sp. nov. **K.** *A. consuelo* sp. nov. **L.** *A. insolita* sp. nov. **M.** *A. litoralis* sp. nov. **N.** *A. olkola* sp. nov. **O.** *A. ethabuka* sp. nov. **P.** *A. namoi* sp. nov. **Q.** *A. serpentina* sp. nov. **R.** *A. viridiensis* sp. nov. Image sets A–E show, from left to right: carapace, retrolateral tibia I, retrolateral metatarsus I, retrolateral pedipalp, copulatory organ. Image sets F–R show a subset of these.

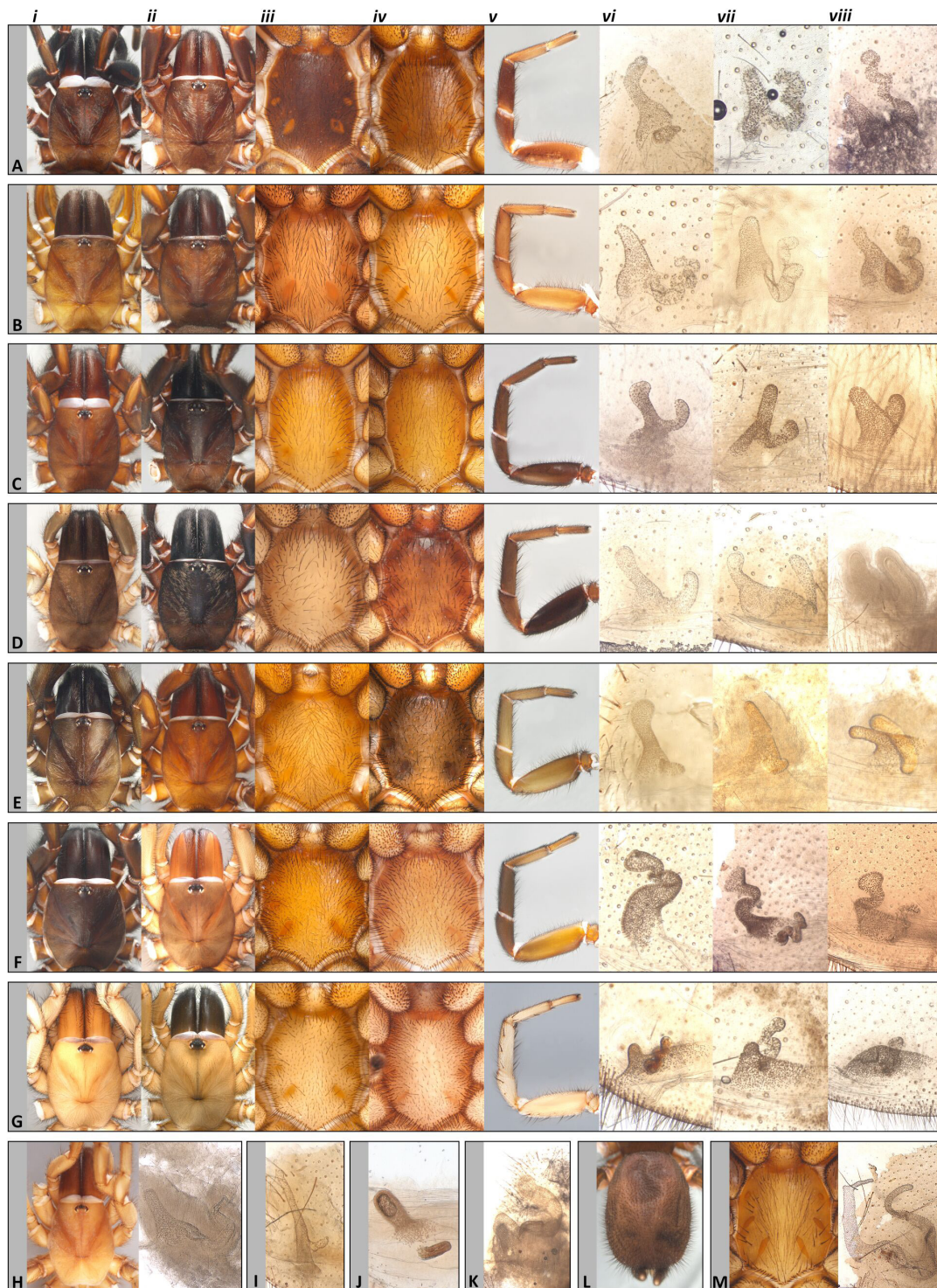


Fig. 5. Example female morphologies for species complexes and miscellaneous species in subtropical and tropical eastern Australia, to be used in conjunction with the diagnostic key to species complexes and miscellaneous species. **A.** *pallida*-complex. **B.** *eddieorum*-complex. **C.** *barakula*-complex. **D.** *robertsororum*-complex. **E.** *barrema*-complex. **F.** *warialda*-complex. **G.** *rubrochelicerca*-complex. **H.** *A. camara*. **I.** *A. consuelo* sp. nov. **J.** *A. olkola* sp. nov. **K.** *A. intermedia* sp. nov. (*pallida*-complex). **L.** *A. blackdownensis* sp. nov. (*pallida*-complex). **M.** *A. serpentina* sp. nov. Image sets A–G show, from left to right: i, ii=dorsal prosoma; iii, iv=sternum; v=proleg I; vi, vii, viii=left spermatheca in dorsal view. Image sets H–M show a subset of these, except L, which shows the dorsal abdomen.

Key to the species complexes of *Aname* from tropical and subtropical eastern Australia, including miscellaneous species

Note that the keys in this paper use Boolean operators, with character states separated by a comma and linked by an “or” operator denoting states that *may or may not* apply (and only one must apply for the requirements of the statement to be met). Semi-colons separate implicit relevant states and should be treated as “and” operators in a Boolean context (with any exceptions noted in brackets).

1. Males.....	2
– Females.....	27
Male morphology	
2. Embolus length $>1.5 \times$ bulb length (e.g., Figs 3A–D, E _[ix] , F; 4D, F–H, L–M, Q–R).....	3
– Embolus shorter (e.g., Figs 3E _[ix] , G; 4A–C, E, I–K, N–P).....	16
3. Carapace length <4.0 mm; embolus long, straight, and reflexed relative to the bulb (e.g., Fig. 4D).	<i>flexicaudula</i> -complex
– Carapace longer.....	4
4. Copulatory organ with a highly reflexed and broad corkscrew-shaped embolus (Fig. 4Q).....	<i>A. serpentina</i> sp. nov.
– Copulatory organ otherwise.....	5
5. Palp tibia with a small, tight patch of thorn-like setae on retrolateral side of asetose depression; metatarsus I proximal excavation length $\sim 0.6 \times$ metatarsus I length, with a sharp heel (Fig. 4J).....	<i>A. camara</i> Raven, 1985
– Palp tibia without tight patch of thorn-like setae; metatarsus I with a shorter proximal excavation, or a more rounded heel.....	6
6. Metatarsus I proximal excavation length $<0.5 \times$ metatarsus I length, with a prominent and sharp heel, and a relatively straight distal pad (e.g., Fig. 3A).....	<i>pallida</i> -complex (except <i>A. platensis</i> sp. nov.)
– Metatarsus I otherwise.....	7
7. Embolus with a relatively wide basal section that tapers to a curvy and sinuous distal section after about 0.4–0.5 of length (e.g., Fig. 3B).....	<i>eddieorum</i> -complex
– Embolus otherwise.....	8
8. Embolus thin, with a sharp bend at about 0.2–0.4 of length, before a relatively straight distal section (e.g., Fig. 3D).....	<i>robertsorum</i> -complex
– Embolus otherwise.....	9
9. Tibial megaspine length $<0.2 \times$ tibia I length, usually angled almost parallel with tibia; prolateral patellae of pedipalp and leg I with three or more spines (or spine ‘sockets’ if spines have been lost); sternum length $<1.2 \times$ width, covered in short setae (e.g., Fig. 3F).....	<i>warialda</i> -complex
– Tibial megaspine longer, or prolateral patellae of pedipalp and leg I and pedipalp with two spines or less, or sternum narrower.....	10
10. Palp tibia asetose depression length $\sim 0.8 \times$ palp tibia length; embolus length $>2.5 \times$ bulb length (Fig. 4G, M).....	11
– Asetose depression or embolus shorter.....	12

11. Embolus length $\sim 4.6 \times$ bulb length (Fig. 4G)	<i>A. distorta</i> sp. nov.
– Embolus shorter ($\sim 2.8 \times$ bulb length) (Fig. 4K)	<i>A. consuelo</i> sp. nov.
12. Metatarsus I proximal excavation $> 0.5 \times$ metatarsus I length; copulatory organ with bulb tapering into the embolus, a strong curve at about 0.6 of length, and a small hook at the tip (Fig. 4R).....	<i>A. viridiensis</i> sp. nov.
– Proximal excavation shorter; copulatory organ otherwise	13
13. Copulatory organ with the bulb tapering into the embolus, the embolus thicker at the base before tapering and curving sharply at about 0.6 of its length (Fig. 3E)	<i>barrema</i> -complex, in part
– Copulatory organ otherwise.....	14
14. Metatarsus I length $\sim 3.5 \times$ width (Fig. 4F)	<i>A. platensis</i> sp. nov. (<i>pallida</i> -complex)
– Metatarsus I thinner (length $> 3.9 \times$ width)	15
15. Sternum length $> 1.25 \times$ width; tibial spur triangular (e.g., Fig. 3C)	<i>barakula</i> -complex
– Sternum broader; tibial spur more digitiform (Fig. 4H)	<i>A. lawrenceae</i> sp. nov.
16. Carapace length < 4.0 mm	17
– Carapace longer	19
17. Copulatory organ with bulb tapering into embolus, embolus with thick base; palp tibia with thorn-like setae along retrolateral edge of asetose depression, getting denser proximally (Fig. 4M).....	<i>A. litoralis</i> sp. nov.
– Copulatory organ with more demarcated bulb and embolus; palp tibia without thorn-like setae (e.g., Fig. 4C, E).....	18
18. Embolus with sharp tip; metatarsus I length $> 4 \times$ width (e.g., Fig. 4C)	<i>mariala</i> -complex
– Embolus with wider tip; metatarsus I thicker (e.g., Fig. 4E).....	<i>savannella</i> -complex
19. Embolus thick and relatively straight, with a slight angle change at the tip; tibial spur triangular (e.g., Fig. 3G).....	<i>rubrochelicera</i> -complex (except <i>A. savannensis</i> sp. nov.)
– Copulatory organ otherwise, or tibia I with a more digitiform spur.....	20
20. Copulatory organ with an angular bulb with a slight ridge adjacent to the embolus (e.g., Fig. 4A).....	<i>callitra</i> -complex
– Copulatory organ otherwise.....	21
21. Tibial spur digitiform (e.g., Fig. 4I, N–O).....	22
– Tibial spur more triangular (e.g., Fig. 4B).....	24
22. Tibial megaspine $> 0.3 \times$ tibia I length; embolus straight, with slight bend near tip (Fig. 4O)	<i>A. ethabuka</i> sp. nov.
– Tibial megaspine shorter; embolus more strongly curved (Fig. 4I, N).....	23
23. Metatarsus I proximal excavation $\sim 0.4 \times$ metatarsus I length, with a rounded heel and a long, straight distal pad; copulatory organ with a slightly angular bulb and the embolus protruding roughly perpendicular to the bulb (not reflexed) (Fig. 4I)	<i>A. savannensis</i> sp. nov. (<i>rubrochelicera</i> -complex)
– Metatarsus I with a longer proximal excavation; copulatory organ with a more rounded bulb and a shorter embolus that is more reflexed relative to the bulb (Fig. 4N).....	<i>A. olkola</i> sp. nov.

24. Copulatory organ with the bulb tapering into the embolus, the embolus thicker at the base before tapering and curving sharply at about 0.6 of its length (Fig. 3E, left bulb).....
*A. inimica* Raven, 1985 (*barrema*-complex)
 – Copulatory organ otherwise..... 25
25. Embolus wide and flattened, thinning just before tip (Fig. 4L)..... *A. insolita* sp. nov.
 – Embolus more attenuate 26
26. Embolus curving gradually; metatarsus I length $>4 \times$ width (e.g., Fig. 4B)..... *aurantella*-complex
 – Embolus curving strongly near base; metatarsus I thicker (Fig. 4P)..... *A. namoi* sp. nov.
- Female morphology**
27. Spermathecae with a relatively elongate, undulating vesicle (lateral vesicle length $>2 \times$ width), and medial vesicle absent or tightly undulating (e.g., Fig. 5F) *warialda*-complex
 – Spermathecae always with two vesicles, and lateral vesicle straighter (e.g., Fig. 5A, C, G)..... 28
28. Spermathecae lateral vesicle length $<0.25 \times$ genitalia width; lateral vesicle length $<0.55 \times$ width (e.g., Fig. 5G)..... *rubrochelicerca*-complex
 – Lateral vesicles more elongate (length $>0.25 \times$ genitalia width) (e.g., Fig. 5A–C)..... 29
29. Spermathecae lateral vesicle length $>13 \times$ width; medial vesicle length $>10 \times$ width (Fig. 5M).....
 *A. serpentina* sp. nov.
 – Spermathecae vesicles less elongate (length $<10 \times$ width) (e.g., Fig. 5A–B, F) 30
30. Spermathecae with two vesicles, lateral vesicle length $>1.5 \times$ width, medial vesicle shorter than lateral vesicle; sternum length $>1.35 \times$ width (e.g., Fig. 5C)..... *barakula*-complex
 – Spermathecae otherwise, or sternum broader 31
31. Spermathecae lateral vesicles bulbous, widening from base towards tip, and medial vesicles short, straight, and separated from the lateral vesicles (Fig. 5J)..... *A. olkola* sp. nov.
 – Spermathecae otherwise 32
32. Spermathecae with medial vesicles $<0.5 \times$ lateral vesicle length (e.g., Fig. 5A_[vi], E_[vi, vii], I) 33
 – Medial vesicles longer relative to lateral vesicles (e.g., Fig. 5A_[vii, viii], B–D)..... 35
33. Spermathecae lateral vesicle length $\sim 5.9 \times$ width (Fig. 5I) *A. consuelo* sp. nov.
 – Spermathecae with less elongate lateral vesicles (length $<3.5 \times$ width) (e.g., Fig. 5A_[vi], E_[vii, viii]) .. 34
34. Spermathecae with lateral vesicles that curve medially just before their tips (Fig. 5A_[vi]) *pallida*-complex, in part
 – Spermathecae with lateral vesicles that don't curve medially just before tips (Fig. 5E_[vi, vii])..... *barrema*-complex (except *A. inimica* Raven, 1985)
35. Spermathecae lateral vesicle length $\sim 1 \times$ width; medial vesicle length $\sim 2.6 \times$ lateral vesicle length (Figs 5K)..... *A. intermedia* (*pallida*-complex)
 – Spermathecae otherwise 36
36. Anterior legs bicoloured, with darker femurs and lighter distal segments; spermathecae lateral vesicle length $>0.25 \times$ genitalia width and angled laterally, medial vesicles curving gradually from a medial to a lateral angle (e.g., Fig. 5D) *robertsorum*-complex
 – Legs and/or spermathecae otherwise 37

37. Posterior abdomen covered in erect, bristle-like setae (Fig. 5L) *A. blackdownensis* sp. nov. (*pallida*-complex)
 – Posterior abdomen not covered in erect, bristle-like setae 38
38. Spermathecae lateral and medial vesicle length $\sim 0.3 \times$ genitalia width, and laterally angled (Fig. 5E_[viii]) *A. inimica* (*barrema*-complex)
 – Spermathecae otherwise 39
39. Spermathecae medial vesicle length $\geq 1.0 \times$ lateral vesicle length, projecting at an antero-medial angle and undulating (e.g., Fig. 5A_[vii, viii]) *pallida*-complex, in part
 – Medial vesicle with basal section projecting more medially or postero-medially, before undulating anteriorly (Fig. 5B, H) 40
40. Spermathecae medial vesicle length $\sim 0.30 \times$ genitalia width; distance between lateral and medial vesicle crowns roughly equal to the length of the lateral vesicles; body colouration light tan (Fig. 5H) *A. camara* Raven, 1985
 – Spermathecae medial vesicle length $\sim 0.35 \times$ genitalia width; crowns closer together; body colouration darker (e.g., Fig. 5B) *eddieorum*-complex

Aname pallida-complex

Figs 1, 3A, 4F, 5A, K–L, 6, 15–33

Remarks

See the key to complexes and Figures 3–5 for diagnostic information. In life, spiders of the *pallida*-complex are usually dark red-brown, sometimes with lighter segments on some or all of the legs (Fig. 6). However, somatic colouration can be surprisingly variable within species (see, for example, the two female *A. giraulti* specimens pictured in Fig. 6). Females of the *pallida*-complex generally have reflective bronze setae on the carapace, and sometimes also on the dorsal abdomen and femora. Males of at least some species have reflective silver setae on the carapace and dorsal abdomen (Fig. 6). Spiders of this complex generally construct an open, silk-lined burrow without silk outside of the entrance, with the main entrance often on an angle relative to the ground surface, and with a hidden secondary ‘wishbone’ entrance. The burrows are usually found in areas with a leaf-litter layer, and indeed the main entrance is often somewhat embedded within the leaf-litter (Fig. 6).

Distribution

The *pallida*-complex has a largely sub-coastal distribution, occurring along a strip of the Queensland coast from the New England Tablelands and Southeast Queensland bioregions along the New South Wales border, as far north as the Einasleigh Uplands and Wet Tropics bioregions in north Queensland (Fig. 6). They occur no more than a few hundred kilometres inland of the Pacific coast, with the most inland species being *A. convoluta* sp. nov., which occurs about 300 km from the coast. They generally occur in drier woodlands, although some of the northern species can be found in lowland tropical vine scrub or rainforest habitats.

Composition

The *pallida*-complex includes nine described species: *Aname pallida* L. Koch, 1873, *A. attenuata* (Rainbow & Pulleine, 1918), *A. blackdownensis* Raven, 1985, *A. convoluta* sp. nov., *A. ferruginea* sp. nov., *A. giraulti* (Rainbow, 1914), *A. intermedia* sp. nov., *A. platensis* sp. nov., and *A. vigilata* sp. nov.

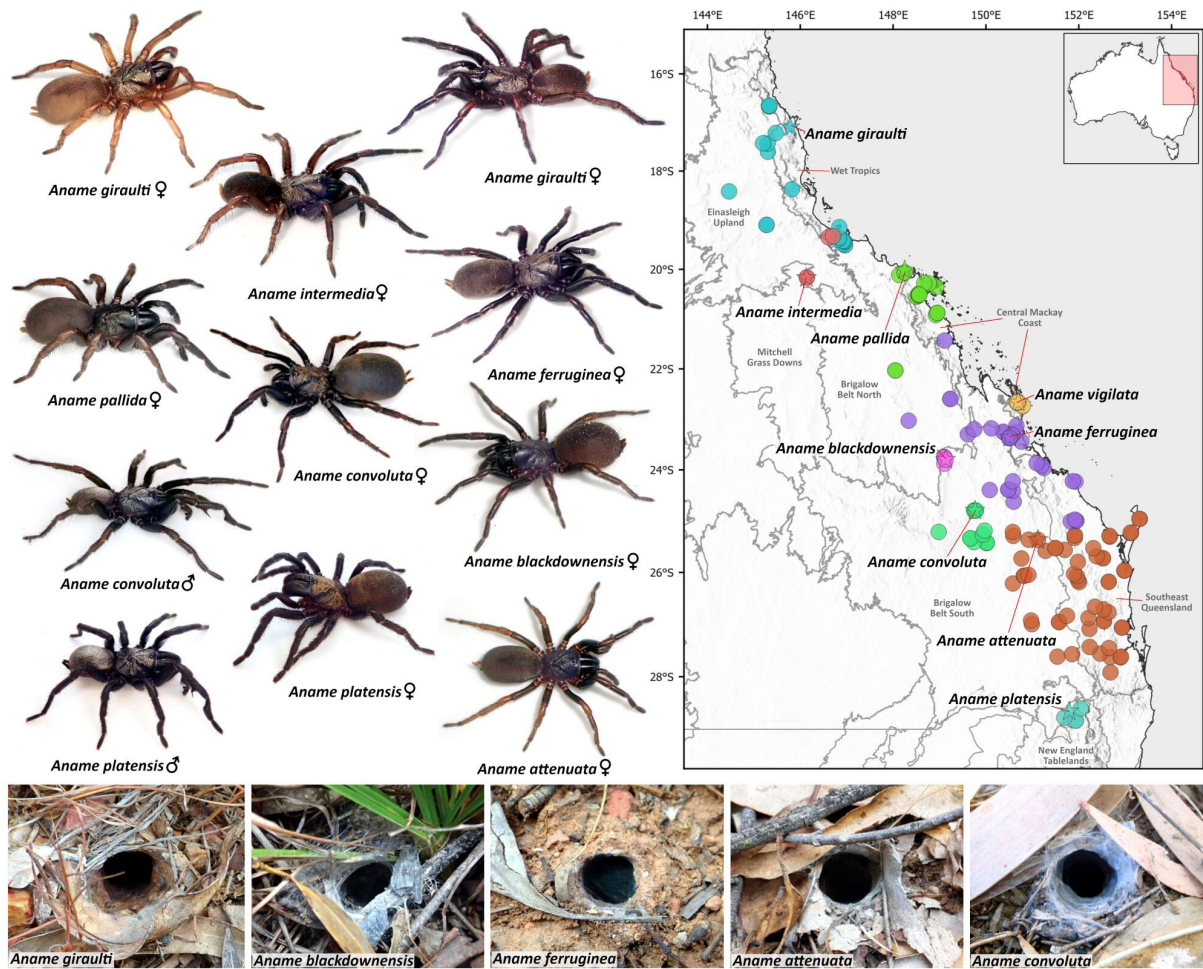


Fig. 6. *Aname pallida*-complex species habitus images, distribution map, and burrow architecture. Points on the map represented by a star are type localities. Note that intraspecific variation occurs in both physical appearance and burrow architecture, and images shown here should be treated only as examples, not used for species diagnosis.

Key to species in the *Aname pallida*-complex

Note: females are unknown for *A. vigilata* sp. nov.

- 1. Males..... 2
- Females 10

Males

- 2. Metatarsus I with a rounded heel (Fig. 31)..... *A. platensis* sp. nov.
- Metatarsus I with a sharp heel 3
- 3. Embolus with a relatively wide basal section, which then tapers to an attenuate, sinuous distal section after about 0.4 of length (similar to *eddieorum*-complex species) (Fig. 29) *A. intermedia* sp. nov.
- Embolus with a narrower base, tapering gradually to tip (e.g., Figs 15, 18, 21)..... 4

4. Embolus reflexed, with a small hook at the tip; palp tibia without short, thorn-like setae along the retrolateral edge of the asetose depression (Figs 15, 25, 27)..... 5
 - Embolus not reflexed and without a small hook at the tip; palp tibia with thorn-like setae along retrolateral edge of asetose depression (e.g., Figs 18, 21, 23)..... 7
5. Embolus length $\sim 2.0 \times$ bulb length and only slightly reflexed; tibial spur digitiform (Fig. 25) *A. ferruginea* sp. nov.
 - Embolus longer and more reflexed, tibial spur more triangular (Figs 15, 27)..... 6
6. Embolus length $\sim 2.3 \times$ bulb length (Fig. 27) *A. giraulti* (Rainbow, 1914)
 - Embolus longer ($\sim 2.5 \times$ bulb length) (Fig. 15) *A. pallida* L. Koch, 1873
7. Embolus length $> 2.0 \times$ bulb length (Fig. 23) *A. convoluta* sp. nov.
 - Embolus shorter 8
8. Copulatory organ with the bulb tapering into the embolus (Fig. 18)
 - *A. attenuata* (Rainbow & Pulleine, 1918)
 - Embolus more demarcated from the bulb (Figs 21, 33) 9
9. Posterior abdomen covered in erect, bristle-like setae (Fig. 21) *A. blackdownensis* Raven, 1985
 - Posterior abdomen not covered in erect, bristle-like setae (Fig. 33) *A. vigilata* sp. nov.

Females

10. Spermathecae lateral vesicle length $\sim 1.0 \times$ width, medial vesicles length $\sim 2.6 \times$ lateral vesicle length and curving gradually from a medial to a lateral angle (Fig. 30) *A. intermedia* sp. nov.
 - Spermathecae otherwise (e.g., Figs 16, 20, 24)..... 11
11. Spermathecae medial vesicle length $< 0.5 \times$ lateral vesicle length (Figs 16, 26, 28) 12
 - Spermathecae with longer medial vesicles relative to lateral vesicles 14
12. Spermathecae lateral vesicle length $< 1.5 \times$ width (Fig. 26)..... *A. ferruginea* sp. nov.
 - Spermathecae with more elongate lateral vesicles (Figs 16, 28)..... 13
13. Occurs in central Queensland, in or near the Central Mackay Coast Bioregion (Fig. 6) (based on current data, females of *A. pallida* and *A. giraulti* cannot be confidently distinguished morphologically) (Fig. 16) *A. pallida* L. Koch, 1873
 - Occurs in tropical north Queensland, in the Wet Tropics and Einasleigh Upland Bioregions, or the northern part of the Brigalow Belt North Bioregion (Fig. 6) (based on current data females of *A. pallida* and *A. giraulti* cannot be confidently distinguished morphologically) (Fig. 28) *A. giraulti* (Rainbow, 1914)
14. Spermathecae medial vesicle length $\sim 0.6 \times$ genitalia width and cork-screw shaped (Fig. 24) *A. convoluta* sp. nov.
 - Spermathecae with shorter medial vesicles (length $< 0.5 \times$ genitalia width)..... 15
15. Posterior abdomen covered in erect, bristle-like setae (Fig. 22) *A. blackdownensis* Raven, 1985
 - Posterior abdomen not covered in erect, bristle-like setae (Figs 20, 32)..... 16
16. Spermathecae medial vesicle length $\sim 4.1 \times$ width, undulating slightly (Figs 19–20)
 - *A. attenuata* (Rainbow & Pulleine, 1918)
 - Spermathecae with straighter and less elongate medial vesicles (Fig. 32)..... *A. platensis* sp. nov.

Aname pallida L. Koch, 1873

Figs 1, 6, 15–17

Aname pallida L. Koch, 1873: 465, pl. 35 fig. 8.

Aname pallida – Raven 1981: 329, figs 1–3, 13, 48; 1985: 403, fig. 2. — Harvey *et al.* 2018: 444, figs 3–4, 16a–f. — Rix *et al.* 2021: figs 3, 5, 7–8.

Aname “MYG689” – Rix *et al.* 2021: figs 3, 5, 7.

non *Aname pallida* – Raven 1981: figs 8–10, 14, 44–47, 49 (illustrated male QMB S696 [Rockhampton], females QMB S697 [Biloela], QMB S703 [Monto], and females in fig. 46 [Gin Gin], fig. 47 [Banana], fig. 49 [Gladstone], all here identified as *A. ferruginea* sp. nov.). — Harvey *et al.* 2018: fig. 16g (imaged female QMB S9413 from Mount Elliot, here identified as *A. giraulti* (Rainbow, 1914)).

Diagnosis

Males of *A. pallida* can be distinguished from all species for which males are known except *A. attenuata*, *A. blackdownensis*, *A. convoluta* sp. nov., *A. ferruginea* sp. nov., *A. giraulti*, *A. intermedia* sp. nov., and *A. vigilata* sp. nov. by a moderate to large body size (carapace length >4.0 mm), and the presence of a long embolus (embolus length/bulb length >1.5), a proximal excavation less than or equal to half the length of metatarsus I, and a prominent and sharp heel on metatarsus I (Fig. 15Q). Males of *A. pallida* can be distinguished from those of *A. attenuata*, *A. blackdownensis*, *A. convoluta*, *A. intermedia*, and *A. vigilata* by the presence of a reflexed embolus with a small hook at the tip, and the absence of short, thorn-like setae along the retrolateral edge of the asetose depression on the palp tibia (Fig. 15K–M; cf. Figs 18, 21, 23, 29, 33). Males of *A. pallida* can be distinguished from those of *A. ferruginea* sp. nov. by the presence of a longer and more reflexed embolus (embolus length/bulb length >2.2), and a shorter, more triangular tibial spur (Fig. 15J–Q; cf. Fig. 25). Males of *A. pallida* can be distinguished from those of *A. giraulti* by the presence of a longer embolus (embolus length/bulb length ~2.5; cf. ~2.3 in *A. giraulti*) (Fig. 15L; cf. Fig. 27).

Females of *A. pallida* can be distinguished from all species for which females are known except *A. ferruginea* sp. nov. and *A. giraulti* by the presence of spermathecae with two vesicles, with relatively long and straight lateral vesicles (lateral vesicle length/genitalia width >0.25) that curve medially at their ends, and very short, straight medial vesicles (medial vesicle length/lateral vesicle length <0.5) (Fig. 16D, L). Females of *A. pallida* can be distinguished from those of *A. ferruginea* by the presence of spermathecae with more elongate lateral vesicles (lateral vesicle length/width >2.0) (Fig. 16L; cf. Fig. 26). Females of *A. pallida* can be distinguished from those of *A. giraulti* by their distribution (Fig. 6), occurring in central Queensland, in or near the Central Mackay Coast Bioregion (based on current data females of *A. pallida* and *A. giraulti* cannot be confidently distinguished morphologically) (Fig. 16; cf. Fig. 28).

Type material

Holotype

AUSTRALIA – Queensland • subadult ♂; Bowen; 20°01' S, 148°15' E; ZMH MGH 8104.

Other material examined

AUSTRALIA – Queensland • 1 juv.; Mount Bramston, off Links Road, Whitsunday Shores Estate; 20°04' S, 148°15' E; 40 m a.s.l.; 18 Aug. 2023; M.G. Rix, J.D. Wilson and T.L. Miller leg.; excavated, open burrow on firebreak trail, dry vine scrub; QMB S118199 • 1 juv.; Mount Bramston, off Links Road, Whitsunday Shores Estate; 20°04' S, 148°15' E; 40 m a.s.l.; 18 Aug. 2023; M.G. Rix, J.D. Wilson and T.L. Miller leg.; excavated, open burrow on firebreak trail, dry vine scrub; QMB S118200 • 1 ♀;

SW of Bowen, off Mount Dangar Road, near corner of Peter Delemothe Road; 20°07' S, 148°08' E; 42 m a.s.l.; 18 Aug. 2023; M.G. Rix, J.D. Wilson and T.L. Miller leg.; excavated, open burrow on ground, sclerophyll forest; QMB S118198 • 1 ♀; Conway National Park, Swamp Bay Trail, off Shute Harbour Road, Shute Bay; 20°17' S, 148°46' E; 12 m a.s.l.; 19 Aug. 2023; M.G. Rix, J.D. Wilson and T.L. Miller leg.; excavated, open burrow on bank, sclerophyll forest; QMB S118201 • 1 ♂; Cannonvale; 20°17' S, 148°40' E; 31 Oct. 2003; J. Wyeth leg.; QMB S61051 • 1 ♂; Dent Island, via Mackay; 20°21' S, 148°56' E; Oct. 1954; J.S. Hayes leg.; WAM T151830 • 1 ♂; Proserpine, Airport Drive, Site XY12; 20°29' S, 148°34' E; 36 m a.s.l.; 5 Nov. 2007–13 Feb. 2008; R.J. Raven leg.; pitfall trap, closed woodland; QMB S85631 • 1 ♂; Proserpine, near Airport, Whitsunday Sporting Car Club track, Site XY13; 20°29' S, 148°34' E; 5 Nov. 2007–13 Feb. 2008; R.J. Raven leg.; QMB S85423 • 1 juv.; Proserpine, Deadmans Creek; 20°30' S, 148°33' E; 21 m a.s.l.; 10 Nov. 2007; R.J. Raven leg.; pitfall trap, open forest; QMB S86836 • 1 ♂; Proserpine, Thompson Creek, site XY15; 20°31' S, 148°33' E; 30 m a.s.l.; 6 Nov. 2007–13 Feb. 2008; R.J. Raven leg.; pitfall trap, closed forest; QMB S85374 • 1 ♂; Proserpine, Thompson Creek, site XY14; 20°31' S, 148°34' E; 44 m a.s.l.; 12 Nov. 2007; R.J. Raven leg.; closed forest; QMB S86817 • 1 juv.; Proserpine, Thompson Creek; 20°32' S, 148°33' E; 30 m a.s.l.; 19 Aug. 2023; M.G. Rix, J.D. Wilson and T.L. Miller leg.; excavated, open burrow on ground, sclerophyll forest; QMB S118202 • 1 ♀; Proserpine, Thompson Creek, site XY16; 20°33' S, 148°30' E; 9 Nov. 2007; R.J. Raven leg.; rainforest; QMB S86854 • 1 ♀; Finlaysons Point, 2 km NW of Seaforth; 20°53' S, 148°57' E; 11 m a.s.l.; 20 Aug. 2023; M.G. Rix, J.D. Wilson and T.L. Miller leg.; excavated, open burrow on ground, littoral rainforest; QMB S118205 • 1 ♀; Finlaysons Point, 2 km NW of Seaforth; 20°53' S, 148°57' E; 13 m a.s.l.; 20 Aug. 2023; M.G. Rix, J.D. Wilson and T.L. Miller leg.; excavated, open burrow on ground, littoral rainforest; QMB S118203 • 1 ♀; Finlaysons Point, 2 km NW of Seaforth; 20°53' S, 148°57' E; 13 m a.s.l.; 20 Aug. 2023; M.G. Rix, J.D. Wilson and T.L. Miller leg.; excavated, open burrow on ground, littoral rainforest; QMB S118204 • 1 ♀; WSW of Seaforth, Mount Ossa-Seaforth Road; 20°55' S, 148°55' E; 16 m a.s.l.; 16 Feb. 2023; M.G. Rix, M.S. Harvey and T.L. Miller leg.; excavated, open burrow on bank next to road; QMB S118231 • 1 ♂; 5 km S of Moranbah; 22°02' S, 148°03' E; 25 Jun.–20 Dec. 1997; G.B. Monteith and E. Kruck leg.; intercept trap, gravel ridge; QMB S32446 • 1 ♂; 5 km S of Moranbah; 22°02' S, 148°03' E; 25 Jun.–20 Dec. 1997; G.B. Monteith and E. Kruck leg.; pitfall trap, bendee scrub; QMB S44334.

Description

Male (QMB S86817)

GENERAL (Fig. 15A–Q). Body length 18.57, in good condition, colour presumably faded due to preservation.

DORSAL PROSOMA (Fig. 15A, E–F). Carapace length 7.46, width 6.43, length/width 1.16, clypeus to fovea length/carapace length 0.70, caput width/carapace width 0.68, carapace red-brown, caput slightly darker than thorax, reflective setae present, heavy on caput, moderate on thorax, fovea procurved, fovea width/carapace length 0.12 (Fig. 15A, F); chelicerae dark red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.61 (Fig. 15A); eye group rectangular, width/length 1.99, eye tubercle present (Fig. 15E).

ABDOMEN (Fig. 15B, D). Abdomen length 6.87, grey, dorsal pattern absent, with full covering of reflective setae.

VENTRAL PROSOMA (Fig. 15C, G–I). Labium cuspules absent (Fig. 15H); maxillae heel distinct, cuspules present, count=about 90, extending posteriorly onto heel, extending laterally about 25% of maxillae length (Fig. 15C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 15C, I); sternum length/width 1.19, central sternum with consistent covering of short setae, row of longer setae around posterior edges (Fig. 15G–H); posterior sigilla ovoid, central sternum to posterior sigilla length/

sternum length 0.21, posterior sigilla length/sternum length 0.16 (Fig. 15G–H); other sigilla small, round and lateral (Fig. 15G–H).

LEG I (Fig. 15N–Q). Leg I red-brown, lighter on distal metatarsus and tarsus, reflective setae on dorsal femur, femur length 6.14, patella length 4.12, tibia length 4.53, metatarsus length 4.23, tarsus length 2.78, total length 21.80, leg I length/carapace length 2.92 (Fig. 15N–O); scopulae on distal metatarsus and tarsus (Fig. 15N–O); spine count Fe D 1, Fe PL 1, Pa PL 2 (distal rubbed off), Ti PL 0, Ti RL 0, Me PL 0, Me RL 0, Ta 0 (Fig. 15N–O); tibia length/width [TIL/TID] 3.24, even width along length, spur present, intermediate triangular/digitiform, knuckle absent, megaspine angled at 30 degrees, length to distal face of spur/tibia length [TIS/TIL] 0.50, spur height/tibia width [TISH/TID] 0.70, megaspine length/tibia length 0.26 (Fig. 15N–P); metatarsus relatively straight, proximal excavation present, excavation concave with pronounced heel, heel sharp, excavation length/metatarsus length [MIPEL/MIL] 0.47, metatarsus length/width [MIL/MID] 3.91 (Fig. 15N–O, Q).

PEDIPALP (Fig. 15J–M). Tibia length 3.01, width 1.27, length/width [PTL/PTD] 2.38, aetose depression present, depression length/palp tibia length [PDL/PTL] 0.65, retrolateral face with consistent covering of light setae, ventral face with two elongate bristle-like setae below depression, prolateral face with two disto-ventral spines, disto-medial spine absent (Fig. 15J–K); patella prolateral face with 2 (both rubbed off) spines (Fig. 15J–K); cymbium with scopulae present distally (Fig. 15J–K); copulatory organ total length 2.12, length/palp tibia length 0.70 (Fig. 15L–M); bulb length/width 1.06 (Fig. 15L–M); embolus strongly reflexed, attenuate, tapering and curving relatively evenly to point, one slight bend, at about 0.1 of length, small hook on tip, width at base/bulb width 0.28, embolus length/bulb length 2.49 (Fig. 15L–M).

Female (QMB S118205)

GENERAL (Fig. 16A–L). Body length 23.10, in good condition except slight damage to abdomen.

DORSAL PROSOMA (Fig. 16A, E–F). Carapace length 8.52, width 6.68, length/width 1.28, clypeus to fovea length/carapace length 0.68, caput width/carapace width 0.76, carapace red-brown, reflective setae present, moderate on caput, moderate on thorax, fovea procurved, fovea width/carapace length 0.14 (Fig. 16A, F); chelicerae red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.50 (Fig. 16A); eye group rectangular, width/length 2.05, eye tubercle present (Fig. 16E).

ABDOMEN (Fig. 16B, D). Abdomen length 10.64, brown, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 16C, G–I). Labium cuspules absent (Fig. 16H); maxillae heel distinct, cuspules present, count=about 135, extending posteriorly onto heel, extending laterally about 30% of maxillae length (Fig. 16C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 16C, I); sternum length/width 1.24, almost all setae rubbed off, row of longer setae around posterior edges (Fig. 16G–H); posterior sigilla ovoid, central sternum to posterior sigilla length/sternum length 0.20, posterior sigilla length/sternum length 0.14 (Fig. 16G–H); other sigilla small, round and lateral (Fig. 16G–H).

LEG I (Fig. 16J–K). Leg I red-brown, darker on patella and tibia, reflective setae on dorsal femur, femur length 5.84, patella length 4.16, tibia length 4.16, metatarsus length 3.75, tarsus length 2.41, total length 20.33, leg I length/carapace length 2.39; scopulae on distal metatarsus and tarsus; spine count Fe D 1, Fe PL 1, Pa PL 2, Ti PL 3, Ti RL 4, Me PL 2, Me RL 3, Ta 0; tibia length/width [TIL/TID] 2.94.

GENITALIA (Fig. 16D, L). Epigastric furrow extending slightly, posterior edge with rounded shape (Fig. 16D); spermathecae with two vesicles each (Fig. 16L); lateral vesicle relatively straight with ends

curving medially, length 0.96, lateral vesicle length/genitalia width 0.47, length/width at base 2.23, crown un-demarcated (Fig. 16L); medial vesicle short, relatively straight and projecting ventrally, medial vesicle length/genitalia width 0.13, length/width 1.93, medial vesicle length/lateral vesicle length 0.29 (Fig. 16L).

Subadult male (holotype, ZMH MGH 8104)

GENERAL (Fig. 17A–K). Body length 18.51, in very poor condition, cuticle very faded and cuticle and tissue hardened and fragmented.

DORSAL PROSOMA (Fig. 17A, E). Carapace length 6.64, width 5.26, length/width 1.26, clypeus to fovea length/carapace length 0.70, caput width/carapace width 0.62, carapace pallid, reflective setae present, light on caput, light on thorax, fovea procurved (Fig. 17A); chelicerae yellow, rastellum absent or inconspicuous, chelicerae length/carapace length 0.53 (Fig. 17A); eye group rectangular, width/length 1.88, eye tubercle present (Fig. 17E).

ABDOMEN (Fig. 17B, D). Abdomen length 8.39, yellow-brown, dorsal pattern absent.

VENTRAL PROSOMA (Fig. 17C, I). Labium cuspules absent (Fig. 17C); maxillae heel distinct, cuspules present, count=about 80, extending posteriorly onto heel, extending laterally about 30% of maxillae length (Fig. 17C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 17C, I); sternum length/width 1.04, some posterior setae rubbed off, central sternum with consistent covering of moderate setae, row of longer setae around posterior edges (Fig. 17C); posterior sigilla ovoid, central sternum to posterior sigilla length/sternum length 0.28, posterior sigilla length/sternum length 0.17 (Fig. 17C); other sigilla small, round and lateral (Fig. 17C).

LEG I (Fig. 17J–K). Leg I pallid yellow, femur length 4.56, patella length 2.89, tibia length 2.72, metatarsus length 2.48; scopulae on distal metatarsus and tarsus; spine count Fe D 1, Fe PL 1, Pa PL 2, Ti PL 3, Ti RL 4, Me PL 2, Ta 0; tibia length/width [TIL/TID] 2.75.

Distribution and natural history

Aname pallida occurs in central-eastern Queensland, in the Central Mackay Coast bioregion, extending from Moranbah in the south-west to Bowen in the north-east (Fig. 6). It constructs an open, silk-lined burrow without silk outside of the entrance, often on an angle, and with a hidden secondary ‘wishbone’ entrance (Fig. 6).

Remarks

The subadult male holotype of *A. pallida* is in very poor condition and therefore lacks many of the most informative taxonomic characters. However, based on current data, only two species occur near the type locality of Bowen, and one is significantly larger than the other. Given that the subadult male holotype of *A. pallida* is quite large (i.e. carapace length 6.64), and based on somatic morphology, we have determined that the larger species matches *A. pallida*, and the smaller species is here described as *A. litoralis* sp. nov.

Aname attenuata (Rainbow & Pulleine, 1918) stat. rev.
Figs 1, 6, 18–20

Dolichosternum attenuatum Rainbow & Pulleine, 1918: 169, pl. 24 figs 121–122.

Aname distincta (Rainbow, 1914) – Raven 1981: 338 (synonymised *Dolichosternum* Rainbow & Pulleine, 1918 with *Aname* L. Koch, 1873; synonymy of *A. attenuata* (Rainbow & Pulleine, 1918)

with *A. distincta* (Rainbow, 1914) **here rejected**; 1985a: figs 19, 36, 48, 67–69 (illustrated male QMB S1267 [Eidsvold region], and illustrated females QMB S1263 [Cooyar], QMB S1268 [Gailles], EUQ [Bunya Mountains], all here identified as *A. attenuata* (Rainbow & Pulleine, 1918)).

Aname “MYG684” – Rix *et al.* 2021: figs 3, 5, 7.

Diagnosis

Males of *A. attenuata* can be distinguished from all species for which males are known except *A. blackdownensis*, *A. convoluta* sp. nov., *A. ferruginea* sp. nov., *A. giraulti*, *A. intermedia* sp. nov., *A. pallida*, and *A. vigilata* sp. nov. by a moderate to large body size (carapace length >4.0 mm), and the presence of a long embolus (embolus length/bulb length >1.5), a proximal excavation less than or equal to half the length of metatarsus I, and a prominent and sharp heel on metatarsus I (Fig. 18Q). Males of *A. attenuata* can be distinguished from those of *A. ferruginea*, *A. giraulti*, and *A. pallida* by the presence of an embolus that is not reflexed and does not have a small hook at the tip, and the presence of thorn-like setae along the retrolateral edge of the asetose depression on the palp tibia (Fig. 18K–M; cf. Figs 15, 25, 27). Males of *A. attenuata* can be distinguished from those of *A. blackdownensis*, *A. intermedia*, and *A. vigilata* by the presence of a copulatory organ with an un-demarcated embolus, such that the bulb tapers gradually into the curving embolus (Fig. 18L; cf. Figs 21, 29, 33). Males of *A. attenuata* can be distinguished from those of *A. convoluta* by the presence of a shorter embolus (embolus length/bulb length <2.0) (Fig. 18L; cf. Fig. 23).

Females of *A. attenuata* can be distinguished from all species for which females are known except *A. blackdownensis*, *A. convoluta* sp. nov., and *A. platensis* sp. nov. by the presence of spermathecae with two vesicles, with relatively long and straight lateral vesicles (lateral vesicle length/genitalia width >0.25), and long medial vesicles (medial vesicle length/lateral vesicle length >1.0) that project at an antero-medial angle (Figs 19L, 20L). Females of *A. attenuata* can be distinguished from those of *A. convoluta* by the presence of spermathecae with less elongate medial vesicles (medial vesicle length/genitalia width <0.5) (Figs 19L, 20L; cf. Fig. 24). Females of *A. attenuata* can be distinguished from those of *A. blackdownensis* by the absence of bristle-like setae covering the posterior part of the abdomen (Figs 19B, D, 20B, D; cf. Fig. 22). Females of *A. attenuata* can be distinguished from those of *A. platensis* by the presence of spermathecae with thinner, undulating medial vesicles (medial vesicle length/width ~4.1; cf. ~3.3 in *A. platensis*) (Figs 19L, 20L; cf. Fig. 32).

Type material

Holotype

AUSTRALIA – Queensland • ♀; Eidsvold; 25°22' S, 151°07' E; AMS KS8213.

Other material examined

AUSTRALIA – Queensland • 1 ♂; Fraser Island, Orchid Beach, Eliza Avenue; 24°58' S, 153°19' E; 20 Aug.–17 Dec. 1997; R.J. Raven, P. Fishburn and P. Lawless leg.; pitfall trap; QMB S43412 • 1 ♂; Fraser Island, Maroo [Marloo]; 24°58' S, 153°18' E; Nov. 1999; R.J. Raven leg.; QMB S55376 • 1 juv.; Good Night Scrub National Park; 25°13' S, 150°35' E; 20 Feb. 2019; M.G. Rix and J.D. Wilson leg.; excavated, open burrow in creek bank, dry rainforest; QMB S111402 • 1 ♂; Fraser Island; 25°14' S, 153°08' E; 8 Jul. 1998; P. Lawless and D. Wilson leg.; pitfall trap; QMB S72543 • 2 ♂♂; Fraser Island; 25°14' S, 153°07' E; 16 Aug. 1999; QMB S50855 • 1 ♂; Hervey Bay; 25°17' S, 152°40' E; 12 Jul. 1991; Hervey Bay Shire Council leg.; QMB S20000 • 1 ♂; 1 km E of One Tree Hill; 25°17' S, 151°55' E; 180 m a.s.l.; 19 Mar.–28 May 2000; D.J. Cook and G.B. Monteith leg.; pitfall trap, vinescrub; QMB S57237 • 1 ♂; 1 km E of One Tree Hill; 25°17' S, 151°55' E; 180 m a.s.l.; 14 Dec. 1999–19 Mar. 2000; G.B. Monteith leg.; pitfall trap, vinescrub; QMB S57783 • 1 ♀; Good Night Scrub National Park; 25°18' S, 150°35' E; 167 m a.s.l.; 20 Feb. 2019; M.G. Rix and J.D. Wilson leg.; excavated, open burrow on bank next to road, dry rainforest; QMB S111405 • 1 ♂; Takura, 1266 Torbanlea-Pialba Road;

25°19' S, 152°40' E; 7 Jun. 2005; J. Weldon leg.; hand collected, in bedroom; QMB S66986 • 1 ♂; 5.5 km SE of One Tree Hill; 25°20' S, 151°55' E; 120 m a.s.l.; 19 Mar.–28 May 2000; D.J. Cook and G.B. Monteith leg.; pitfall trap, vine scrub; QMB S57686 • 2 juvs; Eidsvold; 25°22' S, 151°07' E; AMS KS8214 • 1 ♂; Eidsvold; 25°22' S, 150°55' E; 8 Aug. 1961; M.A. Tesch leg.; QMB S9356 • 1 ♂; 3.5 km SE of Farlie's Knob; 25°32' S, 152°19' E; 120 m a.s.l.; 20 Dec. 2000–23 Mar. 2001; G.B. Monteith and D.J. Cook leg.; pitfall trap, hoop pine scrub; QMB S56738 • 1 ♂; Binjour, Swains Road; 25°32' S, 151°30' E; 340 m a.s.l.; 20 Dec. 1997–26 Apr. 1998; G.B. Monteith leg.; pitfall trap, vine scrub; QMB S31718 • 1 ♀; Binjour, Swains Road; 25°32' S, 151°30' E; 371 m a.s.l.; 24 Apr. 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground; QMB S118309 • 1 ♂; 3 km SW of Wetheron; 25°34' S, 151°42' E; 150 m a.s.l.; 27–28 Jan. 1999; D.J. Cook leg.; pitfall trap, vine scrub; QMB S59932 • 1 ♂; 3 miles from Mundubbera, on loop road from Mundubbera-Eidsvold Road; 25°35' S, 151°17' E; 11 Aug. 1961; P.R. Webb leg.; excavated, open burrow, semi-brigalow patch; QMB S1267 • 1 ♂; St Mary State Forest; 25°41' S, 152°23' E; 5 Sep. 1995; M. Starkey leg.; QMB S30133 • 1 ♂; Narayan Research Station; 25°44' S, 150°46' E; 9 Jan. 1980; J. Hodgekinson leg.; QMB S54428 • 1 ♂; St Mary State Forest; 25°44' S, 152°31' E; R. Zellow leg.; QMB S118362 • 1 ♂; Tiaro; 25°44' S, 152°31' E; 5 Sep. 1995; M. Starkey leg.; hand collected, in house after spraying; QMB S30132 • 1 ♂; Stockhaven, near Ban Ban National Park; 25°48' S, 151°59' E; 450 m a.s.l.; 25 Jan.–2 Jun. 1999; G.B. Monteith and G. Thompson leg.; pitfall trap, rainforest; QMB S59923 • 1 ♂; Cooloola Cove, Queen Elizabeth Drive; 25°58' S, 152°59' E; Nov. 1999; R.J. Raven leg.; QMB S60855 • 1 ♂; Cooloola Cove, 110 Bayside Road; 25°58' S, 152°59' E; 15 Apr. 2005; G. Webb leg.; QMB S66989 • 1 ♂; Cobbs Hill; 26°02' S, 151°54' E; 19 Dec. 1992–NA; S. Hamlet leg.; pitfall trap; QMB S27400 • 1 ♂; 10 km ENE of Wonga Hills Pastoral; 26°03' S, 150°55' E; 320 m a.s.l.; 11 Dec. 2001–4 Mar. 2002; D.J. Cook and G.B. Monteith leg.; pitfall trap, brigalow; QMB S58064 • 2 ♂♂; Wonga Hills Pastoral, site 1; 26°04' S, 150°49' E; 480 m a.s.l.; 11 Dec. 2001–4 Mar. 2002; D.J. Cook and G.B. Monteith leg.; pitfall trap, vine scrub; QMB S58051 • 1 ♂; Wonga Hills Pastoral; 26°04' S, 150°50' E; 520 m a.s.l.; 11 Dec. 2001–4 Mar. 2002; D.J. Cook and G.B. Monteith leg.; pitfall trap, vine scrub; QMB S58407 • 1 ♂; Kilkivan; 26°05' S, 151°58' E; 26 Oct. 1991; QMB S25567 • 1 ♂; Boat Mountain, summit; 26°09' S, 151°59' E; 26 Jan.–20 Apr. 1995; G.B. Monteith leg.; intercept trap, vine scrub; QMB S46422 • 1 ♂; Goomeri; 26°11' S, 152°01' E; 18 Aug. 1952; P. Stimmer leg.; QMB S9366 • 1 ♂; Gympie; 26°11' S, 152°39' E; 1987; M. DeBaar leg.; QMB S6776 • 1 ♂; Gympie; 26°11' S, 152°39' E; 9 Jun. 1989; E. Wharton and A.P.C. leg.; hand collected, in tree; QMB S6891 • 2 ♂♂; 23 km ENE of Barakula; 26°13' S, 150°35' E; 400 m a.s.l.; 18 Dec. 2001–4 Mar. 2002; G.B. Monteith and D.J. Cook leg.; pitfall trap, brigalow; QMB S58058 • 1 ♂; Jimna State Forest, Marumba Creek; 26°40' S, 152°21' E; 10 Apr. 1979; K. McDonald leg.; QMB S9373 • 1 ♂; Bellthorpe-Jimna Road; 26°43' S, 152°32' E; 20 Jan.–9 Mar. 1997; G.B. Monteith leg.; pitfall trap, open forest; QMB S38069 • 2 ♂♂; Bellthorpe-Jimna Road; 26°46' S, 152°38' E; 9 Mar.–15 May 1997; G.B. Monteith leg.; intercept trap, open forest; QMB S37645 • 1 ♂; Maidenwell; 26°50' S, 151°45' E; 11 May 2005; S. Thomas leg.; QMB S69851 • 2 ♂♂; Moore, near Toogoolawah; 26°53' S, 152°13' E; 1 Jul. 1983; C. Krisanski leg.; hand collected, in house; QMB S10039 • 1 ♂; Kilcoy; 26°56' S, 152°33' E; 3 Apr. 2000; L. Blunt leg.; QMB S45073 • 1 ♂; Belle [Bell]; 26°56' S, 150°58' E; 1 Mar. 1984; QMB S9810 • 1 ♂; Kilcoy; 26°57' S, 152°33' E; 1 Jun. 1993; P. Strong leg.; hand collected, in house; QMB S21266 • 2 ♂♂; Marlaybrook property, SW of the Bunya Mountains; 26°58' S, 151°35' E; 1–6 Mar. 1976; R.J. Raven and V.E. Davies leg.; QMB S9369 • 1 ♂, 1 ♀, 1 juv.; Marlaybrook property, SW of the Bunya Mountains; 26°58' S, 151°35' E; 5 Mar. 1976; R.J. Raven leg.; excavated, bottle tree scrub; QMB S9385 • 2 ♂♂; Blackbutt Range; 26°60' S, 150°59' E; 2 Jan. 1981; I.A. McKenzie leg.; excavated, burrow webbed over; QMB S9374 • 1 ♂; Caboolture; 27°04' S, 152°56' E; 26 Apr. 1989; J. Jesberg leg.; QMB S11470 • 1 ♂; Caboolture; 27°04' S, 152°56' E; 21 Jun. 1955; J.S. Mackay leg.; QMB S9370 • 1 ♂; Toogoolawah; 27°05' S, 152°14' E; Jul. 2001; A. Stafford leg.; QMB S29063 • 1 ♂; Coominya; 27°26' S, 152°14' E; 19 Jun. 1997; D. Marchioni leg.; QMB S34622 • 1 ♂; Fernvale; 27°27' S, 152°39' E; 21 Jun. 1994; Ipswich, Queensland Ambulance Service leg.; QMB S21984 • 1 ♂; Toowoomba; 27°34' S, 151°51' E; 17 Apr. 2001; G. Sharp leg.; QMB S54401 •

1 ♂; Hatton Vale; 27°34' S, 152°28' E; 4 May 1983; Ipswich, Queensland Ambulance Transport Brigade leg.; QMB S6717 • 1 ♂; Goodna, Carole Park; 27°37' S, 152°55' E; 17 Apr. 1984; Queensland Oilseed Crushers leg.; QMB S9815 • 1 ♀; Goodna, Ric Natrass Environmental Park, corner of Eric and Bertha Street; 27°37' S, 151°32' E; 58 m a.s.l.; 22 Sep. 2020; M.G. Rix leg.; excavated, open burrow on ground, open eucalypt forest; QMB S124049 • 1 ♂; Camira; 27°38' S, 152°54' E; 27 Apr. 1983; J. Moore leg.; QMB S9819 • 1 ♂; Amberley; 27°38' S, 152°41' E; 6 Jun. 1984; Royal Australian Air Force leg.; QMB S10278 • 1 ♂; Roadvale; 27°55' S, 152°41' E; 8 May 1986; P. Claridge leg.; QMB S9359.

Description

Male (QMB S58407)

GENERAL (Fig. 18A–Q). Body length 16.54, in good condition, colour presumably faded due to preservation.

DORSAL PROSOMA (Fig. 18A, E–F). Carapace length 6.58, width 5.48, length/width 1.20, clypeus to fovea length/carapace length 0.70, caput width/carapace width 0.70, carapace red-brown, caput slightly darker than thorax, reflective setae present, moderate on caput, light on thorax, fovea procurved, fovea width/carapace length 0.17 (Fig. 18A, F); chelicerae dark red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.57 (Fig. 18A); eye group rectangular, width/length 2.03, eye tubercle present (Fig. 18E).

ABDOMEN (Fig. 18B, D). Abdomen length 6.07, grey-brown, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 18C, G–I). Labium cuspules absent (Fig. 18H); maxillae heel distinct, cuspules present, count=about 90, extending posteriorly onto heel, extending laterally about 25% of maxillae length (Fig. 18C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 18C, I); sternum length/width 1.30, central sternum with consistent covering of moderate setae, row of longer setae around posterior edges (Fig. 18G–H); posterior sigilla ovoid, central sternum to posterior sigilla length/sternum length 0.26, posterior sigilla length/sternum length 0.10 (Fig. 18G–H); other sigilla small, round and lateral (Fig. 18G–H).

LEG I (Fig. 18N–Q). Leg I red-brown, lighter on distal metatarsus and tarsus, femur length 5.83, patella length 3.63, tibia length 4.10, metatarsus length 4.00, tarsus length 2.54, total length 20.10, leg I length/carapace length 3.05 (Fig. 18N–O); scopulae on distal metatarsus and tarsus (Fig. 18N–O); spine count Fe D 3, Fe PL 2, Pa PL 2, Ti PL 0, Ti RL 0, Me PL 0, Me RL 0, Ta 0 (Fig. 18N–O); tibia length/width [TIL/TID] 3.51, even width along length, spur present, intermediate triangular/digitiform, knuckle present, megaspine angled at 23 degrees, length to distal face of spur/tibia length [TIS/TIL] 0.45, spur height/tibia width [TISH/TID] 0.63, megaspine length/tibia length 0.22 (Fig. 18N–P); metatarsus slightly sinuous, proximal excavation present, excavation concave with pronounced heel, heel sharp, excavation length/metatarsus length [MIPEL/MIL] 0.48, metatarsus length/width [MIL/MID] 4.33 (Fig. 18N–O, Q).

PEDIPALP (Fig. 18J–M). Tibia length 2.95, width 1.01, length/width [PTL/PTD] 2.92, asetose depression present, depression length/palp tibia length [PDL/PTL] 0.58, retrolateral face with short, thorn-like setae along retrolateral edge of depression, ventral face with one elongate bristle-like seta below depression, prolateral face with patch of spines on distal half, disto-medial spine absent (Fig. 18J–K); patella prolateral face with 2 spines (Fig. 18J–K); cymbium with scopulae present distally (Fig. 18J–K); copulatory organ total length 1.62, length/palp tibia length 0.55 (Fig. 18L–M); bulb length/width 0.84 (Fig. 18L–M); embolus tapering from bulb, attenuate, tapering and curving relatively evenly to point, width at base/bulb width 0.30, embolus length/bulb length 1.92 (Fig. 18L–M).

Female (holotype, AMS KS8213)

GENERAL (Fig. 19A–L). Body length 19.63, in poor condition, significantly faded, damaged and deformed due to long-term preservation.

DORSAL PROSOMA (Fig. 19A, E–F). Carapace length 7.28, width 5.73, length/width 1.27, clypeus to fovea length/carapace length 0.71, caput width/carapace width 0.76, carapace orange-brown, reflective setae present, light on caput, light on thorax, fovea procurved, fovea width/carapace length 0.13 (Fig. 19A, F); chelicerae red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.40 (Fig. 19A); eye group rectangular, width/length 1.75, eye tubercle present (Fig. 19E).

ABDOMEN (Fig. 19B, D). Abdomen length 9.65, yellow-brown, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 19C, G–I). Labium cuspules absent (Fig. 19H); maxillae heel distinct, cuspules present, count=about 100, extending posteriorly onto heel, extending laterally about 35% of maxillae length (Fig. 19C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 19C, I); sternum almost all setae rubbed off, row of longer setae around posterior edges (Fig. 19G–H).

LEG I (Fig. 19J–K). Leg I orange-brown, femur length 4.98, patella length 3.17, tibia length 3.33, metatarsus length 2.81, tarsus length 2.15, total length 16.44, leg I length/carapace length 2.26; scopulae on distal metatarsus and tarsus; spine count Fe D 1 (rubbed off), Fe PL 1 (rubbed off), Pa PL 2 (both rubbed off), Ti PL 1, Ti RL 4 (all rubbed off), Me PL 2, Me RL 3, Ta 0; tibia length/width [TIL/TID] 2.87.

GENITALIA (Fig. 19D, L). Epigastric furrow unmodified (Fig. 19D); spermathecae with two vesicles each (Fig. 19L); lateral vesicle relatively straight, length 0.44, lateral vesicle length/genitalia width 0.30, length/width at base 1.42, crown un-demarcated (Fig. 19L); medial vesicle undulating anteriorly (Fig. 19L).

Female (QMB S118309)

GENERAL (Fig. 20A–L). Body length 18.58, in good condition.

DORSAL PROSOMA (Fig. 20A, E–F). Carapace length 6.31, width 4.35, length/width 1.45, clypeus to fovea length/carapace length 0.69, caput width/carapace width 0.72, carapace red-brown, reflective setae present, moderate on caput, light on thorax, fovea procurved, fovea width/carapace length 0.13 (Fig. 20A, F); chelicerae dark red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.45 (Fig. 20A); eye group rectangular, width/length 1.7, eye tubercle present (Fig. 20E).

ABDOMEN (Fig. 20B, D). Abdomen length 9.38, grey, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 20C, G–I). Labium cuspules absent (Fig. 20H); maxillae heel distinct, cuspules present, count=about 80, extending posteriorly onto heel, extending laterally about 30% of maxillae length (Fig. 20C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 20C, I); sternum length/width 1.28, central sternum with consistent covering of short setae, row of longer setae around posterior edges (Fig. 20G–H); posterior sigilla ovoid, central sternum to posterior sigilla length/sternum length 0.23, posterior sigilla length/sternum length 0.11 (Fig. 20G–H); other sigilla small, round and lateral (Fig. 20G–H).

LEG I (Fig. 20J–K). Leg I orange-brown, darker on patella and tibia, femur length 4.43, patella length 2.84, tibia length 2.99, metatarsus length 2.72, tarsus length 1.73, total length 14.70, leg I length/carapace

length 2.33; scopulae on distal metatarsus and tarsus; spine count Fe D 1, Fe PL 1, Pa PL 2 (proximal rubbed off), Ti PL 2, Ti RL 4, Me PL 2, Me RL 3, Ta 0; tibia length/width [TIL/TID] 2.98.

GENITALIA (Fig. 20D, L). Epigastric furrow unmodified (Fig. 20D); spermathecae with two vesicles each (Fig. 20L); lateral vesicle relatively straight, length 0.35, lateral vesicle length/genitalia width 0.33, length/width at base 1.36, crown un-demarcated (Fig. 20L); medial vesicle undulating anteriorly, medial vesicle length/genitalia width 0.38, length/width 4.09, medial vesicle length/lateral vesicle length 1.16 (Fig. 20L).

Distribution and natural history

Aname attenuata occurs in south-eastern Queensland, in the Southeast Queensland and Brigalow Belt South bioregions, extending from around Eidsvold in the north to Toowoomba and Amberley/Redbank Plains in the south, and from around Dalby in the west to Cooloola (including K'gari – Fraser Island) in the east (Fig. 6). It constructs an open, silk-lined burrow without silk outside of the entrance, often on an angle, and with a hidden secondary 'wishbone' entrance (Fig. 6).

Remarks

Our (very limited) current molecular sample of *A. attenuata* indicates significant genetic divergence between northern (nominate) and southern populations (*COI* average pairwise divergence of 10.34%), and the *COI* sequences of specimens assigned to the species were not recovered as a monophyletic group. However, morphology of both males and females from the northern and southern extent of the distribution show no significant morphological differences, and we thus retain them within one species. The holotype of this species was synonymised with *Aname distincta* by Raven (1981), but morphological examination during this study revealed it to be a distinct species. Furthermore, most of the males and females imaged and identified as *A. distincta* in Raven (1985) are actually *A. attenuata*.

Aname blackdownensis Raven, 1985

Figs 1, 6, 21–22

Aname blackdownensis Raven, 1985: 385, figs 14, 32, 61.

Diagnosis

Adult males and females of *A. blackdownensis* can be distinguished from those of all other species by the presence of erect, bristle-like setae on the posterior part of the abdomen (Figs 21B, D, 22B, D).

Type material

Holotype

AUSTRALIA – Queensland • ♀; Blackdown Tableland National Park; 23°48' S, 149°08' E; 1–6 Feb. 1981; R.J. Raven leg.; QMB S1248.

Paratypes

AUSTRALIA – Queensland • 2 ♀♀, 5 juvs; Blackdown Tableland National Park; 23°48' S, 149°08' E; 1–6 Feb. 1981; R.J. Raven leg.; QMB S1249.

Other material examined

AUSTRALIA – Queensland • 1 ♀; Blackdown Tableland National Park, off track to Two Mile Falls; 23°45' S, 149°06' E; 821 m a.s.l.; 20 Apr. 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground; QMB S118294 • 1 ♀; Blackdown Tableland National Park, off track to Two Mile Falls; 23°45' S, 149°06' E; 820 m a.s.l.; 20 Apr. 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow

on ground; QMB S118295 • 1 ♀; Blackdown Tableland National Park, off Charlevue Road; 23°45' S, 149°06' E; 832 m a.s.l.; 20 Apr. 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground; QMB S118290 • 1 ♂; Blackdown Tableland National Park, off Charlevue Road; 23°45' S, 149°06' E; 838 m a.s.l.; 20 Apr. 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground; QMB S118292 • 1 ♀; Blackdown Tableland National Park, off Charlevue Road; 23°45' S, 149°06' E; 838 m a.s.l.; 20 Apr. 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground; QMB S118293 • 1 ♂; Blackdown Tableland National Park, via Dingo; 23°53' S, 149°06' E; 11–12 Apr. 1996; G.B. Monteith leg.; QMB S46805.

Description

Male (QMB S118292)

GENERAL (Fig. 21A–Q). Body length 14.49, in good condition.

DORSAL PROSOMA (Fig. 21A, E–F). Carapace length 5.17, width 4.29, length/width 1.20, clypeus to fovea length/carapace length 0.69, caput width/carapace width 0.68, carapace dark red-brown, reflective setae present, moderate on caput, light on thorax, fovea procurved, fovea width/carapace length 0.15 (Fig. 21A, F); chelicerae very dark chocolate-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.61 (Fig. 21A); eye group rectangular, width/length 1.93, eye tubercle present (Fig. 21E).

ABDOMEN (Fig. 21B, D). Abdomen length 6.05, chocolate-brown, dorsal pattern absent, with reflective setae on anterior portion and erect bristle-like setae on posterior portion.

VENTRAL PROSOMA (Fig. 21C, G–I). Labium cuspules absent (Fig. 21H); maxillae heel distinct, cuspules present, count=about 80, extending posteriorly onto heel, extending laterally about 30% of maxillae length (Fig. 21C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 21C, I); sternum length/width 1.21, central sternum with consistent covering of short setae, row of longer setae around posterior edges (Fig. 21G–H); posterior sigilla ovoid, central sternum to posterior sigilla length/sternum length 0.26, posterior sigilla length/sternum length 0.13 (Fig. 21G–H); other sigilla small, round and lateral (Fig. 21G–H).

LEG I (Fig. 21N–Q). Leg I dark red-brown, lighter on distal metatarsus and tarsus, femur length 4.35, patella length 2.82, tibia length 3.30, metatarsus length 3.08, tarsus length 2.16, total length 15.71, leg I length/carapace length 3.04 (Fig. 21N–O); scopulae on distal metatarsus and tarsus (Fig. 21N–O); spine count Fe D 1, Fe PL 1, Pa PL 2, Ti PL 0, Ti RL 0, Me PL 0, Me RL 0, Ta 0 (Fig. 21N–O); tibia length/width [TIL/TID] 3.17, even width along length, spur present, intermediate triangular/digitiform, knuckle absent, megaspine angled at 19 degrees, length to distal face of spur/tibia length [TIS/TIL] 0.47, spur height/tibia width [TISH/TID] 0.51, megaspine length/tibia length 0.23 (Fig. 21N–P); metatarsus relatively straight, proximal excavation present, excavation concave with pronounced heel, heel sharp, excavation length/metatarsus length [MIPEL/MIL] 0.47, metatarsus length/width [MIL/MID] 3.57 (Fig. 21N–O, Q).

PEDIPALP (Fig. 21J–M). Tibia length 2.54, width 0.91, length/width [PTL/PTD] 2.80, asetose depression present, depression length/palp tibia length [PDL/PTL] 0.57, retrolateral face with short, thorn-like setae along retrolateral edge of depression, ventral face with two elongate bristle-like setae below depression, prolateral face with two disto-ventral spines, disto-medial spine absent (Fig. 21J–K); patella prolateral face with 2 spines (Fig. 21J–K); cymbium with scopulae present distally (Fig. 21J–K); copulatory organ total length 1.36, length/palp tibia length 0.53 (Fig. 21L–M); bulb length/width 0.86 (Fig. 21L–M); embolus demarcated and roughly perpendicular to bulb, attenuate, tapering and curving relatively evenly to point, one slight bend, at about 0.4 of length, slight bend before tip, width at base/bulb width 0.25, embolus length/bulb length 1.86 (Fig. 21L–M).

Female (holotype, QMB S1248)

GENERAL (Fig. 22A–L). Body length 18.53, in moderate condition, colour significantly faded due to preservation, dorsal abdomen damaged.

DORSAL PROSOMA (Fig. 22A, E–F). Carapace length 6.85, width 5.49, length/width 1.25, clypeus to fovea length/carapace length 0.68, caput width/carapace width 0.77, carapace pallid, reflective setae present, fovea procurved, fovea width/carapace length 0.11 (Fig. 22A, F); chelicerae orange, rastellum absent or inconspicuous, chelicerae length/carapace length 0.49 (Fig. 22A); eye group rectangular, width/length 1.69, eye tubercle present (Fig. 22E).

ABDOMEN (Fig. 22B, D). Abdomen length 8.27, light brown, dorsal pattern absent, with erect bristle-like setae on posterior portion.

VENTRAL PROSOMA (Fig. 22C, G–I). Labium cuspules absent (Fig. 22H); maxillae heel distinct, cuspules present, count=about 116, extending posteriorly onto heel, extending laterally about 35% of maxillae length (Fig. 22C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 22C, I); sternum length/width 1.22, central sternum with consistent covering of short setae, row of longer setae around posterior edges (Fig. 22G–H); posterior sigilla ovoid, central sternum to posterior sigilla length/sternum length 0.26, posterior sigilla length/sternum length 0.10 (Fig. 22G–H); other sigilla small, round and lateral (Fig. 22G–H).

LEG I (Fig. 22J–K). Leg I pallid, femur length 4.88, patella length 3.25, tibia length 3.45, metatarsus length 3.10, tarsus length 2.21, total length 16.88, leg I length/carapace length 2.46; scopulae on distal metatarsus and tarsus; spine count Fe D 2, Fe PL 1, Pa PL 2, Ti PL 2, Ti RL 4, Me PL 3, Me RL 3, Ta 0; tibia length/width [TIL/TID] 2.96.

GENITALIA (Fig. 22D, L). Epigastric furrow unmodified (Fig. 22D); spermathecae with two vesicles each (Fig. 22L); lateral vesicle relatively straight, length 0.38, lateral vesicle length/genitalia width 0.28, length/width at base 0.82, crown un-demarcated (Fig. 22L); medial vesicle undulating anteriorly, medial vesicle length/genitalia width 0.49, length/width 4.84, medial vesicle length/lateral vesicle length 1.77 (Fig. 22L).

Distribution and natural history

Aname blackdownensis occurs on the Blackdown Tableland in central-eastern Queensland, in the Brigalow Belt South bioregion, located between Emerald and Rockhampton (Fig. 6). It constructs an open, silk-lined burrow without silk outside of the entrance, often on an angle, and with a hidden secondary ‘wishbone’ entrance (Fig. 6).

Aname convoluta sp. nov.

[urn:lsid:zoobank.org:act:66D33B3D-2D22-4A6A-8962-544BC637A32A](https://zoobank.org/act:66D33B3D-2D22-4A6A-8962-544BC637A32A)

Figs 1, 6, 23–24

Diagnosis

Males of *A. convoluta* sp. nov. can be distinguished from all species for which males are known except *A. attenuata*, *A. blackdownensis*, *A. ferruginea* sp. nov., *A. giraulti*, *A. intermedia* sp. nov., *A. pallida*, and *A. vigilata* sp. nov. by a moderate to large body size (carapace length > 4.0 mm), and the presence of a long embolus (embolus length/bulb length > 1.5), a proximal excavation less than or equal to half the length of metatarsus I, and a prominent and sharp heel on metatarsus I (Fig. 23Q). Males of *A. convoluta* can be distinguished from those of *A. ferruginea*, *A. giraulti*, and *A. pallida* by the presence of an embolus that is not reflexed and does not have a small hook at the tip, and the presence of thorn-like

setae along the retrolateral edge of the aetose depression on the palp tibia (Fig. 23K–M; cf. Figs 15, 25, 27). Males of *A. convoluta* can be distinguished from those of *A. attenuata*, *A. blackdownensis*, and *A. vigilata* by the presence of a longer embolus (embolus length/bulb length > 2) (Fig. 23L; cf. Figs 18, 21, 33). Males of *A. convoluta* can be distinguished from those of *A. intermedia* by the presence of a more gradually tapering embolus, with a narrower basal section (Fig. 23L–M; cf. Fig. 29).

Females of *A. convoluta* sp. nov. can be distinguished from all species for which females are known except *A. attenuata*, *A. blackdownensis*, and *A. platensis* sp. nov. by the presence of spermathecae with two vesicles, with relatively long and straight lateral vesicles (lateral vesicle length/genitalia width > 0.25), and long medial vesicles (medial vesicle length/lateral vesicle length > 1) that project at an antero-medial angle (Fig. 24L). Females of *A. convoluta* can be distinguished from those of *A. attenuata*, *A. blackdownensis*, and *A. platensis* by the presence of spermathecae with longer, cork-screw shaped medial vesicles (medial vesicle length/genitalia width ~0.6; cf. <0.5) (Fig. 24L; cf. Figs 19–20, 22, 32).

Etymology

The specific epithet '*convoluta*' is a Latin adjective meaning 'coiled' or 'twisted', in reference to the long, coiled medial receptacle of the female genitalia of this species.

Type material

Holotype

AUSTRALIA – Queensland • ♂; Brigalow Reserve Station; 24°48' S, 149°46' E; 160 m a.s.l.; 28 Oct.–16 Dec. 2000; D.J. Cook and G.B. Monteith leg.; pitfall trap, belah/brigalow; QMB S57732.

Paratypes

AUSTRALIA – Queensland • 1 ♂; Brigalow Reserve Station; 24°48' S, 149°45' E; 160 m a.s.l.; 29 Oct.–16 Dec. 2000; D.J. Cook and G.B. Monteith leg.; pitfall, vine scrub; QMB S57747 • 1 ♂; Brigalow Reserve Station; 24°48' S, 149°47' E; 28 Oct.–16 Dec. 2000; G.B. Monteith leg.; vine scrub; QMB S57752 • 2 ♂♂; Brigalow Reserve Station; 24°48' S, 149°46' E; 16 Dec. 2000–28 Mar. 2001; P. Lawless leg.; pitfall trap; QMB S62155 • 1 ♂; Brigalow Reserve Station; 24°48' S, 149°45' E; 16 Dec. 2000–28 Mar. 2001; D.J. Cook and G.B. Monteith leg.; intercept trap, vine scrub; QMB S63021 • 1 ♂; Brigalow Reserve Station; 24°48' S, 149°47' E; 170 m a.s.l.; 16 Dec. 2000–28 Mar. 2001; D.J. Cook and G.B. Monteith leg.; pitfall trap, brigalow; QMB S63078.

Other material examined

AUSTRALIA – Queensland • 2 ♂♂; Isla Gorge National Park; 25°12' S, 149°58' E; 170 m a.s.l.; 4 Apr. 1998; D.J. Cook and G.B. Monteith leg.; pitfall trap, brigalow; QMB S44514 • 1 ♂; Expedition Range National Park, Ampitheatre Scrub; 25°13' S, 148°59' E; 360 m a.s.l.; 25 Sep.–17 Dec. 1997; G.B. Monteith leg.; pitfall trap, vine scrub; QMB S44789 • 1 ♂; Isla Gorge National Park, 8.4 km SSW of lookout; 25°16' S, 149°56' E; 21 Sep.–19 Dec. 1997; D.J. Cook and G.B. Monteith leg.; pitfall trap; QMB S44308 • 1 ♂; Gwambegwine, NW on Taroom-Bauhinia Downs Road; 25°20' S, 149°40' E; 279 m a.s.l.; 15 Apr. 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground; QMB S118258 • 1 ♂; Gwambegwine, NW on Taroom-Bauhinia Downs Road; 25°21' S, 149°40' E; 264 m a.s.l.; 15 Apr. 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground; QMB S118256 • 1 ♀; Gwambegwine, NW on Taroom-Bauhinia Downs Road; 25°25' S, 149°45' E; 266 m a.s.l.; 15 Apr. 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground; QMB S118255 • 2 ♂♂; Boggomoss, near Taroom; 25°26' S, 150°01' E; 12 Nov. 1996–1 Jan. 1997; D.J. Cook and G.B. Monteith leg.; pitfall trap, softwood scrub; QMB S36354 • 2 ♂♂; Boggomoss, near Taroom; 25°26' S, 150°01' E; 9 Sep.–12 Nov. 1996; P. Lawless leg.; pitfall trap; QMB S75650 • 1 ♂; Boggomoss, near Taroom; 25°26' S, 150°01' E; 160 m a.s.l.; 9 Sep.–11 Nov. 1996; D.J. Cook and G.B. Monteith leg.; pitfall trap, belah/brigalow; QMB S75713.

Description

Male (holotype, QMB S57732)

GENERAL (Fig. 23A–Q). Body length 16.57, in good condition, colour presumably faded due to preservation.

DORSAL PROSOMA (Fig. 23A, E–F). Carapace length 6.79, width 5.63, length/width 1.21, clypeus to fovea length/carapace length 0.70, caput width/carapace width 0.64, carapace red-orange, caput much darker than thorax, reflective setae present, heavy on caput, light on thorax, fovea procurved, fovea width/carapace length 0.13 (Fig. 23A, F); chelicerae dark red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.45 (Fig. 23A); eye group rectangular, width/length 1.97, eye tubercle present (Fig. 23E).

ABDOMEN (Fig. 23B, D). Abdomen length 6.77, light grey, dorsal pattern absent, with reflective setae on anterior portion.

VENTRAL PROSOMA (Fig. 23C, G–I). Labium cuspules absent (Fig. 23H); maxillae heel distinct, cuspules present, count=about 90, extending posteriorly onto heel, extending laterally about 25% of maxillae length (Fig. 23C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 23C, I); sternum length/width 1.18, central sternum with consistent covering of short setae, row of longer setae around posterior edges (Fig. 23G–H); posterior sigilla ovoid, central sternum to posterior sigilla length/sternum length 0.25, posterior sigilla length/sternum length 0.16 (Fig. 23G–H); other sigilla small, round and lateral (Fig. 23G–H).

LEG I (Fig. 23N–Q). Leg I orange, femur length 5.57, patella length 3.52, tibia length 4.14, metatarsus length 3.60, tarsus length 2.58, total length 19.40, leg I length/carapace length 2.86 (Fig. 23N–O); scopulae on distal metatarsus and tarsus (Fig. 23N–O); spine count Fe D 1, Fe PL 1, Pa PL 2, Ti PL 0, Ti RL 0, Me PL 0, Me RL 0, Ta 0 (Fig. 23N–O); tibia length/width [TIL/TID] 3.25, even width along length, spur present, intermediate triangular/digitiform, knuckle absent, megaspine angled at 26 degrees, length to distal face of spur/tibia length [TIS/TIL] 0.45, spur height/tibia width [TISH/TID] 0.44, megaspine length/tibia length 0.22 (Fig. 23N–P); metatarsus relatively straight, proximal excavation present, excavation concave with pronounced heel, heel sharp, excavation length/metatarsus length [MIPEL/MIL] 0.50, metatarsus length/width [MIL/MID] 3.47 (Fig. 23N–O, Q).

PEDIPALP (Fig. 23J–M). Tibia length 2.70, width 1.02, length/width [PTL/PTD] 2.64, aetose depression present, depression length/palp tibia length [PDL/PTL] 0.61, retrolateral face with short, thorn-like setae along retrolateral edge of depression, ventral face with two elongate bristle-like setae below depression, prolateral face with two disto-ventral spines, disto-medial spine absent (Fig. 23J–K); patella prolateral face with 2 spines (Fig. 23J–K); cymbium with scopulae present distally (Fig. 23J–K); copulatory organ total length 1.65, length/palp tibia length 0.61 (Fig. 23L–M); bulb length/width 0.89 (Fig. 23L–M); embolus tapering from bulb, attenuate, tapering and curving relatively evenly to point, one slight bend, at about 0.4 of length, width at base/bulb width 0.28, embolus length/bulb length 2.30 (Fig. 23L–M).

Female (QMB S118255)

GENERAL (Fig. 24A–L). Body length 24.45, in good condition.

DORSAL PROSOMA (Fig. 24A, E–F). Carapace length 6.96, width 5.84, length/width 1.19, clypeus to fovea length/carapace length 0.67, caput width/carapace width 0.76, carapace red-brown, reflective setae present, heavy on caput, moderate on thorax, fovea procurved, fovea width/carapace length 0.17 (Fig. 24A, F); chelicerae dark red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.65 (Fig. 24A); eye group rectangular, width/length 2.11, eye tubercle present (Fig. 24E).

ABDOMEN (Fig. 24B, D). Abdomen length 12.34, dark grey, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 24C, G–I). Labium cuspules absent (Fig. 24H); maxillae heel distinct, cuspules present, count=about 84, extending posteriorly onto heel, extending laterally about 30% of maxillae length (Fig. 24C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 24C, I); sternum length/width 1.14, central sternum with consistent covering of moderate setae, row of longer setae around posterior edges (Fig. 24G–H); posterior sigilla semi-elongate, central sternum to posterior sigilla length/sternum length 0.20, posterior sigilla length/sternum length 0.18 (Fig. 24G–H); other sigilla small, round and lateral (Fig. 24G–H).

LEG I (Fig. 24J–K). Leg I red-brown, darker on patella and tibia, femur length 5.54, patella length 3.65, tibia length 3.62, metatarsus length 3.32, tarsus length 2.23, total length 18.35, leg I length/carapace length 2.64; scopulae on distal metatarsus and tarsus; spine count Fe D 0, Fe PL 1, Pa PL 1, Ti PL 0, Ti RL 4, Me PL 2, Me RL 3, Ta 0; tibia length/width [TIL/TID] 3.02.

GENITALIA (Fig. 24D, L). Epigastric furrow unmodified (Fig. 24D); spermathecae with two vesicles each (Fig. 24L); lateral vesicle relatively straight, length 0.51, lateral vesicle length/genitalia width 0.35, length/width at base 1.81, crown un-demarcated (Fig. 24L); medial vesicle undulating towards anterior, medial vesicle length/genitalia width 0.61, length/width 3.92, medial vesicle length/lateral vesicle length 1.73 (Fig. 24L).

Distribution and natural history

Aname convoluta sp. nov. occurs in south-eastern Queensland in the Brigalow Belt South bioregion. It occurs west of Eidsvold, near the Palmgrove and Isla Gorge National Parks, with its range between Taroom in the south and Roundstone in the north (Fig. 6). It constructs an open, silk-lined burrow without silk outside of the entrance, often on an angle, and with a hidden secondary ‘wishbone’ entrance (Fig. 6).

Aname ferruginea sp. nov.

[urn:lsid:zoobank.org:act:61F2E144-1E56-4124-A2D0-EF0A7F6CA018](https://doi.org/10.21203/rs.3.rs-5111111/v1)

Figs 1, 6, 25–26

Aname pallida L. Koch, 1873 – Raven 1981: figs 8–10, 14, 44–47, 49 (illustrated male QMB S696 [Rockhampton], females QMB S697 [Biloela], QMB S703 [Monto], and females from fig. 46 [Gin Gin], fig. 47 [Banana], fig. 49 [Gladstone], here identified as *A. ferruginea* sp. nov.).

Diagnosis

Males of *A. ferruginea* sp. nov. can be distinguished from all species for which males are known except *A. attenuata*, *A. blackdownensis*, *A. convoluta* sp. nov., *A. giraulti*, *A. intermedia* sp. nov., *A. pallida*, and *A. vigilata* sp. nov. by a moderate to large body size (carapace length >4.0 mm), and the presence of a long embolus (embolus length/bulb length >1.5), a proximal excavation less than or equal to half the length of metatarsus I, and a prominent and sharp heel on metatarsus I (Fig. 25Q). Males of *A. ferruginea* can be distinguished from those of *A. attenuata*, *A. blackdownensis*, *A. convoluta*, *A. intermedia*, and *A. vigilata* by the presence of a reflexed embolus with a small hook at the tip, and the absence of short, thorn-like setae along the retrolateral edge of the asetose depression on the palp tibia (Fig. 25K–M; cf. Figs 18, 21, 23, 29, 33). Males of *A. ferruginea* can be distinguished from those of *A. giraulti* and *A. pallida* by the presence of a shorter and less reflexed embolus (embolus length/bulb length ~2), and a longer, more digitiform tibial spur (Fig. 25J–Q; cf. Figs 15, 27).

Females of *A. ferruginea* sp. nov. can be distinguished from all species for which females are known except *A. giraulti* and *A. pallida* by the presence of spermathecae with two vesicles, with relatively long and straight lateral vesicles (lateral vesicle length/genitalia width >0.25) that curve medially at their ends, and very short, straight medial vesicles (medial vesicle length/lateral vesicle length <0.5) (Fig. 26D, L). Females of *A. ferruginea* can be distinguished from those of *A. giraulti* and *A. pallida* by the presence of spermathecae with shorter, wider lateral vesicles (lateral vesicle length/width <1.5) (Fig. 26L; cf. Figs 16, 28).

Etymology

The specific epithet '*ferruginea*' is a Latin adjective meaning 'rusty', or 'of the colour of iron-rust', in reference to the general dark red-brown hue of the spider and the reflective bronze setae on its carapace.

Type material

Holotype

AUSTRALIA – Queensland • ♂; Rockhampton; 23°22' S, 150°31' E; 4 Dec. 1993; D. Wallace leg.; QMB S48106.

Paratypes

AUSTRALIA – Queensland • 1 ♂; Mount Chalmers; 23°19' S, 150°34' E; 16 Mar. 1993; C. Hollins and D. Wallace leg.; pitfall trap; QMB S22176 • 1 ♂; Mount Chalmers; 23°19' S, 150°34' E; 20 Apr.–23 Oct. 1990; D. Wallace, R.J. Raven and K. Williams leg.; pitfall trap, open forest; QMB S60862 • 1 ♂; Rockhampton; 23°22' S, 150°31' E; Jan. 1971; QMB S9410 • 1 ♂; Rockhampton; 23°22' S, 150°32' E; 15 Aug. 1960; W. Siels leg.; QMB S696 • 1 ♂; Rockhampton; 23°23' S, 150°30' E; 5 Mar. 1983; D. Wallace leg.; QMB S10041.

Other material examined

AUSTRALIA – Queensland • 1 ♂; Sarina; 21°26' S, 149°07' E; Feb. 1985; QMB S9406 • 1 ♂; 7 km NNE of Mount Bluffkin, on highway; 22°36' S, 149°14' E; 160 m a.s.l.; 22 Oct.–19 Dec. 2000; D.J. Cook and G.B. Monteith leg.; pitfall trap, brigalow; QMB S57771 • 1 ♂; 7 km NNE of Mount Bluffkin, on highway; 22°36' S, 149°14' E; 160 m a.s.l.; 19 Dec. 2000–25 Mar. 2001; D.J. Cook and G.B. Monteith leg.; pitfall trap, brigalow; QMB S63034 • 1 ♂; Tieri; 23°02' S, 148°20' E; 19 Nov. 1986; P.G. Allsopp leg.; QMB S96565 • 1 ♂; Yeppoon; 23°08' S, 150°39' E; 19 Jan. 1981; R. Wicks leg.; QMB S96504 • 1 ♂; 9 km north NE of Mount Salmon, on road; 23°11' S, 150°07' E; 60 m a.s.l.; 16 Dec. 1999–22 Mar. 2000; G.B. Monteith leg.; pitfall trap, vine scrub; QMB S57794 • 1 ♂; Boomer Range [Goodedulla National Park]; 23°12' S, 149°45' E; 180 m a.s.l.; 28–30 Sep. 1999; S. Evans and C. Burwell leg.; open forest; QMB S52185 • 1 ♂; Cawarral; 23°15' S, 150°38' E; 18 Jul. 1963; H.M. Tooker leg.; QMB S9417 • 1 ♂; Yeppoon Road; 23°15' S, 150°22' E; Aug. 1993; R. Hehoe leg.; QMB S48102 • 1 ♂; Rockhampton, intersection of Bond Road and Lion Mountain Road; 23°16' S, 150°24' E; 1 Jan. 1993; C. Buckley leg.; QMB S48100 • 1 ♀; Alton Downs, NW of Rockhampton, 299 Laurel Bank Road; 23°18' S, 149°37' E; 10 Jun. 2020; J. Arthur leg.; QMB S124052 • 1 ♂; Boodoola; 23°27' S, 150°46' E; 25 Oct. 1992; D. Wallace leg.; QMB S87755 • 1 ♂; Gladstone; 23°52' S, 151°06' E; 20 Jan. 1988; pest control service leg.; QMB S3535 • 2 ♂♂; Gladstone, Beecher foothills near Burua; 23°55' S, 151°12' E; Mar. 2017; R. Sweeney leg.; hand collected, found in swimming pool; QMB S32292 • 1 ♂; Wurdong Heights; 23°58' S, 151°15' E; 25 Oct. 2004; R.J. Raven leg.; QMB S73749 • 1 ♂; Agnes Waters; 24°13' S, 151°52' E; 21 Oct. 1999; G. Gibson leg.; QMB S53971 • 1 ♂; Rocky Point; 24°14' S, 151°56' E; 60 m a.s.l.; 1 Apr.–4 Sep. 1977; G.B. Monteith and S.R. Monteith leg.; pitfall trap, rainforest; QMB S702 • 1 ♀; Biloela, on Dawson Highway, near Callide Timber Reserve; 24°14' S, 150°35' E; 349 m a.s.l.; 22 Apr. 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground; QMB S118301 • 1 ♂; Biloela; 24°23' S, 150°29' E; 12 Dec. 1992; A. McColl leg.; QMB S21042 • 1 ♂; Biloela; 24°23' S, 150°29' E; 14 Oct. 1987; Department of Primary Industries leg.; hand collected, inside house;

QMB S3170 • 1 ♂; Calliope; 24°24' S, 150°05' E; Jan. 1993; S. McLaughlin leg.; QMB S20906 • 1 ♂; Lowmead; 24°25' S, 150°35' E; 7 Dec. 1990; M. Henson leg.; QMB S100540 • 1 ♀; Bulburin National Park, off Granite Creek Road; 24°38' S, 150°36' E; 128 m a.s.l.; 8 Nov. 2020; M.G. Rix, C. Burwell and C. Lambkin leg.; excavated, open forest; QMB S124081 • 1 ♂; Gin Gin; 24°59' S, 151°55' E; 18 Sep. 1998; C. Barnes leg.; QMB S42522 • 1 ♀; Malangool, near Gin Gin; 25°00' S, 151°57' E; 18 Jul. 1934; P. Gaden leg.; AMS KS12468 • 1 ♂, 4 ♀♀, 2 juvs; Malangool, near Gin Gin; 25°00' S, 151°57' E; E.L.G. Troughton leg.; AMS KS12478 • 1 ♂, 1 ♀; Gin Gin, Mooloolaman Rd; 25°01' S, 151°50' E; 10 Nov. 1998; R. Sellinger leg.; QMB S42722.

Description

Male (holotype, QMB S48106)

GENERAL (Fig. 25A–Q). Body length 24.43, in good condition, colour presumably faded due to preservation.

DORSAL PROSOMA (Fig. 25A, E–F). Carapace length 8.96, width 7.13, length/width 1.26, clypeus to fovea length/carapace length 0.69, caput width/carapace width 0.64, carapace red-brown, reflective setae present, heavy on caput, moderate on thorax, fovea procurved, fovea width/carapace length 0.13 (Fig. 25A, F); chelicerae dark red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.50 (Fig. 25A); eye group rectangular, width/length 1.91, eye tubercle present (Fig. 25E).

ABDOMEN (Fig. 25B, D). Abdomen length 10.07, light grey, dorsal pattern absent, with reflective setae on anterior portion.

VENTRAL PROSOMA (Fig. 25C, G–I). Labium cuspules absent (Fig. 25H); maxillae heel distinct, cuspules present, count=about 110, extending posteriorly onto heel, extending laterally about 25% of maxillae length (Fig. 25C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 25C, I); sternum length/width 1.18, central sternum with consistent covering of short setae, row of longer setae around posterior edges (Fig. 25G–H); posterior sigilla ovoid, central sternum to posterior sigilla length/sternum length 0.23, posterior sigilla length/sternum length 0.15 (Fig. 25G–H); other sigilla small, round and lateral (Fig. 25G–H).

LEG I (Fig. 25N–Q). Leg I red-brown, lighter on distal metatarsus and tarsus, femur length 7.25, patella length 4.64, tibia length 5.13, metatarsus length 4.83, tarsus length 3.10, total length 24.95, leg I length/carapace length 2.78 (Fig. 25N–O); scopulae on distal metatarsus and tarsus (Fig. 25N–O); spine count Fe D 1, Fe PL 1, Pa PL 2, Ti PL 0, Ti RL 0, Me PL 0, Me RL 0, Ta 0 (Fig. 25N–O); tibia length/width [TIL/TID] 3.37, even width along length, spur present, digitiform, knuckle absent, megaspine angled at 25 degrees, length to distal face of spur/tibia length [TIS/TIL] 0.46, spur height/tibia width [TISH/TID] 0.70, megaspine length/tibia length 0.23 (Fig. 25N–P); metatarsus slightly sinuous, proximal excavation present, excavation concave with pronounced heel, heel sharp, excavation length/metatarsus length [MIPEL/MIL] 0.44, metatarsus length/width [MIL/MID] 3.80 (Fig. 25N–O, Q).

PEDIPALP (Fig. 25J–M). Tibia length 3.68, width 1.34, length/width [PTL/PTD] 2.75, asetose depression present, depression length/palp tibia length [PDL/PTL] 0.59, retrolateral face with consistent covering of light setae, ventral face with two elongate bristle-like setae below depression, prolateral face with two disto-ventral spines, disto-medial spine absent (Fig. 25J–K); patella prolateral face with 2 spines (Fig. 25J–K); cymbium with scopulae present distally (Fig. 25J–K); copulatory organ total length 2.05, length/palp tibia length 0.56 (Fig. 25L–M); bulb length/width 0.93 (Fig. 25L–M); embolus reflexed, attenuate, tapering and curving relatively evenly to point, one slight bend, at about 0.1 of length, small hook on tip, width at base/bulb width 0.27, embolus length/bulb length 2.10 (Fig. 25L–M).

Female (QMB S118301)

GENERAL (Fig. 26A–L). Body length 26.48, in good condition.

DORSAL PROSOMA (Fig. 26A, E–F). Carapace length 8.40, width 7.19, length/width 1.17, clypeus to fovea length/carapace length 0.70, caput width/carapace width 0.73, carapace red-brown, caput slightly darker than thorax, reflective setae present, moderate on caput, moderate on thorax, fovea procurved, fovea width/carapace length 0.16 (Fig. 26A, F); chelicerae dark red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.60 (Fig. 26A); eye group rectangular, width/length 1.98, eye tubercle present (Fig. 26E).

ABDOMEN (Fig. 26B, D). Abdomen length 12.69, purple-brown, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 26C, G–I). Labium cuspules absent (Fig. 26H); maxillae heel distinct, cuspules present, count=about 107, extending posteriorly onto heel, extending laterally about 35% of maxillae length (Fig. 26C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 26C, I); sternum length/width 1.24, central sternum with consistent covering of short setae, row of longer setae around posterior edges, some shorter thorn-like setae around anterior edges (Fig. 26G–H); posterior sigilla ovoid, central sternum to posterior sigilla length/sternum length 0.19, posterior sigilla length/sternum length 0.16 (Fig. 26G–H); other sigilla small, round and lateral (Fig. 26G–H).

LEG I (Fig. 26J–K). Leg I red-brown, femur length 5.11, patella length 3.02, tibia length 3.68, metatarsus length 3.34, tarsus length 2.13, total length 17.27, leg I length/carapace length 2.06; scopulae on distal metatarsus and tarsus; spine count Fe D 0, Fe PL 1, Pa PL 2, Ti PL 2, Ti RL 4 (weak), Me PL 3, Me RL 2, Ta 0; tibia length/width [TIL/TID] 3.30.

GENITALIA (Fig. 26D, L). Epigastric furrow extending slightly, posterior edge with rounded shape (Fig. 26D); spermathecae with two vesicles each (Fig. 26L); lateral vesicle relatively straight with ends curving medially, length 0.70, lateral vesicle length/genitalia width 0.30, length/width at base 1.33, crown un-demarcated (Fig. 26L); medial vesicle short, relatively straight and projecting ventrally, medial vesicle length/genitalia width 0.12, length/width 1.42, medial vesicle length/lateral vesicle length 0.41 (Fig. 26L).

Distribution and natural history

Aname ferruginea sp. nov. occurs in central-eastern Queensland, in the Southeast Queensland, Brigalow Belt South and Brigalow Belt North bioregions, extending from around Bundaberg in the south to Sarina in the north, and west to around Banana (Fig. 6). It constructs an open, silk-lined burrow without silk outside of the entrance, often on an angle, and with a hidden secondary ‘wishbone’ entrance (Fig. 6).

Aname giraulti (Rainbow, 1914) stat. rev.

Figs 1, 6, 27–28

Chenistonia giraulti Rainbow, 1914: 243, figs 52–57.

Aname collinsorum Raven, 1985: 391, figs 6, 41, 50–52 (**new synonymy**).

Aname pallida L. Koch, 1873 – Raven 1985: 403 (synonymy of *Chenistonia giraulti* Rainbow, 1914 with *Aname pallida* L. Koch, 1873 **here rejected**). — Harvey *et al.* 2018: fig. 16g (imaged female QMB S9413 from Mount Elliot, here identified as *A. giraulti*).

non *Aname collinsorum* – Raven 1985: figs 12, 31, 55, 57 (illustrated female allotype QMB S1260 [100 Mile Swamp, Rosella Plains], and two females QMB S1284 [Mount Mulligan], here identified as *A. scutitheca* sp. nov.).

Diagnosis

Males of *A. giraulti* can be distinguished from all species for which males are known except *A. attenuata*, *A. blackdownensis*, *A. convoluta* sp. nov., *A. ferruginea* sp. nov., *A. intermedia* sp. nov., *A. pallida*, and *A. vigilata* sp. nov. by a moderate to large body size (carapace length >4.0 mm), and the presence of a long embolus (embolus length/bulb length >1.5), a proximal excavation less than or equal to half the length of metatarsus I, and a prominent and sharp heel on metatarsus I (Fig. 27Q). Males of *A. giraulti* can be distinguished from those of *A. attenuata*, *A. blackdownensis*, *A. convoluta*, *A. intermedia*, and *A. vigilata* by the presence of a reflexed embolus with a small hook at the tip, and the absence of short, thorn-like setae along the retrolateral edge of the asetose depression on the palp tibia (Fig. 27K–M; cf. Figs 18, 21, 23, 29, 33). Males of *A. giraulti* can be distinguished from those of *A. ferruginea* by the presence of a longer and more reflexed embolus (embolus length/bulb length >2.2), and a shorter, more triangular tibial spur (Fig. 27J–Q; cf. Fig. 25). Males of *A. giraulti* can be distinguished from those of *A. pallida* by the presence of a shorter embolus (embolus length/bulb length ~2.3; cf. ~2.5 in *A. pallida*) (Fig. 27L; cf. Fig. 15).

Females of *A. giraulti* can be distinguished from all species for which females are known except *A. ferruginea* sp. nov. and *A. pallida* by the presence of spermathecae with two vesicles, with relatively long and straight lateral vesicles (lateral vesicle length/genitalia width >0.25) that curve medially at their ends, and very short, straight medial vesicles (medial vesicle length/lateral vesicle length <0.5) (Fig. 28D, L). Females of *A. giraulti* can be distinguished from those of *A. ferruginea* by the presence of spermathecae with more elongate lateral vesicles (lateral vesicle length/width >2) (Fig. 28L; cf. Fig. 26). Females of *A. giraulti* can be distinguished from those of *A. pallida* by their distribution (Fig. 6), occurring in tropical north Queensland, in the Wet Tropics, Einasleigh Uplands or the northern part of the Brigalow Belt North bioregions (based on current data females of *A. pallida* and *A. giraulti* cannot be confidently distinguished morphologically) (Fig. 28; cf. Fig. 16).

Type material

Lectotype

AUSTRALIA – Queensland • 1 ♂; Nelson [Gordonvale]; 17°06' S, 145°47' E; AMS KS6391.

Other material examined

AUSTRALIA – Queensland • 1 juv.; Mount Molloy, Wetherby Road, NE of Rifle Creek Rest Area; 16°40' S, 145°20' E; 387 m a.s.l.; 9 May 2023; J.D. Wilson and M.G. Rix leg.; excavated, wet sclerophyll forest; QMB S118313 • 1 juv.; Mount Molloy, Wetherby Road NE of Rifle Creek Rest Area; 16°40' S, 145°20' E; 385 m a.s.l.; 12 May 2023; J.D. Wilson and M.G. Rix leg.; QMB S118322 • 1 ♂; Mount Molloy; 16°41' S, 145°20' E; 10 Dec. 1978; A. Walford-Huggins leg.; QMB S9411 • 1 ♂; Atherton, Zogla [Tolga]; 17°13' S, 145°28' E; 9 Nov. 1999; R. Elick, via B.Y. Main leg.; hand collected, inside house after rain; WAM T151657 • 1 ♂; Kalunga, via Herberton; 17°26' S, 145°18' E; 7 Dec. 2009; N. Kung leg.; QMB S69139 • 1 ♀; Irvinebank, via Herberton; 17°26' S, 145°12' E; 26 Oct. 1993; R. Gravener leg.; AMS KS36911 • 1 ♀; Silver Valley Road, off Kennedy Highway, W of Ravenshoe; 17°36' S, 145°18' E; 726 m a.s.l.; 13 May 2023; J.D. Wilson and M.G. Rix leg.; QMB S118339 • 1 ♂; Cardwell; 18°22' S, 145°49' E; 5 Sep. 1994; C. Richards leg.; QMB S25815 • 1 ♂; Rosella Plains, 100 Mile Swamp; 18°25' S, 144°28' E; 4–7 Nov. 1979; K. McDonald leg.; grassy open forest; QMB S1259 (holotype of *Aname collinsorum* Raven, 1985) • 1 ♀; Gregory Developmental Road, 1 km E of Marble Creek crossing; 19°06' S, 145°16' E; 440 m a.s.l.; 15 May 2023; J.D. Wilson and M.G. Rix leg.; QMB

S118345 • 1 ♀; Gregory Developmental Road, 1 km E of Marble Creek crossing; 19°06' S, 145°16' E; 433 m a.s.l.; 15 May 2023; J.D. Wilson and M.G. Rix leg.; QMB S118344 • 1 ♂; Magnetic Island, Aracadia, 10 Mirimar Palms, Mirimar Crescent; 19°09' S, 146°51' E; Jan. 1989; I. McCallum leg.; hand collected, caught in laundry washtub; QMB S11272 • 1 ♂; Townsville, Roseneath; 19°22' S, 146°50' E; 27 Nov. 1995; D. Wilson leg.; QMB S30537 • 1 ♂; Oak Valley, near Townsville; 19°24' S, 146°49' E; 29 Dec. 1988; Mrs Mackay leg.; hand collected, under pillow in house; QMB S11274 • 1 ♂; Bowling Green Bay National Park, Mount Elliot section, picnic grounds; 19°25' S, 146°55' E; 23 Nov. 1983; J. Denison leg.; hand collected, in leaf litter after rain; QMB S9808 • 1 ♀; Bowling Green Bay National Park, Mount Elliot section, near Alligator Creek Day Use Area; 19°26' S, 146°57' E; 44 m a.s.l.; 17 May 2023; J.D. Wilson and M.G. Rix leg.; QMB S118356 • 1 juv.; Bowling Green Bay National Park, Mount Elliot section, near Alligator Creek Day Use Area; 19°26' S, 146°57' E; 52 m a.s.l.; 17 May 2023; J.D. Wilson and M.G. Rix leg.; QMB S118355 • 1 ♂; Bowling Green Bay National Park, Mount Elliot section; 19°29' S, 146°55' E; 17 Oct. 1985; C. Adams leg.; hand collected, edge of creek near house; QMB S9798 • 1 ♂; Bowling Green Bay National Park, Mount Elliot section; 19°31' S, 146°58' E; 9 Nov. 1999; M. Towers leg.; QMB S60777 • 1 ♂; Mount Garnet; 19°31' S, 146°58' E; 31 Dec. 1960; I.E. Mackay leg.; hand collected, found in small silk-lined depression under burnt log, slight forested area; QMB S9765.

Description

Male (holotype of *A. collinsorum* Raven, 1985, QMB S1259)

GENERAL (Fig. 27A–Q). Body length 23.27, in moderate condition, colour faded significantly due to preservation.

DORSAL PROSOMA (Fig. 27A, E–F). Carapace length 8.64, width 7.09, length/width 1.22, clypeus to fovea length/carapace length 0.68, caput width/carapace width 0.68, carapace red-brown, reflective setae present, heavy on caput, moderate on thorax, fovea procurved, fovea width/carapace length 0.11 (Fig. 27A, F); chelicerae dark red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.57 (Fig. 27A); eye group rectangular, width/length 1.88, eye tubercle present (Fig. 27E).

ABDOMEN (Fig. 27B, D). Abdomen length 9.69, grey-brown, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 27C, G–I). Labium cuspules absent (Fig. 27H); maxillae heel distinct, cuspules present, count=about 108, extending posteriorly onto heel, extending laterally about 25% of maxillae length (Fig. 27C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 27C, I); sternum length/width 1.19, central sternum with consistent covering of short setae, row of longer setae around posterior edges (Fig. 27G–H); posterior sigilla ovoid, central sternum to posterior sigilla length/sternum length 0.19, posterior sigilla length/sternum length 0.16 (Fig. 27G–H); other sigilla small, round and lateral (Fig. 27G–H).

LEG I (Fig. 27N–Q). Leg I orange-brown, lighter on distal metatarsus and tarsus, femur length 7.21, patella length 4.72, tibia length 5.41, metatarsus length 4.81, tarsus length 3.22, total length 25.36, leg I length/carapace length 2.94 (Fig. 27N–O); scopulae on distal metatarsus and tarsus (Fig. 27N–O); spine count Fe D 1, Fe PL 1, Pa PL 2 (distal rubbed off), Ti PL 0, Ti RL 0, Me PL 0, Me RL 0, Ta 0 (Fig. 27N–O); tibia length/width [TIL/TID] 3.52, even width along length, spur present, intermediate triangular/digitiform, knuckle absent, megaspine angled at 20 degrees, length to distal face of spur/tibia length [TIS/TIL] 0.50, spur height/tibia width [TISH/TID] 0.65, megaspine length/tibia length 0.20 (Fig. 27N–P); metatarsus relatively straight, proximal excavation present, excavation concave with pronounced heel, heel sharp, excavation length/metatarsus length [MIPEL/MIL] 0.43, metatarsus length/width [MIL/MID] 3.47 (Fig. 27N–O, Q).

PEDIPALP (Fig. 27J–M). Tibia length 3.67, width 1.51, length/width [PTL/PTD] 2.43, asetose depression present, depression length/palp tibia length [PDL/PTL] 0.66, retrolateral face with consistent covering of light setae, ventral face with two elongate bristle-like setae below depression, prolateral face with patch of spines on distal half, disto-medial spine absent (Fig. 27J–K); patella prolateral face with 2 spines (Fig. 27J–K); cymbium with scopulae present distally (Fig. 27J–K); copulatory organ total length 2.13, length/palp tibia length 0.58 (Fig. 27L–M); bulb length/width 0.98 (Fig. 27L–M); embolus reflexed, attenuate, tapering and curving relatively evenly to point, one slight bend, at about 0.1 of length, small hook on tip, width at base/bulb width 0.29, embolus length/bulb length 2.29 (Fig. 27L–M).

Female (QMB S118344)

GENERAL (Fig. 28A–L). Body length 25.60, in good condition.

DORSAL PROSOMA (Fig. 28A, E–F). Carapace length 7.97, width 5.96, length/width 1.34, clypeus to fovea length/carapace length 0.66, caput width/carapace width 0.75, carapace red-brown, caput slightly darker than thorax, reflective setae present, moderate on caput, light on thorax, fovea procurved, fovea width/carapace length 0.11 (Fig. 28A, F); chelicerae dark red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.49 (Fig. 28A); eye group rectangular, width/length 1.89, eye tubercle present (Fig. 28E).

ABDOMEN (Fig. 28B, D). Abdomen length 12.88, light brown, darker dorsally, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 28C, G–I). Labium cuspules absent (Fig. 28H); maxillae heel distinct, cuspules present, count=about 107, extending posteriorly onto heel, extending laterally about 40% of maxillae length (Fig. 28C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 28C, I); sternum length/width 1.25, central sternum with consistent covering of moderate setae, row of longer setae around posterior edges, setae at higher density around anterior edges (Fig. 28G–H); posterior sigilla ovoid, central sternum to posterior sigilla length/sternum length 0.21, posterior sigilla length/sternum length 0.14 (Fig. 28G–H); other sigilla small, round and lateral (Fig. 28G–H).

LEG I (Fig. 28J–K). Leg I pallid, darker on distal tarsus, femur length 5.55, patella length 3.70, tibia length 3.74, metatarsus length 3.43, tarsus length 2.35, total length 18.78, leg I length/carapace length 2.36; scopulae on distal metatarsus and tarsus; spine count Fe D 1, Fe PL 1, Pa PL 2, Ti PL 2, Ti RL 4 (proximal weak), Me PL 2, Me RL 3, Ta 0; tibia length/width [TIL/TID] 2.89.

GENITALIA (Fig. 28D, L). Epigastric furrow extending slightly, posterior edge with rounded shape (Fig. 28D); spermathecae with two vesicles each (Fig. 28L); lateral vesicle relatively straight with ends curving medially, length 0.77, lateral vesicle length/genitalia width 0.48, length/width at base 2.28, crown un-demarcated (Fig. 28L); medial vesicle short, relatively straight and projecting ventrally, medial vesicle length/genitalia width 0.09, length/width 1.31, medial vesicle length/lateral vesicle length 0.19 (Fig. 28L).

Distribution and natural history

Aname giraulti occurs in north-eastern Queensland, in the Brigalow Belt North, Einasleigh Uplands and Wet Tropics bioregions, extending from around Mount Elliot, in the south, to approximately Mount Molloy in the north, and as far west as Rosella Plains (Fig. 6). It constructs an open, silk-lined burrow without silk outside of the entrance, often on an angle, and with a hidden secondary ‘wishbone’ entrance (Fig. 6).

Remarks

This species was previously in synonymy with *Aname pallida*; however, morphological examination, along with molecular divergence values (12.22% average pairwise divergence for *COI*) indicate that it is a distinct species, of which *Aname collinsorum* Raven, 1985 is a junior synonym. Although we have examined both the *A. giraulti* lectotype and the *A. collinsorum* holotype to confirm that they are conspecific, we have imaged the *A. collinsorum* holotype due to it being more recently collected and in better condition.

Aname intermedia sp. nov.

[urn:lsid:zoobank.org:act:7603502B-B1E2-4B9E-BFD0-73C6822041C3](https://zoobank.org/act:7603502B-B1E2-4B9E-BFD0-73C6822041C3)

Figs 1, 6, 29, 30

Diagnosis

Males of *A. intermedia* sp. nov. can be distinguished from all species for which males are known except *A. attenuata*, *A. blackdownensis*, *A. convoluta* sp. nov., *A. ferruginea* sp. nov., *A. giraulti*, *A. pallida*, and *A. vigilata* sp. nov. by a moderate to large body size (carapace length >4.0 mm), and the presence of a long embolus (embolus length/bulb length >1.5), a proximal excavation less than or equal to half the length of metatarsus I, and a prominent and sharp heel on metatarsus I (Fig. 29Q). Males of *A. intermedia* can be distinguished from those of *A. attenuata*, *A. blackdownensis*, *A. convoluta*, *A. ferruginea*, *A. giraulti*, *A. pallida*, and *A. vigilata* by the presence of a relatively wide basal section on the embolus, which then tapers to an attenuate, sinuous distal section after about 0.4 of length (similar to *eddieorum*-complex species) (Fig. 29L–M; cf. Figs 15, 18, 21, 23, 25, 27, 33).

Females of *A. intermedia* sp. nov. can be distinguished from all species for which females are known by the presence of spermathecae with relatively short and wide lateral vesicles (lateral vesicle length/width ~1) and large, banana-shaped medial vesicles curving from a medial to lateral angle (medial vesicle length/lateral vesicle length ~2.6) (Fig. 30L).

Etymology

The specific epithet ‘*intermedia*’ is a Latin adjective referencing the intermediate morphology of this species between species of the *pallida*- and *eddieorum*-complexes.

Type material**Holotype**

AUSTRALIA – Queensland • ♂; Townsville, Condon; 19°20' S, 146°42' E; 12 Nov. 1979; V. Cataldo leg.; QMB S22502.

Other material examined

AUSTRALIA – Queensland • 1 juv.; Granitevale Road, Alice River, SW of Townsville; 19°21' S, 146°37' E; 44 m a.s.l.; 17 May 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on bank (full of ant remains); QMB S118357 • 1 ♀; Jesmond Road, SW of Charters Towers; 20°10' S, 146°08' E; 364 m a.s.l.; 16 May 2023; J.D. Wilson and M.G. Rix leg.; excavated; QMB S118353 • 1 juv.; Jesmond Road, SW of Charters Towers; 20°10' S, 146°09' E; 367 m a.s.l.; 16 May 2023; J.D. Wilson and M.G. Rix leg.; excavated; QMB S118352 • 1 juv.; Jesmond Road, SW of Charters Towers; 20°10' S, 146°09' E; 340 m a.s.l.; 16 May 2023; J.D. Wilson and M.G. Rix leg.; open burrow on ground; QMB S118350.

Description

Male (holotype, QMB S22502)

GENERAL (Fig. 29A–Q). Body length 16.75, in moderate condition, leg I megaspines broken off, colour presumably faded.

DORSAL PROSOMA (Fig. 29A, E–F). Carapace length 7.14, width 5.78, length/width 1.24, clypeus to fovea length/carapace length 0.71, caput width/carapace width 0.63, carapace red-orange, caput slightly darker than thorax, reflective setae present, heavy on caput, moderate on thorax, fovea procurved, fovea width/carapace length 0.13 (Fig. 29A, F); chelicerae red, rastellum absent or inconspicuous, chelicerae length/carapace length 0.47 (Fig. 29A); eye group rectangular, width/length 1.95, eye tubercle present (Fig. 29E).

ABDOMEN (Fig. 29B, D). Abdomen length 6.19, brown, dorsal pattern absent, with reflective setae on anterior portion.

VENTRAL PROSOMA (Fig. 29C, G–I). Labium cuspules absent (Fig. 29H); maxillae heel distinct, cuspules present, count=about 78, extending posteriorly onto heel, extending laterally about 40% of maxillae length (Fig. 29C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 29C, I); sternum length/width 1.35, some posterior setae rubbed off, central sternum with consistent covering of moderate setae, row of longer setae around posterior edges (Fig. 29G–H); posterior sigilla semi-elongate, central sternum to posterior sigilla length/sternum length 0.21, posterior sigilla length/sternum length 0.14 (Fig. 29G–H); other sigilla small, round and lateral (Fig. 29G–H).

LEG I (Fig. 29N–Q). Leg I orange-brown, lighter on distal metatarsus and tarsus, reflective setae on dorsal femur, femur length 5.68, patella length 3.64, tibia length 4.35, metatarsus length 3.84, tarsus length 2.39, total length 19.90, leg I length/carapace length 2.79 (Fig. 29N–O); scopulae on distal metatarsus and tarsus (Fig. 29N–O); spine count Fe D 1, Fe PL 1 (rubbed off), Pa PL 2 (distal rubbed off), Ti PL 0, Ti RL 0, Me PL 0, Me RL 0, Ta 0 (Fig. 29N–O); tibia length/width [TIL/TID] 3.51, even width along length, spur present, intermediate triangular/digitiform, knuckle absent, length to distal face of spur/tibia length [TIS/TIL] 0.44, spur height/tibia width [TISH/TID] 0.61 (Fig. 29N–P); metatarsus relatively straight, proximal excavation present, excavation concave with pronounced heel, heel sharp, excavation length/metatarsus length [MIPEL/MIL] 0.47, metatarsus length/width [MIL/MID] 3.49 (Fig. 29N–O, Q).

PEDIPALP (Fig. 29J–M). Tibia length 2.80, width 1.23, length/width [PTL/PTD] 2.28, asetose depression present, depression length/palp tibia length [PDL/PTL] 0.63, retrolateral face with consistent covering of light setae, ventral face with two elongate bristle-like setae below depression, prolateral face with two disto-ventral spines, disto-medial spine absent (Fig. 29J–K); patella prolateral face with 2 (distal rubbed off) spines (Fig. 29J–K); cymbium with scopulae present distally (Fig. 29J–K); copulatory organ total length 1.73, length/palp tibia length 0.62 (Fig. 29L–M); bulb length/width 0.87 (Fig. 29L–M); embolus slightly reflexed, attenuate, with wide base tapering about halfway along into attenuate apical section, one slight bend, at about 0.4 of length, slight bend before tip, width at base/bulb width 0.28, embolus length/bulb length 2.25 (Fig. 29L–M).

Female (QMB S118353)

GENERAL (Fig. 30A–L). Body length 23.00, in good condition.

DORSAL PROSOMA (Fig. 30A, E–F). Carapace length 9.19, width 7.13, length/width 1.29, clypeus to fovea length/carapace length 0.71, caput width/carapace width 0.73, carapace red-brown, caput slightly darker than thorax, reflective setae present, moderate on caput, moderate on thorax, fovea procurved, fovea width/carapace length 0.13 (Fig. 30A, F); chelicerae dark red-brown, rastellum absent or inconspicuous,

chelicerae length/carapace length 0.46 (Fig. 30A); eye group rectangular, width/length 1.88, eye tubercle present (Fig. 30E).

ABDOMEN (Fig. 30B, D). Abdomen length 9.43, dark brown, dorsal pattern absent, with full covering of reflective setae.

VENTRAL PROSOMA (Fig. 30C, G–I). Labium cuspules absent (Fig. 30H); maxillae heel distinct, cuspules present, count=about 100, extending posteriorly onto heel, extending laterally about 45% of maxillae length (Fig. 30C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 30C, I); sternum length/width 1.22, central sternum with consistent covering of short setae, row of longer setae around posterior edges (Fig. 30G–H); posterior sigilla ovoid, central sternum to posterior sigilla length/sternum length 0.22, posterior sigilla length/sternum length 0.16 (Fig. 30G–H); other sigilla small, round and lateral (Fig. 30G–H).

LEG I (Fig. 30J–K). Leg I red-brown, lighter on tarsus, femur length 6.47, patella length 4.37, tibia length 4.38, metatarsus length 3.96, tarsus length 2.48, total length 21.65, leg I length/carapace length 2.36; scopulae on distal metatarsus and tarsus; spine count Fe D 2, Fe PL 1, Pa PL 2, Ti PL 2, Ti RL 4 (2nd from proximal rubbed off), Me PL 2, Me RL 3, Ta 0; tibia length/width [TIL/TID] 3.00.

GENITALIA (Fig. 30D, L). Epigastric furrow unmodified (Fig. 30D); spermathecae with two vesicles each (Fig. 30L); lateral vesicle relatively straight, length 0.57, lateral vesicle length/genitalia width 0.19, length/width at base 0.95, crown un-demarcated (Fig. 30L); medial vesicle long, broad and curving from medial to lateral angle, medial vesicle length/genitalia width 0.49, length/width 5.82, medial vesicle length/lateral vesicle length 2.6 (Fig. 30L).

Distribution and natural history

Aname intermedia sp. nov. occurs in north-eastern Queensland, near the boundaries of the Einsleigh Uplands, Desert Uplands, and Brigalow Belt North bioregions. It is known from two general localities, one in western Townsville and the other just west of Charters Towers (Fig. 6). It constructs an open, silk-lined burrow without silk outside of the entrance, often on an angle, and with a hidden secondary ‘wishbone’ entrance (Fig. 6).

Aname platensis sp. nov.

[urn:lsid:zoobank.org:act:85689b9e-96a4-4f80-bd28-eb532cfa7b9](https://zoobank.org/act:85689b9e-96a4-4f80-bd28-eb532cfa7b9)

Figs 6, 31–32

Aname barrema Raven, 1985 – Raven 1985: fig. 72 (illustrated female paratype QMB S1243 [Girraween National Park] assigned to *A. barrema* Raven, 1985, here identified as *A. platensis* sp. nov.).

Diagnosis

Males of *A. platensis* sp. nov. can be distinguished from all species for which males are known by a moderate to large body size (carapace length >4.0 mm), the presence of a long embolus (embolus length/bulb length >1.5), a narrow sternum (sternum length/width >1.3), and a thick metatarsus I with a rounded heel (metatarsus I length/width ~3.5) (Fig. 31A–Q).

Females of *A. platensis* sp. nov. can be distinguished from all species for which females are known except *A. attenuata*, *A. blackdownensis*, and *A. convoluta* sp. nov. by the presence of spermathecae with two vesicles, with relatively long and straight lateral vesicles (lateral vesicle length/genitalia width >0.25), and long medial vesicles (medial vesicle length/lateral vesicle length >1) that project at an antero-medial angle (Fig. 32L). Females of *A. platensis* can be distinguished from those of *A. convoluta* by the presence of spermathecae with less elongate medial vesicles (medial vesicle length/genitalia width <0.5)

(Fig. 32L; cf. Fig. 24). Females of *A. platensis* can be distinguished from those of *A. blackdownensis* by the absence of bristle-like setae covering the posterior part of the abdomen (Fig. 32B, D; cf. Fig. 22). Females of *A. platensis* can be distinguished from those of *A. attenuata* by the presence of spermathecae with thicker, straighter medial vesicles (medial vesicle length/width ~3.3; cf. ~4.1 in *A. attenuata*) (Fig. 32L; cf. Figs 19–20).

Etymology

The specific epithet '*platensis*' is an adjective formed from the Latin '*platus*' signifying a flat or broad surface, and the suffix '*-ensis*', which signifies a connection to a location, in reference to the distribution of this species in the highlands or 'plateau' around Stanthorpe, Queensland, which represents the northern extent of the New England Tableland bioregion.

Type material

Holotype

AUSTRALIA – Queensland • ♂; 10 km W of Stanthorpe, Texas Road; 28°39' S, 151°48' E; 18 Mar. 1994; L. Smith leg.; QMB S40807.

Paratypes

AUSTRALIA – Queensland • 1 ♂; Liston; 28°36' S, 152°03' E; Jul. 1980; M. Smith leg.; QMB S96473 • 1 ♂, 1 ♀; Nundubbermere Falls, 25 km SW of Stanthorpe; 28°47' S, 151°41' E; 1–4 Apr. 1988; G.B. Monteith leg.; QMB S4192 • 1 ♀; Girraween National Park, near Girraween Day Use Area off Pyramids Road; 28°50' S, 151°56' E; 879 m a.s.l.; 18 Feb. 2023; M.G. Rix, J.D. Wilson and M.S. Harvey leg.; excavated, open burrow on ground, sclerophyll woodland; QMB S118225 • 1 ♂; Girraween National Park, near Girraween Day Use Area off Pyramids Road; 28°50' S, 151°56' E; 884 m a.s.l.; 18 Feb. 2023; M.G. Rix, J.D. Wilson and M.S. Harvey leg.; excavated, open burrow on ground, sclerophyll woodland; QMB S118226.

Other material examined

AUSTRALIA – Queensland • 1 ♀; near Girraween National Park; 28°50' S, 151°56' E; 22 Feb. 1973; R.J. Raven leg.; QMB S1243 (paratype of *Aname barrema* Raven, 1985).

Description

Male (holotype, QMB S40807)

GENERAL (Fig. 31A–Q). Body length 17.26, in good condition, colour presumably faded due to preservation.

DORSAL PROSOMA (Fig. 31A, E–F). Carapace length 7.35, width 6.05, length/width 1.22, clypeus to fovea length/carapace length 0.68, caput width/carapace width 0.73, carapace red-brown, reflective setae present, moderate on caput, light on thorax, fovea straight, fovea width/carapace length 0.16 (Fig. 31A, F); chelicerae red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.52 (Fig. 31A); eye group rectangular, width/length 2.2, eye tubercle present (Fig. 31E).

ABDOMEN (Fig. 31B, D). Abdomen length 6.45, brown, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 31C, G–I). Labium cuspules absent (Fig. 31H); maxillae heel distinct, cuspules present, count=about 63, extending posteriorly onto heel, extending laterally about 20% of maxillae length (Fig. 31C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 31C, I); sternum length/width 1.36, central sternum with consistent covering of short setae, row of longer setae around posterior edges (Fig. 31G–H); posterior sigilla circular, central sternum to posterior sigilla

length/sternum length 0.26, posterior sigilla length/sternum length 0.13 (Fig. 31G–H); other sigilla small, round and lateral (Fig. 31G–H).

LEG I (Fig. 31N–Q). Leg I red-brown, lighter on distal metatarsus and tarsus, femur length 5.89, patella length 3.67, tibia length 4.27, metatarsus length 4.09, tarsus length 2.79, total length 20.70, leg I length/carapace length 2.82 (Fig. 31N–O); scopulae on distal metatarsus and tarsus (Fig. 31N–O); spine count Fe D 0, Fe PL 1, Pa PL 0, Ti PL 0, Ti RL 0, Me PL 0, Me RL 0, Ta 0 (Fig. 31N–O); tibia length/width [TIL/TID] 2.99, even width along length, spur present, intermediate triangular/digitiform, knuckle absent, megaspine angled at 23 degrees, length to distal face of spur/tibia length [TIS/TIL] 0.53, spur height/tibia width [TISH/TID] 0.43, megaspine length/tibia length 0.15 (Fig. 31N–P); metatarsus relatively straight, proximal excavation present, excavation concave with pronounced heel, heel semi-sharp, excavation length/metatarsus length [MIPEL/MIL] 0.45, metatarsus length/width [MIL/MID] 3.49 (Fig. 31N–O, Q).

PEDIPALP (Fig. 31J–M). Tibia length 3.14, width 1.27, length/width [PTL/PTD] 2.48, asetose depression present, depression length/palp tibia length [PDL/PTL] 0.53, retrolateral face with short, thorn-like setae along retrolateral edge of depression, ventral face with two elongate bristle-like setae below depression, prolateral face with two disto-ventral spines, disto-medial spine absent (Fig. 31J–K); patella prolateral face with 0 spines (Fig. 31J–K); cymbium with scopulae present distally (Fig. 31J–K); copulatory organ total length 1.68, length/palp tibia length 0.54 (Fig. 31L–M); bulb length/width 0.88 (Fig. 31L–M); embolus demarcated and roughly perpendicular to bulb, attenuate, tapering and curving relatively evenly to point, one slight bend, at about 0.4 of length, slight bend before tip, width at base/bulb width 0.26, embolus length/bulb length 1.94 (Fig. 31L–M).

Female (paratype, QMB S118225)

GENERAL (Fig. 32A–L). Body length 21.38, in good condition.

DORSAL PROSOMA (Fig. 32A, E–F). Carapace length 7.30, width 6.11, length/width 1.19, clypeus to fovea length/carapace length 0.66, caput width/carapace width 0.77, carapace dark red-brown, reflective setae present, heavy on caput, heavy on thorax, fovea straight, fovea width/carapace length 0.18 (Fig. 32A, F); chelicerae dark red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.55 (Fig. 32A); eye group rectangular, width/length 2.18, eye tubercle present (Fig. 32E).

ABDOMEN (Fig. 32B, D). Abdomen length 10.21, dark grey, dorsal pattern absent, with reflective setae on anterior portion.

VENTRAL PROSOMA (Fig. 32C, G–I). Labium cuspules absent (Fig. 32H); maxillae heel distinct, cuspules present, count=about 105, extending posteriorly onto heel, extending laterally about 45% of maxillae length (Fig. 32C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 32C, I); sternum length/width 1.34, central sternum with consistent covering of moderate setae, row of longer setae around posterior edges (Fig. 32G–H); posterior sigilla circular, central sternum to posterior sigilla length/sternum length 0.26, posterior sigilla length/sternum length 0.12 (Fig. 32G–H); other sigilla small, round and lateral (Fig. 32G–H).

LEG I (Fig. 32J–K). Leg I dark red-brown, femur length 4.95, patella length 3.29, tibia length 3.34, metatarsus length 3.26, tarsus length 2.40, total length 17.24, leg I length/carapace length 2.36; scopulae on distal metatarsus and tarsus; spine count Fe D 1, Fe PL 1, Pa PL 2, Ti PL 2, Ti RL 4, Me PL 2, Me RL 3, Ta 0; tibia length/width [TIL/TID] 2.61.

GENITALIA (Fig. 32D, L). Epigastric furrow unmodified (Fig. 32D); spermathecae with two vesicles each (Fig. 32L); lateral vesicle relatively straight, length 0.49, lateral vesicle length/genitalia width 0.34,

length/width at base 1.59, crown un-demarcated (Fig. 32L); medial vesicle undulating anteriorly, medial vesicle length/genitalia width 0.33, length/width 3.28, medial vesicle length/lateral vesicle length 0.97 (Fig. 32L).

Distribution and natural history

Aname platensis sp. nov. occurs in south-eastern Queensland (and potentially north-eastern New South Wales), in the New England Tablelands and Nandewar bioregions, extending from around Liston in the north to the Girraween National Park in the south (Fig. 6). It constructs an open, silk-lined burrow without silk outside of the entrance, often on an angle, and with a hidden secondary ‘wishbone’ entrance (Fig. 6).

Aname vigilata sp. nov.

[urn:lsid:zoobank.org:act:4A3BB11D-5344-45DA-8FE4-5924A06D1FBD](https://zoobank.org/act:4A3BB11D-5344-45DA-8FE4-5924A06D1FBD)

Figs 6, 33

Diagnosis

Males of *A. vigilata* sp. nov. can be distinguished from all species for which males are known except *A. attenuata*, *A. blackdownensis*, *A. convoluta* sp. nov., *A. ferruginea* sp. nov., *A. giraulti*, *A. intermedia* sp. nov., and *A. pallida* by a moderate to large body size (carapace length >4.0 mm), and the presence of a long embolus (embolus length/bulb length >1.5), a proximal excavation less than or equal to half the length of metatarsus I, and a prominent and sharp heel on metatarsus I (Fig. 33Q). Males of *A. vigilata* can be distinguished from those of *A. ferruginea*, *A. giraulti*, and *A. pallida* by the presence of an embolus that is not reflexed and does not have a small hook at the tip, and the presence of thorn-like setae along the retrolateral edge of the asetose depression on the palp tibia (Fig. 33K–M; cf. Figs 15, 25, 27). Males of *A. vigilata* can be distinguished from those of *A. intermedia* by the presence of a more gradually tapering embolus, with a narrower basal section (Fig. 33L–M; cf. Fig. 29). Males of *A. vigilata* can be distinguished from those of *A. convoluta* by the presence of a shorter embolus (embolus length/bulb length <2) (Fig. 33L; cf. Fig. 23). Males of *A. vigilata* can be distinguished from those of *A. attenuata* by the presence of a copulatory organ with a more demarcated bulb and embolus (Fig. 33L; cf. Fig. 18). Males of *A. vigilata* can be distinguished from those of *A. blackdownensis* by the absence of erect, bristle-like setae on the posterior part of the abdomen (Fig. 33B, D; cf. Fig. 21).

Females of *A. vigilata* sp. nov. are unknown.

Etymology

The specific epithet ‘*vigilata*’ is a Latin adjective meaning ‘vigilant’ or ‘watchful’, alluding to the use of Shoalwater Bay (where the species occurs) as a military training area.

Type material

Holotype

AUSTRALIA – Queensland • ♂; Shoalwater Bay, Manifold Road, near Manifold ruins; 22°40′ S, 150°42′ E; 14 Aug. 1991; J.C. Wombley leg.; QMB S20019.

Paratypes

AUSTRALIA – Queensland • 1 ♂; Shoalwater Bay; 22°40′ S, 150°41′ E; 15 Aug. 1991; J.C. Wombley leg.; QMB S20020 • 4 ♂♂; Shoalwater Bay; 22°40′ S, 150°42′ E; 13 Aug. 1991; J.C. Wombley leg.; pitfall trap, rainforest; QMB S20015 • 1 ♂; Shoalwater Bay; 22°40′ S, 150°40′ E; 16 Aug. 1991; J.C. Wombley leg.; QMB S20016 • 1 ♂; Shoalwater Bay; 22°40′ S, 150°41′ E; 12 Aug. 1991; J.C. Wombley leg.; pitfall trap; QMB S20013 • 2 ♂♂; Shoalwater Bay; 22°40′ S, 150°39′ W; 13 Aug. 1991; J.C.

Wombley leg.; QMB S60948 • 1 ♂; Shoalwater Bay; 22°44' S, 150°48' E; 19 Aug. 1991; J.C. Wombley leg.; QMB S20018 • 1 ♂; Shoalwater Bay; 22°45' S, 150°47' E; 19 Aug. 1991; J.C. Wombley leg.; QMB S20021.

Description

Male (holotype, QMB S20019)

GENERAL (Fig. 33A–Q). Body length 16.31, in good condition, colour presumably faded due to preservation.

DORSAL PROSOMA (Fig. 33A, E–F). Carapace length 6.44, width 5.26, length/width 1.22, clypeus to fovea length/carapace length 0.69, caput width/carapace width 0.69, carapace red-brown, caput slightly darker than thorax, reflective setae present, moderate on caput, light on thorax, fovea straight, fovea width/carapace length 0.17 (Fig. 33A, F); chelicerae dark red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.47 (Fig. 33A); eye group rectangular, width/length 1.89, eye tubercle present (Fig. 33E).

ABDOMEN (Fig. 33B, D). Abdomen length 6.83, dark grey-brown, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 33C, G–I). Labium cuspules absent (Fig. 33H); maxillae heel distinct, cuspules present, count=about 105, extending posteriorly onto heel, extending laterally about 35% of maxillae length (Fig. 33C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 33C, I); sternum length/width 1.19, central sternum with consistent covering of moderate setae, row of longer setae around posterior edges (Fig. 33G–H); posterior sigilla ovoid, central sternum to posterior sigilla length/sternum length 0.25, posterior sigilla length/sternum length 0.14 (Fig. 33G–H); other sigilla small, round and lateral (Fig. 33G–H).

LEG I (Fig. 33N–Q). Leg I red-brown, lighter on distal metatarsus and tarsus, femur length 5.82, patella length 3.71, tibia length 4.18, metatarsus length 3.92, tarsus length 2.57, total length 20.20, leg I length/carapace length 3.14 (Fig. 33N–O); scopulae on distal metatarsus and tarsus (Fig. 33N–O); spine count Fe D 1, Fe PL 1, Pa PL 2, Ti PL 0, Ti RL 0, Me PL 0, Me RL 0, Ta 0 (Fig. 33N–O); tibia length/width [TIL/TID] 3.03, even width along length, spur present, digitiform, knuckle absent, megaspine angled at 19 degrees, length to distal face of spur/tibia length [TIS/TIL] 0.51, spur height/tibia width [TISH/TID] 0.68, megaspine length/tibia length 0.25 (Fig. 33N–P); metatarsus slightly sinuous, proximal excavation present, excavation concave with pronounced heel, heel sharp, excavation length/metatarsus length [MIPEL/MIL] 0.47, metatarsus length/width [MIL/MID] 3.92 (Fig. 33N–O, Q).

PEDIPALP (Fig. 33J–M). Tibia length 2.72, width 1.05, length/width [PTL/PTD] 2.60, asetose depression present, depression length/palp tibia length [PDL/PTL] 0.59, retrolateral face with short, thorn-like setae along retrolateral edge of depression, ventral face with two elongate bristle-like setae below depression, prolateral face with two disto-ventral spines, disto-medial spine absent (Fig. 33J–K); patella prolateral face with 2 spines (Fig. 33J–K); cymbium with scopulae present distally (Fig. 33J–K); copulatory organ total length 1.73, length/palp tibia length 0.63 (Fig. 33L–M); bulb length/width 0.88 (Fig. 33L–M); embolus demarcated and roughly perpendicular to bulb, attenuate, tapering and curving relatively evenly to point, slight bend before tip, width at base/bulb width 0.23, embolus length/bulb length 1.76 (Fig. 33L–M).

Distribution and natural history

Aname vigilata sp. nov. occurs in central-eastern Queensland, at Shoalwater Bay, in the Central Mackay Coast bioregion (Fig. 6). The form of burrows constructed by spiders of this species is unknown, but is likely to be similar to that of other *pallida*-complex species (Fig. 6).

Aname eddieorum-complex
Figs 1, 3B, 5B, 7, 34–48

Remarks

See the key to complexes and Figures 3–5 for diagnostic information. In life, spiders of the *eddieorum*-complex vary from honey-tan to dark brown in colour, with the anterior legs often slightly darker than the posterior legs (Fig. 7); however, colour can vary a surprising amount within species (see, for example, the two female *A. briggsi* sp. nov. specimens pictured in Fig. 7). Females of the *eddieorum*-complex generally have reflective bronze setae on the carapace, and sometimes the dorsal abdomen and femora. Males of at least some species have a dense covering of reflective silver setae on the carapace and dorsal abdomen (Fig. 7). Spiders of this complex generally make an open, silk-lined burrow without silk outside of the entrance, with the entrance often on an angle, and with a hidden secondary ‘wishbone’ entrance. The burrows are often found in areas with a leaf-litter layer, and indeed the entrance may be somewhat embedded in the leaf-litter (Fig. 7).

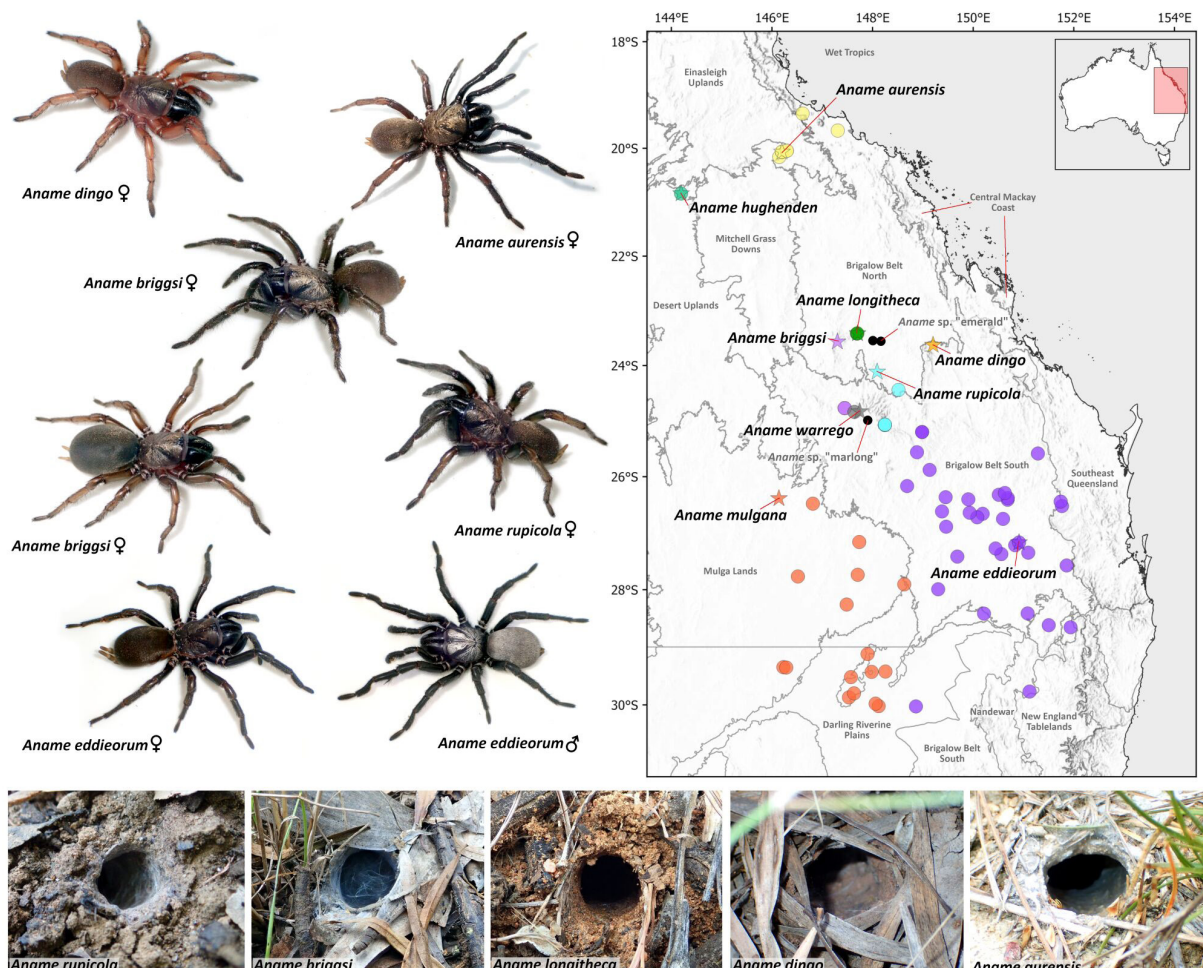


Fig. 7. *Aname eddieorum*-complex species habitus images, distribution map, and burrow architecture. Points on the map represented by a star are type localities. Note that intraspecific variation occurs in both physical appearance and burrow architecture, and images shown here should be treated only as examples, not used for species diagnosis.

Distribution

The *eddieorum*-complex has a largely inland distribution in Queensland and northern New South Wales, occurring from the Darling Riverine Plains, Brigalow Belt South, and New England Tablelands bioregions, north to the Brigalow Belt North, Mitchell Grass Downs and Desert Uplands bioregions in north Queensland (near the border with the Einsleigh Uplands) (Fig. 7). They are generally found on or west of the Great Dividing Range, except *A. aurens* sp. nov. which extends to near the coast around Townsville and Ayr. The two most southerly species, *A. mulgana* sp. nov. and *A. eddieorum* sp. nov., are both widespread; however, in central Queensland many species occur, each with seemingly relatively small ranges. This may be due to the increased topological complexity in this region, and the adjoining boundaries between several different bioregions.

Composition

The *eddieorum*-complex includes nine described species: *Aname aurens* sp. nov., *A. briggsi* sp. nov., *A. dingo* sp. nov., *A. eddieorum* sp. nov., *A. hughenden* sp. nov., *A. longithec*a Raven, 1985, *A. mulgana* sp. nov., *A. rupicola* sp. nov., and *A. warrego* sp. nov.. Based on the drawings of Hogg (1902), *A. diversicolor* likely also belongs to the *eddieorum*-complex; however, this species is not treated in this revision as the type specimen is lost, and we were not able to resample at the type locality. Two other potentially distinct species are shown in the phylogeny (Fig. 1) and on the map for this complex (Fig. 7), *A. sp.* “marlong”, and *A. sp.* “emerald”; however, further evidence is required to confirm that these species are distinct from others known from the area.

Key to species in the *Aname eddieorum*-complex

NB. Males are unknown for *A. dingo* sp. nov., and females are unknown for *A. hughenden* sp. nov., and *A. warrego* sp. nov.

- 1. Males..... 2
- Females..... 9

Males

- 2. Tibia I widening from the proximal end to the base of the tibial spur when in lateral view (e.g., Figs 34, 36, 41)..... 3
- Tibia I about the same width from the proximal end to the base of the tibial spur when in lateral view (e.g., Figs 39, 42, 48)..... 7
- 3. Embolus length $< 2.5 \times$ bulb length (Figs 34, 46)..... 4
- Embolus longer (Figs 36, 41, 44)..... 5
- 4. Metatarsus I proximal excavation length $\sim 0.46 \times$ metatarsus I length (Fig. 46).....
..... *A. rupicola* sp. nov.
- Metatarsus I proximal excavation shorter ($\sim 0.37 \times$ metatarsus I length) and distal pad longer (Fig. 34)..... *A. aurens* sp. nov.
- 5. Embolus relatively straight (Fig. 41)..... *A. hughenden* sp. nov.
- Embolus more curved (Figs 36, 44)..... 6
- 6. Metatarsus I proximal excavation length $\sim 0.43 \times$ metatarsus I length (Fig. 44).....
..... *A. mulgana* sp. nov.
- Metatarsus I with a shorter proximal excavation ($\sim 0.36 \times$ metatarsus I length) and longer distal pad (Fig. 36)..... *A. briggsi* sp. nov.

7. Palp tibia length $>3.0 \times$ width (Fig. 48)..... *A. warrego* sp. nov.
– Palp tibia less elongate (Figs 39, 42)..... 8
8. Embolus length $\sim 2.2 \times$ bulb length (Fig. 39)..... *A. eddieorum* sp. nov.
– Embolus longer ($\sim 2.7 \times$ bulb width) and more strongly curved (Fig. 42).....
..... *A. longithecata* Raven, 1985

Females

9. Spermathecae with lateral vesicles terminating in relatively wide ends (Figs 40, 45)..... 10
– Spermathecae with lateral vesicles with relatively narrow ends (e.g., Figs 35, 37–38)..... 11
10. Sternum with bald patches lateral to the sigilla and without thorn-like setae around the anterior edges; coxae with rounded medioventral corners (Fig. 40)..... *A. eddieorum* sp. nov.
– Sternum without bald patches lateral to the sigilla and with short, thorn-like setae around the anterior edges; coxae with more angular medioventral corners (Fig. 45)..... *A. mulgana* sp. nov.
11. Spermathecae medial vesicle length $>0.8 \times$ genitalia width (Fig. 37)..... *A. briggsi* sp. nov.
– Spermathecae with shorter medial vesicles ($<0.65 \times$ genitalia width) (Figs 35, 38, 47)..... 12
12. Spermathecae with slightly bent lateral vesicles (Fig. 47)..... *A. rupicola* sp. nov.
– Spermathecae with straighter lateral vesicles (Figs 35, 38, 43)..... 13
13. Spermathecae medial vesicle length $>0.6 \times$ genitalia width; sternum with dark patches of cuticle surrounding and lateral to the sigilla (Fig. 43)..... *A. longithecata* Raven, 1985
– Spermathecae with shorter medial vesicles; sternum without dark patches of cuticle lateral to the sigilla (Figs 35, 38)..... 14
14. Spermathecae medial vesicle length $\sim 5.3 \times$ width; body dark red in colour (Fig. 35).....
..... *A. aurensis* sp. nov.
– Spermathecae with longer medial vesicles (length $\sim 6.2 \times$ width); body lighter in colour (Fig. 38) ..
..... *A. dingo* sp. nov.

Aname aurensis sp. nov.

[urn:lsid:zoobank.org:act:3DE17C41-ABD3-42DD-B713-EFD9B910F24E](https://zoobank.org/act:3DE17C41-ABD3-42DD-B713-EFD9B910F24E)

Figs 1, 7, 34–35

Diagnosis

Males of *A. aurensis* sp. nov. can be distinguished from all species for which males are known except *A. briggsi* sp. nov., *A. eddieorum* sp. nov., *A. hughenden* sp. nov., *A. longithecata*, *A. mulgana* sp. nov., *A. rupicola* sp. nov., and *A. warrego* sp. nov. by a moderate to large body size (carapace length >4.0 mm), the presence of a long embolus (embolus length/bulb length >1.5) that has a relatively wide basal section tapering into an attenuate, sinuous distal section after about 0.4 of length, and the absence of a prominent sharp heel on metatarsus I (as in the *pallida*-complex) (Fig. 34L–M). Males of *A. aurensis* can be distinguished from those of *A. eddieorum*, *A. longithecata*, and *A. warrego* by the presence of a tibia I that widens from the proximal end to the base of the tibial spur when in lateral view (Fig. 34P; cf. Figs 39, 42, 48). Males of *A. aurensis* can be distinguished from those of *A. briggsi*, *A. hughenden*, and *A. mulgana* by the presence of a shorter embolus (embolus length/bulb length <2.5) (Fig. 34L–M; cf. Figs 36, 41, 44). Males of *A. aurensis* can be distinguished from those of *A. rupicola* by the presence

of a longer distal pad and shorter proximal excavation on metatarsus I (excavation length/metatarsus length ~ 0.37 ; cf. ~ 0.46 in *A. rupicola*) (Fig. 34Q; cf. Fig. 46).

Females of *A. aurens* sp. nov. can be distinguished from all species for which females are known except *A. briggsi* sp. nov., *A. camara*, *A. dingo* sp. nov., *A. eddieorum* sp. nov., *A. longithec*a, *A. mulgana* sp. nov., and *A. rupicola* sp. nov. by the presence of spermathecae with two vesicles, with relatively long and straight lateral vesicles (lateral vesicle length/genitalia width > 0.25) and long medial vesicles (medial vesicle length/lateral vesicle length > 1) that project medially or posteromedially, before undulating anteriorly (Fig. 35L). Females of *A. aurens* can be distinguished from those of *A. eddieorum* and *A. mulgana* by the presence of spermathecae with lateral vesicles terminating in narrower ends (Fig. 35L; cf. Figs 40, 45). Females of *A. aurens* can be distinguished from those of *A. camara* by the presence of a darker body colouration and spermathecae with longer vesicles (lateral vesicle length/genitalia width > 0.35) with less widely-spaced crowns (distance between crowns less than length of lateral vesicles) (Fig. 35A–L; cf. Fig. 107). Females of *A. aurens* can be distinguished from those of *A. briggsi* by the presence of spermathecae with less elongate lateral and medial vesicles (medial vesicle length/genitalia width < 0.65) (Fig. 35L; cf. Fig. 37). Females of *A. aurens* can be distinguished from those of *A. rupicola* by the presence of spermathecae with straighter lateral vesicles (Fig. 35L; cf. Fig. 47). Females of *A. aurens* can be distinguished from those of *A. longithec*a by the presence of spermathecae with shorter medial vesicles (medial vesicle length/genitalia width usually < 0.6), and the absence of dark patches of cuticle on the sternum, surrounding and lateral of the sigilla (Fig. 35G–I, L; cf. Fig. 43). Females of *A. aurens* can be distinguished from those of *A. dingo* by the presence of spermathecae with thicker, less undulating medial vesicles (medial vesicle length/width ~ 5.3 ; cf. ~ 6.2 in *A. dingo*), and a dark red body colouration (Fig. 35A–L; cf. Fig. 38).

Etymology

The specific epithet ‘*aurens*’ is an adjective formed from the Latin ‘*aureus*’, meaning ‘golden’, and the suffix ‘-ensis’, which signifies association with a place, referencing the distribution of this species in the Charters Towers region, an area that experienced a gold rush in the 19th century.

Type material

Holotype

AUSTRALIA – Queensland • ♂; Charters Towers; 20°04′ S, 146°12′ E; Dec. 2003; E. Rowe leg.; QMB S61200.

Paratypes

AUSTRALIA – Queensland • 1 ♀; Charters Towers, Connors Gully Road; 20°03′ S, 146°18′ E; 293 m a.s.l.; 16 May 2023; J.D. Wilson and M.G. Rix leg.; excavated; QMB S118346 • 1 ♀; Charters Towers, Connors Gully Road; 20°03′ S, 146°18′ E; 293 m a.s.l.; 16 May 2023; J.D. Wilson and M.G. Rix leg.; excavated; QMB S118347 • 1 ♂; Charters Towers; 20°04′ S, 146°12′ E; 8 Feb. 2005; G. Simpson leg.; QMB S73408 • 1 ♂; Charters Towers; 20°04′ S, 146°12′ E; 25 Mar. 2006; D. Duncan leg.; QMB S87666.

Other material examined

AUSTRALIA – Queensland • 1 ♀; Granitevale Road, Alice River, SW of Townsville; 19°21′ S, 146°36′ E; 61 m a.s.l.; 17 May 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground; QMB S118358 • 1 ♂; Ayr, Mount Kelly; 19°40′ S, 147°18′ E; 6 Dec. 1999; Jamieson leg.; hand collected, in swimming pool; QMB S60776 • 1 ♀; Jesmond Road, SW of Charters Towers; 20°10′ S, 146°09′ E; 343 m a.s.l.; 16 May 2023; J.D. Wilson and M.G. Rix leg.; excavated; QMB S118349.

Description

Male (holotype, QMB S61200)

GENERAL (Fig. 34A–Q). Body length 20.68, in good condition, colour presumably faded due to preservation.

DORSAL PROSOMA (Fig. 34A, E–F). Carapace length 8.10, width 6.43, length/width 1.26, clypeus to fovea length/carapace length 0.69, caput width/carapace width 0.75, carapace dark red-brown, reflective setae present, heavy on caput, moderate on thorax, fovea procurved, fovea width/carapace length 0.14 (Fig. 34A, F); chelicerae dark red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.52 (Fig. 34A); eye group rectangular, width/length 2.07, eye tubercle present (Fig. 34E).

ABDOMEN (Fig. 34B, D). Abdomen length 8.31, grey, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 34C, G–I). Labium cuspules absent (Fig. 34H); maxillae heel distinct, cuspules present, count=about 145, extending posteriorly onto heel, extending laterally about 35% of maxillae length (Fig. 34C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 34C, I); sternum length/width 1.12, some setae rubbed off, central sternum with consistent covering of short setae, row of longer setae around posterior edges (Fig. 34G–H); posterior sigilla semi-elongate, central sternum to posterior sigilla length/sternum length 0.23, posterior sigilla length/sternum length 0.15 (Fig. 34G–H); other sigilla small, round and lateral (Fig. 34G–H).

LEG I (Fig. 34N–Q). Leg I dark red-brown, lighter on distal metatarsus and tarsus, femur length 6.35, patella length 3.99, tibia length 4.66, metatarsus length 4.53, tarsus length 2.99, total length 22.51, leg I length/carapace length 2.78 (Fig. 34N–O); scopulae on distal metatarsus and tarsus (Fig. 34N–O); spine count Fe D 1, Fe PL 1, Pa PL 2, Ti PL 0, Ti RL 0, Me PL 0, Me RL 0, Ta 0 (Fig. 34N–O); tibia length/width [TIL/TID] 2.96, widening from proximal end to spur before narrowing again towards distal end, spur present, intermediate triangular/digitiform, knuckle present, megaspine angled at 12 degrees, length to distal face of spur/tibia length [TIS/TIL] 0.44, spur height/tibia width [TISH/TID] 0.37, megaspine length/tibia length 0.23 (Fig. 34N–P); metatarsus slightly sinuous, proximal excavation present, excavation concave with pronounced heel, heel broadly rounded, excavation length/metatarsus length [MIPEL/MIL] 0.37, metatarsus length/width [MIL/MID] 3.86 (Fig. 34N–O, Q).

PEDIPALP (Fig. 34J–M). Tibia length 3.33, width 1.29, length/width [PTL/PTD] 2.58, asetose depression present, depression length/palp tibia length [PDL/PTL] 0.64, retrolateral face with consistent covering of light setae, ventral face with one elongate bristle-like seta below depression, prolateral face with patch of spines on distal half, disto-medial spine absent (Fig. 34J–K); patella prolateral face with 2 spines (Fig. 34J–K); cymbium with scopulae present distally (Fig. 34J–K); copulatory organ total length 1.94, length/palp tibia length 0.58 (Fig. 34L–M); bulb length/width 0.82 (Fig. 34L–M); embolus tapering from bulb, attenuate, with wide base tapering about halfway along into attenuate apical section, one slight bend, at about 0.4 of length, slight bend before tip, width at base/bulb width 0.33, embolus length/bulb length 2.10 (Fig. 34L–M).

Female (paratype, QMB S118347)

GENERAL (Fig. 35A–L). Body length 22.15, in good condition.

DORSAL PROSOMA (Fig. 35A, E–F). Carapace length 8.67, width 7.10, length/width 1.22, clypeus to fovea length/carapace length 0.72, caput width/carapace width 0.76, carapace red-brown, reflective setae present, light on caput, light on thorax, fovea procurved, fovea width/carapace length 0.18 (Fig. 35A,

F); chelicerae dark red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.46 (Fig. 35A); eye group rectangular, width/length 2.08, eye tubercle present (Fig. 35E).

ABDOMEN (Fig. 35B, D). Abdomen length 9.80, brown, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 35C, G–I). Labium cuspules absent (Fig. 35H); maxillae heel distinct, cuspules present, count=about 110, extending posteriorly onto heel, extending laterally about 50% of maxillae length (Fig. 35C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 35C, I); sternum length/width 1.19, central sternum with consistent covering of moderate setae, row of longer setae around posterior edges (Fig. 35G–H); posterior sigilla elongate, central sternum to posterior sigilla length/sternum length 0.19, posterior sigilla length/sternum length 0.21 (Fig. 35G–H); other sigilla small, round and lateral (Fig. 35G–H).

LEG I (Fig. 35J–K). Leg I red-brown, darker on patella and tibia, femur length 6.75, patella length 4.13, tibia length 4.63, metatarsus length 4.07, tarsus length 2.54, total length 22.11, leg I length/carapace length 2.55; scopulae on distal metatarsus and tarsus; spine count Fe D 2, Fe PL 1, Pa PL 2, Ti PL 1, Ti RL 4, Me PL 2, Me RL 3, Ta 0; tibia length/width [TIL/TID] 3.43.

GENITALIA (Fig. 35D, L). Epigastric furrow unmodified (Fig. 35D); spermathecae with two vesicles each (Fig. 35L); lateral vesicle relatively straight, length 0.65, lateral vesicle length/genitalia width 0.36, length/width at base 1.41, crown un-demarcated (Fig. 35L); medial vesicle with distinct basal section angled medially, before undulating anteriorly, medial vesicle length/genitalia width 0.45, length/width 5.30, medial vesicle length/lateral vesicle length 1.27 (Fig. 35L).

Distribution and natural history

Aname aurensis sp. nov. occurs in north-eastern Queensland, near the boundaries of the Einsleigh Uplands, Desert Uplands, and Brigalow Belt North bioregions, west from around Charters Towers, east to the coast around Townsville and Ayr (Fig. 7). It constructs an open, silk-lined burrow without silk outside of the entrance, often on an angle, and with a hidden secondary ‘wishbone’ entrance (Fig. 7).

Aname briggsi sp. nov.

[urn:lsid:zoobank.org:act:32817F44-C994-44BF-9156-EA742069AD48](https://zoobank.org/act:32817F44-C994-44BF-9156-EA742069AD48)

Figs 1, 7, 36–37

Diagnosis

Males of *A. briggsi* sp. nov. can be distinguished from all species for which males are known except *A. aurensis* sp. nov., *A. eddieorum* sp. nov., *A. hughenden* sp. nov., *A. longithecata*, *A. mulgana* sp. nov., *A. rupicola* sp. nov., and *A. warrego* sp. nov. by a moderate to large body size (carapace length >4 mm), the presence of a long embolus (embolus length/bulb length >1.5) that has a relatively wide basal section tapering into an attenuate, sinuous distal section after about 0.4 of length, and the absence of a prominent sharp heel on metatarsus I (as in the *pallida*-complex) (Fig. 36L–M). Males of *A. briggsi* can be distinguished from those of *A. eddieorum*, *A. longithecata*, and *A. warrego* by the presence of a tibia I that widens from the proximal end to the base of the tibial spur when in lateral view (Fig. 36P; cf. Figs 39, 42, 48). Males of *A. briggsi* can be distinguished from those of *A. aurensis* and *A. rupicola* by the presence of a longer embolus (embolus length/bulb length >2.5) (Fig. 36L–M; cf. Figs 34, 46). Males of *A. briggsi* can be distinguished from those of *A. hughenden* by the presence of a more strongly curving embolus (Fig. 36L–M; cf. Fig. 41). Males of *A. briggsi* can be distinguished from those of

A. mulgana by the presence of a longer distal pad and shorter proximal excavation on metatarsus I (excavation length/metatarsus length ~ 0.36 ; cf. ~ 0.43 in *A. mulgana*) (Fig. 36Q; cf. Fig. 44).

Females of *A. briggsi* sp. nov. can be distinguished from all species for which females are known except *A. aurensis* sp. nov., *A. camara*, *A. dingo* sp. nov., *A. eddieorum* sp. nov., *A. longithecata*, *A. mulgana* sp. nov., and *A. rupicola* sp. nov. by the presence of spermathecae with two vesicles, with relatively long and straight lateral vesicles (lateral vesicle length/genitalia width > 0.25) and long medial vesicles (medial vesicle length/lateral vesicle length > 1) that project medially or posteromedially, before undulating anteriorly (Fig. 37L). Females of *A. briggsi* can be distinguished from those of *A. aurensis*, *A. dingo*, *A. longithecata*, and *A. rupicola* by the presence of spermathecae with highly elongate vesicles (medial vesicle length/genitalia width > 0.8 ; cf. < 0.65) (Fig. 37L; cf. Figs 35, 38, 43, 47). Females of *A. briggsi* can be distinguished from those of *A. eddieorum* and *A. mulgana* by the presence of spermathecae with lateral vesicles terminating in narrower ends (Fig. 37L; cf. Figs 40, 45). Females of *A. briggsi* can be distinguished from those of *A. camara* by the presence of a darker body colouration and spermathecae with longer vesicles (lateral vesicle length/genitalia width > 0.35) with less widely-spaced crowns (distance between crowns less than length of lateral vesicles) (Fig. 37A–L; cf. Fig. 107).

Etymology

The specific epithet '*briggsi*' is named in honour of arachnologist Dr Ethan Briggs, who kindly donated many *Aname* specimens to this project.

Type material

Holotype

AUSTRALIA – Queensland • ♂; 9 km N of Bogantungan; 23°34' S, 147°18' E; 840 m a.s.l.; 25–26 Oct. 2000; D.J. Cook leg.; pitfall trap, open forest; QMB S63053.

Other material examined

AUSTRALIA – Queensland • 1 ♀; Carnarvon National Park, Ka Ka Mundi section; 24°46' S, 147°27' E; 422 m a.s.l.; 17 Apr. 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground (with unusual side chamber at bottom of main burrow shaft); QMB S118277 • 1 ♀; Carnarvon National Park, Ka Ka Mundi section; 24°46' S, 147°27' E; 416 m a.s.l.; 17 Apr. 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground (with unusual side chamber at bottom of main burrow shaft); QMB S118278 • 1 ♀; Carnarvon National Park, Ka Ka Mundi section; 24°46' S, 147°27' E; 411 m a.s.l.; 17 Apr. 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground; QMB S118276.

Description

Male (holotype, QMB S63053)

GENERAL (Fig. 36A–Q). Body length 16.74, in good condition, colour presumably faded due to preservation.

DORSAL PROSOMA (Fig. 36A, E–F). Carapace length 5.85, width 5.41, length/width 1.08, clypeus to fovea length/carapace length 0.68, caput width/carapace width 0.76, carapace orange-brown, caput slightly darker than thorax, reflective setae present, heavy on caput, moderate on thorax, fovea procurved, fovea width/carapace length 0.17 (Fig. 36A, F); chelicerae red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.70 (Fig. 36A); eye group rectangular, width/length 2.06, eye tubercle present (Fig. 36E).

ABDOMEN (Fig. 36B, D). Abdomen length 6.65, grey-brown, dorsal pattern absent, with some evidence of covering of reflective setae.

VENTRAL PROSOMA (Fig. 36C, G–I). Labium cuspules absent (Fig. 36H); maxillae heel distinct, cuspules present, count=about 84, extending posteriorly onto heel, extending laterally about 35% of maxillae length (Fig. 36C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 36C, I); sternum length/width 1.20, central sternum with consistent covering of moderate setae, row of longer setae around posterior edges, some shorter thorn-like setae around anterior edges (Fig. 36G–H); posterior sigilla semi-elongate, central sternum to posterior sigilla length/sternum length 0.24, posterior sigilla length/sternum length 0.17 (Fig. 36G–H); other sigilla small, round and lateral (Fig. 36G–H).

LEG I (Fig. 36N–Q). Leg I orange-brown, lighter on distal metatarsus and tarsus, femur length 5.52, patella length 3.48, tibia length 4.04, metatarsus length 3.75, tarsus length 2.61, total length 19.40, leg I length/carapace length 3.32 (Fig. 36N–O); scopulae on distal metatarsus and tarsus (Fig. 36N–O); spine count Fe D 3, Fe PL 1, Pa PL 2, Ti PL 0, Ti RL 0, Me PL 0, Me RL 0, Ta 0 (Fig. 36N–O); tibia length/width [TIL/TID] 2.63, widening from proximal end to spur before narrowing again towards distal end, spur present, digitiform, knuckle absent, megaspine angled at 9 degrees, length to distal face of spur/tibia length [TIS/TIL] 0.48, spur height/tibia width [TISH/TID] 0.44, megaspine length/tibia length 0.20 (Fig. 36N–P); metatarsus slightly sinuous, proximal excavation present, excavation concave with pronounced heel, heel broadly rounded, excavation length/metatarsus length [MIPEL/MIL] 0.36, metatarsus length/width [MIL/MID] 3.42 (Fig. 36N–O, Q).

PEDIPALP (Fig. 36J–M). Tibia length 3.17, width 1.09, length/width [PTL/PTD] 2.91, aetose depression present, depression length/palp tibia length [PDL/PTL] 0.59, retrolateral face with consistent covering of light setae, ventral face with two elongate bristle-like setae below depression, prolateral face with one distoventral spine, disto-medial spine absent (Fig. 36J–K); patella prolateral face with 2 (medial rubbed off) spines (Fig. 36J–K); cymbium with scopulae present distally (Fig. 36J–K); copulatory organ total length 2.03, length/palp tibia length 0.64 (Fig. 36L–M); bulb length/width 0.84 (Fig. 36L–M); embolus tapering from bulb, attenuate, with wide base tapering about halfway along into attenuate apical section, one slight bend, at about 0.4 of length, slight bend before tip, width at base/bulb width 0.37, embolus length/bulb length 2.87 (Fig. 36L–M).

Female (QMB S118276)

GENERAL (Fig. 37A–L). Body length 25.23, in good condition.

DORSAL PROSOMA (Fig. 37A, E–F). Carapace length 7.58, width 6.83, length/width 1.11, clypeus to fovea length/carapace length 0.71, caput width/carapace width 0.77, carapace orange-brown, reflective setae present, moderate on caput, moderate on thorax, fovea procurved, fovea width/carapace length 0.18 (Fig. 37A, F); chelicerae red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.66 (Fig. 37A); eye group rectangular, width/length 2.08, eye tubercle present (Fig. 37E).

ABDOMEN (Fig. 37B, D). Abdomen length 12.36, grey, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 37C, G–I). Labium cuspules absent (Fig. 37H); maxillae heel distinct, cuspules present, count=about 98, extending posteriorly onto heel, extending laterally about 40% of maxillae length (Fig. 37C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 37C, I); sternum length/width 1.15, central sternum with consistent covering of long setae, row of longer setae around posterior edges, some shorter thorn-like setae around anterior edges (Fig. 37G–H); posterior sigilla semi-elongate, central sternum to posterior sigilla length/sternum length 0.25, posterior sigilla length/sternum length 0.17 (Fig. 37G–H); other sigilla small, round and lateral (Fig. 37G–H).

LEG I (Fig. 37J–K). Leg I orange-brown, darker on patella and tibia, femur length 5.19, patella length 3.02, tibia length 3.48, metatarsus length 3.24, tarsus length 1.99, total length 16.93, leg I length/carapace

length 2.23; scopulae on distal metatarsus and tarsus; spine count Fe D 0, Fe PL 1 (rubbed off), Pa PL 2 (proximal rubbed off), Ti PL 2, Ti RL 4 (weak), Me PL 1, Me RL 3, Ta 0; tibia length/width [TIL/TID] 3.08.

GENITALIA (Fig. 37D, L). Epigastric furrow unmodified (Fig. 37D); spermathecae with two vesicles each (Fig. 37L); lateral vesicle relatively straight, length 0.51, lateral vesicle length/genitalia width 0.35, length/width at base 3.57, crown un-demarcated (Fig. 37L); medial vesicle with distinct basal section angled medially, before undulating towards anterior, medial vesicle length/genitalia width 0.89, length/width 9.64, medial vesicle length/lateral vesicle length 2.53 (Fig. 37L).

Distribution and natural history

Aname briggsi sp. nov. occurs in central Queensland, near the border between the Brigalow Belt South and Brigalow Belt North bioregions, north of Carnarvon National Park and west of Emerald (Fig. 7). It constructs an open, silk-lined burrow without silk outside of the entrance, often on an angle, and with a hidden secondary ‘wishbone’ entrance (Fig. 7).

Aname dingo sp. nov.

[urn:lsid:zoobank.org:act:BC4B3C98-885F-4F0A-9F40-0779E87B467B](https://zoobank.org/act:BC4B3C98-885F-4F0A-9F40-0779E87B467B)

Figs 1, 7, 38

Diagnosis

Males of *A. dingo* sp. nov. are unknown.

Females of *A. dingo* sp. nov. can be distinguished from all species for which females are known except *A. aurensis* sp. nov., *A. briggsi* sp. nov., *A. camara*, *A. eddieorum* sp. nov., *A. longithecata*, *A. mulgana* sp. nov., and *A. rupicola* sp. nov. by the presence of spermathecae with two vesicles, with relatively long and straight lateral vesicles (lateral vesicle length/genitalia width > 0.25) and long medial vesicles (medial vesicle length/lateral vesicle length > 1) that project medially or posteromedially, before undulating anteriorly (Fig. 38L). Females of *A. dingo* can be distinguished from those of *A. eddieorum* and *A. mulgana* by the presence of spermathecae with lateral vesicles terminating in narrower ends (Fig. 38L; cf. Figs 40, 45). Females of *A. dingo* can be distinguished from those of *A. camara* by the presence of a darker body colouration and spermathecae with longer vesicles (lateral vesicle length/genitalia width > 0.35) with less widely-spaced crowns (distance between crowns less than length of lateral vesicles) (Fig. 38A–L; cf. Fig. 107). Females of *A. dingo* can be distinguished from those of *A. briggsi* by the presence of spermathecae with less elongate lateral and medial vesicles (medial vesicle length/genitalia width < 0.65) (Fig. 38L; cf. Fig. 37). Females of *A. dingo* can be distinguished from those of *A. rupicola* by the presence of spermathecae with straighter lateral vesicles (Fig. 38L; cf. Fig. 47). Females of *A. dingo* can be distinguished from those of *A. longithecata* by the presence of spermathecae with shorter medial vesicles (medial vesicle length/genitalia width usually < 0.6), and the absence of dark patches of cuticle on the sternum, surrounding and lateral to the sigilla (Fig. 38G–I, L; cf. Fig. 43). Females of *A. dingo* can be distinguished from those of *A. aurensis* by the presence of spermathecae with more elongate, undulating medial vesicles (medial vesicle length/width ~ 6.2; cf. ~ 5.3 in *A. dingo*) and a lighter body colouration (Fig. 38A–L; cf. Fig. 35).

Etymology

The specific epithet ‘*dingo*’ is a noun in apposition, referencing both the type locality of the species, near Dingo in central Queensland, and also the rich honey-red colour of the live spider, reminiscent of the colour of the Australian wild dog commonly called a ‘dingo’.

Type material

Holotype

AUSTRALIA – Queensland • ♀; Charlevue Road, W of Dingo; 23°38' S, 149°12' E; 156 m a.s.l.; 20 Apr. 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground; QMB S118297.

Description

Female (holotype, QMB S118297)

GENERAL (Fig. 38A–L). Body length 22.08, in good condition.

DORSAL PROSOMA (Fig. 38A, E–F). Carapace length 7.62, width 6.62, length/width 1.15, clypeus to fovea length/carapace length 0.72, caput width/carapace width 0.81, carapace orange-brown, caput much darker than thorax, reflective setae present, moderate on caput, light on thorax, fovea procurved, fovea width/carapace length 0.19 (Fig. 38A, F); chelicerae dark red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.65 (Fig. 38A); eye group rectangular, width/length 1.89, eye tubercle present (Fig. 38E).

ABDOMEN (Fig. 38B, D). Abdomen length 8.95, brown, dorsal pattern absent, with light covering of reflective setae.

VENTRAL PROSOMA (Fig. 38C, G–I). Labium cuspules absent (Fig. 38H); maxillae heel distinct, cuspules present, count=about 160, extending posteriorly onto heel, extending laterally about 45% of maxillae length (Fig. 38C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 38C, I); sternum length/width 1.22, central sternum with consistent covering of long setae, row of longer setae around posterior edges (Fig. 38G–H); posterior sigilla ovoid, central sternum to posterior sigilla length/sternum length 0.23, posterior sigilla length/sternum length 0.15 (Fig. 38G–H); other sigilla small, round and lateral (Fig. 38G–H).

LEG I (Fig. 38J–K). Leg I pallid-orange, darker on distal metatarsus and tarsus, femur length 6.27, patella length 4.17, tibia length 4.24, metatarsus length 3.79, tarsus length 2.62, total length 21.08, leg I length/carapace length 2.77; scopulae on distal metatarsus and tarsus; spine count Fe D 0, Fe PL 1, Pa PL 2, Ti PL 3, Ti RL 4, Me PL 2, Me RL 3, Ta 0; tibia length/width [TIL/TID] 2.88.

GENITALIA (Fig. 38D, L). Epigastric furrow unmodified (Fig. 38D); spermathecae with two vesicles each (Fig. 38L); lateral vesicle relatively straight, length 0.52, lateral vesicle length/genitalia width 0.39, length/width at base 1.58, crown un-demarcated (Fig. 38L); medial vesicle with distinct basal section angled medially, before undulating anteriorly, medial vesicle length/genitalia width 0.52, length/width 6.22, medial vesicle length/lateral vesicle length 1.36 (Fig. 38L).

Distribution and natural history

Aname dingo sp. nov. occurs in central Queensland, near the boundary between the Brigalow Belt South and Brigalow Belt North bioregions. It is known from only one location just north of the Blackdown Tableland (Fig. 7). It constructs an open, silk-lined burrow without silk outside of the entrance, at an angle, and with a hidden secondary ‘wishbone’ entrance (Fig. 7).

Aname eddieorum sp. nov.

[urn:lsid:zoobank.org:act:49D83F5A-9ED3-4B4F-A49B-B07BEB0F0C2](https://zoobank.org/act:49D83F5A-9ED3-4B4F-A49B-B07BEB0F0C2)

Figs 1, 7, 39–40

Aname barrema Raven, 1985 – Raven 1985 (pars): figs 13, 33, 70–71, 73–74 (illustrated female allotype QMB S1239 [Braemar State Forest], and female paratypes QMB S1244 [Moombah], QMB S1247 [Yuleba], and QMB S1245 [Stanthorpe], all here identified as *A. eddieorum* sp. nov.).

Diagnosis

Males of *A. eddieorum* sp. nov. can be distinguished from all species for which males are known except *A. aurensis* sp. nov., *A. briggsi* sp. nov., *A. hughenden* sp. nov., *A. longithecata*, *A. mulgana* sp. nov., *A. rupicola* sp. nov., and *A. warrego* sp. nov. by a moderate to large body size (carapace length > 4.0 mm), the presence of a long embolus (embolus length/bulb length > 1.5) that has a relatively wide basal section tapering into an attenuate, sinuous distal section after about 0.4 of length, and the absence of a prominent sharp heel on metatarsus I (as in the *pallida*-complex) (Fig. 39L–M). Males of *A. eddieorum* can be distinguished from those of *A. aurensis*, *A. briggsi*, *A. hughenden*, *A. mulgana*, and *A. rupicola* by the presence of a tibia I that stays about the same width from the proximal end to the base of the tibial spur when in lateral view (Fig. 39P; cf. Figs 34, 36, 41, 44, 46). Males of *A. eddieorum* can be distinguished from those of *A. warrego* by the presence of a thicker palp tibia (palp tibia length/width < 3) (Fig. 39J–K; cf. Fig. 48). Males of *A. eddieorum* can be distinguished from those of *A. longithecata* by the presence of a shorter, straighter embolus (embolus length/bulb length ~2.2; cf. ~2.7 in *A. longithecata*) (Fig. 39L–M; cf. Fig. 42).

Females of *A. eddieorum* sp. nov. can be distinguished from all species for which females are known except *A. aurensis* sp. nov., *A. briggsi* sp. nov., *A. camara*, *A. dingo* sp. nov., *A. longithecata*, *A. mulgana* sp. nov., and *A. rupicola* sp. nov. by the presence of spermathecae with two vesicles, with relatively long and straight lateral vesicles (lateral vesicle length/genitalia width > 0.25) and long medial vesicles (medial vesicle length/lateral vesicle length > 1) that project medially or posteromedially, before undulating anteriorly (Fig. 40L). Females of *A. eddieorum* can be distinguished from those of *A. aurensis*, *A. briggsi*, *A. dingo*, *A. longithecata*, and *A. rupicola* by the presence of spermathecae with lateral vesicles terminating in relatively wide ends (Fig. 40L; cf. Figs 35, 37–38, 43, 47). Females of *A. eddieorum* can be distinguished from those of *A. camara* by the presence of a darker body colouration and spermathecae with longer vesicles (lateral vesicle length/genitalia width > 0.35) with less widely-spaced crowns (distance between crowns less than length of lateral vesicles) (Fig. 40A–L; cf. Fig. 107). Females of *A. eddieorum* can be distinguished from those of *A. mulgana* by the presence of bald patches on the sternum, lateral of the sigilla, the absence of thorn-like setae around the anterior edges of the sternum, and more rounded medioventral corners of the coxae (Fig. 40G–I; cf. Fig. 45).

Etymology

The specific epithet ‘*eddieorum*’ is named in honour of Craig and Meryll Eddie, founders of Boobook Ecological Consulting. The company provided many valuable specimens for this project.

Type material

Holotype

AUSTRALIA – Queensland • ♂; Kumbarilla State Forest, Halliford Road; 27°29' S, 150°54' E; 326m a.s.l.; 4 Nov.–15 Dec. 2019; G.B. Monteith leg.; gutter trap, sandy open forest; QMB S111185.

Paratypes

AUSTRALIA – Queensland • 2 ♂♂; Tara; 27°16' S, 150°27' E; 20 Nov. 2001; Queensland Department of Primary Industries leg.; QMB S116964 • 1 ♂; Lake Broadwater Conservation Park; 27°21' S, 151°06' E; 24 Nov. 1985–3 Jan. 1986; Queensland Museum Party leg.; pitfall trap; QMB S3151 • 1 ♂; Lake Broadwater Conservation Park, south-western loop track; 27°22' S, 150°34' E; 342 m a.s.l.; 27 Jul. 2020; M.G. Rix leg.; excavated, mixed bullock/cypress pine woodland; QMB S124044 • 1 ♂; Windemere Station; 27°25' S, 149°41' E; 5 Dec. 1987; R.J. Raven leg.; hand collected, on ground in low vegetation, brigalow; QMB S2476.

Other material examined

AUSTRALIA – **Queensland** • 1 ♂; Expedition Range National Park; 25°12' S, 148°59' E; 560 m a.s.l.; 25 Sep.–18 Dec. 1997; D.J. Cook and G.B. Monteith leg.; intercept trap, open forest; QMB S44341 • 1 ♂; Expedition Range National Park, Ampitheatre camp; 25°12' S, 148°59' E; 560 m a.s.l.; 17–19 Dec. 1997; D.J. Cook, G.B. Monteith and G. Thompson leg.; open forest; QMB S59368 • 1 ♀; Kentucky Station, tributary of Baffle Creek, 44.3 km NNE of Injune; 25°34' S, 148°53' E; 14 Mar. 2021; C. Eddie and E. Amsters leg.; excavated, short, freshly dug burrow on sloping bank of rocky gorge, dry sclerophyll; QMB S118232 • 1 ♂; Munduberra, Delubra Station; 25°35' S, 151°17' E; 20 Oct. 1982; B. Bloxsome leg.; QMB S9757 • 1 ♀; Strathblane; 25°53' S, 149°08' E; 7 Feb. 2018; C. Eddie leg.; QMB S118224 • 1 ♂; Lorraine Station, 35.3 km NNW of Roma; 26°10' S, 148°41' E; 12 Oct. 2022; J. Groat leg.; hand collected, active around house after rain, property homestead, sandy soil; QMB S118246 • 2 ♂♂, 1 juv.; Barakula State Forest, S of Condarra Tower; 26°17' S, 150°38' E; 1 Oct.–3 Dec. 2012; C. Moeseneder and S. Moeseneder leg.; flight intercept trap; QMB S109552 • 1 ♂; Barrakeela forestry [Barakula State Forest], via Chinchilla; 26°19' S, 150°30' E; 15 Dec. 1981; B.E. Smith leg.; QMB S9394 • 1 ♂; Combabula State Forest; 26°22' S, 149°27' E; 350 m a.s.l.; 5 Nov.–16 Dec. 2019; G.B. Monteith leg.; gutter trap, sandy open forest; QMB S111195 • 1 ♂; Barakula State Forest, Auburn Road; 26°23' S, 150°41' E; 30 Sep.–3 Dec. 2012; C. Moeseneder and S. Moeseneder leg.; flight intercept trap; QMB S108715 • 1 ♀; Gurulmundi State Forest, ca 39.9 km NW of Miles, SEQ; 26°24' S, 149°54' E; 12 Sep. 2021; E. Amsters leg.; excavated, *Arbanitis* burrows observed in vicinity, sclerophyll forest, pale grey/brown loamy clay soil; QMB S118238 • 1 ♂; Barakula State Forest, off Auburn Road; 26°25' S, 150°41' E; 3 Dec. 2012–19 Apr. 2013; C. Moeseneder and S. Moeseneder leg.; flight intercept trap; QMB S118361 • 1 ♂; Kingaroy, Gordonbrook Dam; 26°27' S, 151°44' E; Nov. 1980; T. McAleer leg.; QMB S9368 • 1 ♂; Kingaroy; 26°31' S, 151°46' E; 24 Dec. 1986; K.J.M. leg.; QMB S64335 • 1 ♀; Yuleba; 26°37' S, 149°23' E; 19 Nov. 1957; M. Green leg.; QMB S1247 (paratype of *Aname barrema* Raven, 1985) • 1 ♂; Condamine; 26°38' S, 149°56' E; 27 Jun. 1985; P.G. Allsopp leg.; QMB S100538 • 1 ♂; Miles; 26°40' S, 150°11' E; Nov. 1973; G. May leg.; QMB S208 (paratype of *Aname barrema* Raven, 1985) • 1 ♂; Miles; 26°43' S, 150°05' E; Nov. 1973; G. May leg.; hand collected, wandering in grassland, grassland; QMB S208 • 1 ♂; Chinchilla, “Rockwood”; 26°45' S, 150°36' E; Dec. 1985; W.D. McKenzie leg.; QMB S9799 • 1 ♂; Condamine Highway; 26°53' S, 149°28' E; 248 m a.s.l.; 6 Nov.–17 Dec. 2019; G.B. Monteith leg.; gutter trap, sandy open forest; QMB S111184 • 1 ♀; Braemar State Forest, off Kumbarilla Lane; 27°10' S, 150°55' E; 354 m a.s.l.; 4 Oct. 2020; M.G. Rix, A.G. Rix, A. Wojcieszek and M. Brien leg.; excavated, open woodland with cypress pine; QMB S124056 • 1 ♀; Braemar State Forest; 27°13' S, 150°50' E; 15–19 Oct. 1979; R.J. Raven leg.; excavated; QMB S1239 (allotype of *Aname barrema* Raven, 1985) • 1 ♂; Toowoomba; 27°34' S, 151°51' E; Mar. 1969; T. Passlow leg.; QMB S96436 • 1 ♀; Moombah [E of St George]; 27°59' S, 149°18' E; 11 Feb. 1979; T. Adams and G.V. Czechura leg.; QMB S1244 (paratype of *Aname barrema* Raven, 1985) • 1 ♂; Goondiwindi, N of town; 28°25' S, 150°13' E; D. O'Donoghue leg.; QMB S103498 • 1 ♂; Inglewood; 28°25' S, 151°05' E; 1979; Q. A. T. B. leg.; QMB S9742 • 1 ♂; Stanthorpe; 28°37' S, 151°30' E; 6 Nov. 1982; Queensland Ambulance Transport Brigade leg.; QMB S9744 • 1 ♀; Stanthorpe; 28°39' S, 151°56' E; 10 Nov. 1971; G. Smith leg.; QMB S1245 (paratype of *Aname barrema* Raven, 1985). – **New South Wales** • 1 ♂; Inverell; 29°46' S, 151°07' E; 29 Dec. 1980; C. Easton leg.; AMS KS6463 • 1 ♂; 100 km E of Walgett, near Yallambee; 30°02' S, 148°52' E; 7 Oct. 1996; R.W. Blanch leg.; AMS KS49115.

Description

Male (holotype, QMB S111185)

GENERAL (Fig. 39A–Q). Body length 23.28, in good condition, colour presumably faded due to preservation.

DORSAL PROSOMA (Fig. 39A, E–F). Carapace length 8.17, width 7.52, length/width 1.09, clypeus to fovea length/carapace length 0.70, caput width/carapace width 0.74, carapace dark red-brown, reflective

setae present, heavy on caput, moderate on thorax, fovea procurved, fovea width/carapace length 0.16 (Fig. 39A, F); chelicerae dark red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.64 (Fig. 39A); eye group rectangular, width/length 2.08, eye tubercle present (Fig. 39E).

ABDOMEN (Fig. 39B, D). Abdomen length 9.79, dark grey, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 39C, G–I). Labium cuspules present, count=2 (Fig. 39H); maxillae heel distinct, cuspules present, count=about 130, extending posteriorly onto heel, extending laterally about 40% of maxillae length (Fig. 39C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 39C, I); sternum length/width 1.27, central sternum with consistent covering of moderate setae, row of longer setae around posterior edges, distinct bald patches laterally of all sigilla (Fig. 39G–H); posterior sigilla ovoid, central sternum to posterior sigilla length/sternum length 0.19, posterior sigilla length/sternum length 0.18 (Fig. 39G–H); other sigilla small, round and lateral (Fig. 39G–H).

LEG I (Fig. 39N–Q). Leg I red-brown, lighter on distal metatarsus and tarsus, femur length 7.11, patella length 4.51, tibia length 4.84, metatarsus length 4.74, tarsus length 2.89, total length 24.10, leg I length/carapace length 2.95 (Fig. 39N–O); scopulae on distal metatarsus and tarsus (Fig. 39N–O); spine count Fe D 0, Fe PL 1, Pa PL 2, Ti PL 0, Ti RL 0, Me PL 0, Me RL 0, Ta 0 (Fig. 39N–O); tibia length/width [TIL/TID] 3.23, even width along length, spur present, digitiform, knuckle present, megaspine angled at 13 degrees, length to distal face of spur/tibia length [TIS/TIL] 0.43, spur height/tibia width [TISH/TID] 0.65, megaspine length/tibia length 0.22 (Fig. 39N–P); metatarsus slightly sinuous, proximal excavation present, excavation concave with pronounced heel, heel broadly rounded, excavation length/metatarsus length [MIPEL/MIL] 0.46, metatarsus length/width [MIL/MID] 3.54 (Fig. 39N–O, Q).

PEDIPALP (Fig. 39J–M). Tibia length 3.52, width 1.44, length/width [PTL/PTD] 2.44, asetose depression present, depression length/palp tibia length [PDL/PTL] 0.56, retrolateral face with consistent covering of light setae, ventral face with two elongate bristle-like setae below depression, prolateral face with two disto-ventral spines, disto-medial spine absent (Fig. 39J–K); patella prolateral face with 2 spines (Fig. 39J–K); cymbium with scopulae present distally (Fig. 39J–K); copulatory organ total length 2.17, length/palp tibia length 0.62 (Fig. 39L–M); bulb length/width 0.87 (Fig. 39L–M); embolus tapering from bulb, attenuate, with wide base tapering about halfway along into attenuate apical section, one slight bend, at about 0.4 of length, slight bend before tip, width at base/bulb width 0.29, embolus length/bulb length 2.22 (Fig. 39L–M).

Female (QMB S118238)

GENERAL (Fig. 40A–L). Body length 22.51, in good condition.

DORSAL PROSOMA (Fig. 40A, E–F). Carapace length 9.70, width 8.15, length/width 1.19, clypeus to fovea length/carapace length 0.72, caput width/carapace width 0.80, carapace orange-brown, caput slightly darker than thorax and clypeus darker again, reflective setae present, moderate on caput, light on thorax, fovea procurved, fovea width/carapace length 0.16 (Fig. 40A, F); chelicerae dark red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.53 (Fig. 40A); eye group rectangular, width/length 1.8, eye tubercle present (Fig. 40E).

ABDOMEN (Fig. 40B, D). Abdomen length 8.14, brown, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 40C, G–I). Labium cuspules absent (Fig. 40H); maxillae heel distinct, cuspules present, count=about 110, extending posteriorly onto heel, extending laterally about 40% of maxillae length (Fig. 40C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 40C, I);

sternum length/width 1.14, central sternum with consistent covering of moderate setae, row of longer setae around posterior edges, distinct bald patches laterally of all sigilla (Fig. 40G–H); posterior sigilla semi-elongate, central sternum to posterior sigilla length/sternum length 0.17, posterior sigilla length/sternum length 0.20 (Fig. 40G–H); other sigilla small, round and lateral (Fig. 40G–H).

LEG I (Fig. 40J–K). Leg I orange-brown, femur length 5.13, patella length 3.18, tibia length 3.53, metatarsus length 3.43, tarsus length 2.18, total length 17.45, leg I length/carapace length 1.80; scopulae on distal metatarsus and tarsus; spine count Fe D 0, Fe PL 1, Pa PL 2 (both weak), Ti PL 1, Ti RL 4 (weak), Me PL 0, Me RL 2, Ta 0; tibia length/width [TIL/TID] 3.30.

GENITALIA (Fig. 40D, L). Epigastric furrow unmodified (Fig. 40D); spermathecae with two vesicles each (Fig. 40L); lateral vesicle relatively straight, length 0.73, lateral vesicle length/genitalia width 0.42, length/width at base 2.08, crown slightly wider than stem (Fig. 40L); medial vesicle with distinct basal section angled medially, before undulating anteriorly, medial vesicle length/genitalia width 0.57, length/width 5.15, medial vesicle length/lateral vesicle length 1.36 (Fig. 40L).

Distribution and natural history

Aname eddieorum sp. nov. has a broad distribution in south-eastern Queensland and northern New South Wales, predominantly in the Brigalow Belt South bioregion. It extends from around Walgett and Inverell north to Eidsvold, and from around Roma in the west to Toowoomba in the east (Fig. 7). It constructs an open, silk-lined burrow without silk outside of the entrance, often on an angle, and with a hidden secondary ‘wishbone’ entrance (Fig. 7).

Remarks

The female allotype of *A. barrema*, assigned by Raven (1985), as well as several imaged specimens identified as *A. barrema* in that study, actually represent this species.

Aname hughenden sp. nov.

[urn:lsid:zoobank.org:act:0E10BA1A-FF15-410B-A5F0-7E132E0E8830](https://zoobank.org/act:0E10BA1A-FF15-410B-A5F0-7E132E0E8830)

Figs 7, 41

Diagnosis

Males of *A. hughenden* sp. nov. can be distinguished from all species for which males are known except *A. aurensis* sp. nov., *A. briggsi* sp. nov., *A. eddieorum* sp. nov., *A. longithecata*, *A. mulgana* sp. nov., *A. rupicola* sp. nov., and *A. warrego* sp. nov. by a moderate to large body size (carapace length >4.0 mm), the presence of a long embolus (embolus length/bulb length >1.5) that has a relatively wide basal section tapering into an attenuate, sinuous distal section after about 0.4 of length, and the absence of a prominent sharp heel on metatarsus I (as in the *pallida*-complex) (Fig. 41L–M). Males of *A. hughenden* can be distinguished from those of *A. eddieorum*, *A. longithecata*, and *A. warrego*. by the presence of a tibia I that widens from the proximal end to the base of the tibial spur when in lateral view (Fig. 41P; cf. Figs 39, 42, 48). Males of *A. hughenden* can be distinguished from those of *A. aurensis* and *A. rupicola* by the presence of a longer embolus (embolus length/bulb length >2.5) (Fig. 41L–M; cf. Figs 34, 46). Males of *A. hughenden* can be distinguished from those of *A. briggsi* and *A. mulgana* by the presence of a straighter embolus (Fig. 41L–M; cf. Figs 36, 44).

Females of *A. hughenden* sp. nov. are unknown.

Etymology

The specific epithet '*hughenden*' is a noun in apposition, referencing the distribution of this species near the town of Hughenden in the Mitchell Grass Downs bioregion of Queensland.

Type material

Holotype

AUSTRALIA – Queensland • ♂; 65 km out of Hughenden; 4 Feb. 1981; M.S. Moulds leg.; AMS KS16307.

Paratype

AUSTRALIA – Queensland • 1 ♂; 65 km out of Hughenden; 4 Feb. 1981; M.S. Moulds leg.; AMS KS131723.

Description

Male (holotype, AMS KS16307)

GENERAL (Fig. 41A–Q). Body in moderate condition, colour faded, tissue degraded and abdomen destroyed.

DORSAL PROSOMA (Fig. 41A, E–F). Carapace length 7.19, width 6.07, length/width 1.18, clypeus to fovea length/carapace length 0.69, caput width/carapace width 0.72, carapace red-brown, caput much darker than thorax, reflective setae present, moderate on caput, very light on thorax, fovea procurved, fovea width/carapace length 0.15 (Fig. 41A, F); chelicerae dark red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.56 (Fig. 41A); eye group rectangular, width/length 1.82, eye tubercle present (Fig. 41E).

VENTRAL PROSOMA (Fig. 41C, G–I). Labium cuspules present, count=2 (Fig. 41H); maxillae heel distinct, cuspules present, count=about 90, extending posteriorly onto heel, extending laterally about 30% of maxillae length (Fig. 41C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 41C, I); sternum length/width 1.29, most setae rubbed off, row of longer setae around posterior edges (Fig. 41G–H); posterior sigilla semi-elongate, central sternum to posterior sigilla length/sternum length 0.21, posterior sigilla length/sternum length 0.20 (Fig. 41G–H); other sigilla small, round and lateral (Fig. 41G–H).

LEG I (Fig. 41N–Q). Leg I red-brown, lighter on distal metatarsus and tarsus, femur length 6.17, patella length 4.01, tibia length 4.04, metatarsus length 4.52, tarsus length 2.76, total length 21.51, leg I length/carapace length 2.99 (Fig. 41N–O); scopulae on distal metatarsus and tarsus (Fig. 41N–O); spine count Fe D 2, Fe PL 1, Pa PL 2, Ti PL 0, Ti RL 0, Me PL 0, Me RL 0, Ta 0 (Fig. 41N–O); tibia length/width [TIL/TID] 2.72, widening from proximal end to spur before narrowing again towards distal end, spur present, digitiform, knuckle absent, megaspine angled at 12 degrees, length to distal face of spur/tibia length [TIS/TIL] 0.41, spur height/tibia width [TISH/TID] 0.61, megaspine length/tibia length 0.19 (Fig. 41N–P); metatarsus slightly sinuous, proximal excavation present, excavation concave with pronounced heel, heel broadly rounded, excavation length/metatarsus length [MIPEL/MIL] 0.45, metatarsus length/width [MIL/MID] 3.69 (Fig. 41N–O, Q).

PEDIPALP (Fig. 41J–M). Tibia length 3.64, width 1.10, length/width [PTL/PTD] 3.31, aetose depression present, depression length/palp tibia length [PDL/PTL] 0.56, retrolateral face with consistent covering of light setae, ventral face with without any distinctive setae, prolateral face with two disto-ventral spines, disto-medial spine absent (Fig. 41J–K); patella prolateral face with 2 spines (Fig. 41J–K); cymbium with scopulae present distally (Fig. 41J–K); copulatory organ total length 2.06, length/palp tibia length 0.57 (Fig. 41L–M); bulb length/width 0.88 (Fig. 41L–M); embolus tapering from bulb, attenuate, with wide

base tapering about halfway along into attenuate apical section, one slight bend, at about 0.4 of length, slight bend before tip, width at base/bulb width 0.31, embolus length/bulb length 2.60 (Fig. 41L–M).

Distribution and natural history

Aname hughenden sp. nov. occurs in central Queensland, in the Mitchell Grass Downs bioregion, where it is known from one location, near the town of Hughenden (Fig. 7). The form of burrows constructed by spiders of this species is unknown, but is likely to be similar to that of other *eddieorum*-complex species (Fig. 7).

*Aname longithec*a Raven, 1985

Figs 1, 7, 42–43

*Aname longithec*a Raven, 1985: 402, figs 16, 28, 65.

Diagnosis

Males of *A. longithec*a can be distinguished from all species for which males are known except *A. aurens*is sp. nov., *A. briggs*i sp. nov., *A. eddieorum* sp. nov., *A. hughenden* sp. nov., *A. mulgana* sp. nov., *A. rupicola* sp. nov., and *A. warrego* sp. nov. by a moderate to large body size (carapace length >4.0 mm), the presence of a long embolus (embolus length/bulb length >1.5) that has a relatively wide basal section tapering into an attenuate, sinuous distal section after about 0.4 of length, and the absence of a prominent sharp heel on metatarsus I (as in the *pallida*-complex) (Fig. 42L–M). Males of *A. longithec*a can be distinguished from those of *A. aurens*is, *A. briggs*i, *A. hughenden*, *A. mulgana*, and *A. rupicola* by the presence of a tibia I that stays about the same width from the proximal end to the base of the tibial spur when in lateral view (Fig. 42P; cf. Figs 34, 36, 41, 44, 46). Males of *A. longithec*a can be distinguished from those of *A. warrego* by the presence of a thicker palp tibia (palp tibia length/width <3) (Fig. 42J–K; cf. Fig. 48). Males of *A. longithec*a can be distinguished from those of *A. eddieorum* by the presence of a longer, more curved embolus (embolus length/bulb length ~2.7; cf. ~2.2 in *A. eddieorum*) (Fig. 42L–M; cf. Fig. 39).

Females of *A. longithec*a can be distinguished from all species for which females are known except *A. aurens*is sp. nov., *A. briggs*i sp. nov., *A. camara*, *A. dingo* sp. nov., *A. eddieorum* sp. nov., *A. mulgana* sp. nov., and *A. rupicola* sp. nov. by the presence of spermathecae with two vesicles, with relatively long and straight lateral vesicles (lateral vesicle length/genitalia width >0.25) and long medial vesicles (medial vesicle length/lateral vesicle length >1) that project medially or posteromedially, before undulating anteriorly (Fig. 43L). Females of *A. longithec*a can be distinguished from those of *A. eddieorum* and *A. mulgana* by the presence of spermathecae with lateral vesicles terminating in narrower ends (Fig. 43L; cf. Figs 40, 45). Females of *A. longithec*a can be distinguished from those of *A. aurens*is and *A. dingo* by the presence of spermathecae with long medial vesicles (medial vesicle length/genitalia width >0.6) and dark patches of cuticle on the sternum, surrounding and lateral of the sigilla (Fig. 43G–I, L; cf. Figs 35, 38). Females of *A. longithec*a can be distinguished from those of *A. camara* by the presence of a darker body colouration and spermathecae with longer vesicles (lateral vesicle length/genitalia width >0.35) with less widely-spaced crowns (distance between crowns less than length of lateral vesicles) (Fig. 43A–L; cf. Fig. 107). Females of *A. longithec*a can be distinguished from *A. briggs*i by the presence of spermathecae with less elongate lateral and medial vesicles (medial vesicle length/genitalia width <0.65) (Fig. 43L; cf. Fig. 37). Females of *A. longithec*a can be distinguished from those of *A. rupicola* by the presence of spermathecae with straighter lateral vesicles (Fig. 43L; cf. Fig. 47).

Type material

Holotype

AUSTRALIA – Queensland • ♀; Rubyvale; 23°25' S, 147°42' E; 29 Jun. 1980; I.A. Manthey leg.; QMB S1283.

Other material examined

AUSTRALIA – Queensland • 1 ♂; Rubyvale; 23°25' S, 147°41' E; 18 Jun. 2002; S. Eldridge leg.; QMB S548246 • 1 ♀; Rubyvale, Capella Road; 23°25' S, 147°42' E; 259 m a.s.l.; 18 Apr. 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground; QMB S118281.

Description

Male (QMB S548246)

GENERAL (Fig. 42A–Q). Body length 18.88, in good condition, colour presumably faded due to preservation.

DORSAL PROSOMA (Fig. 42A, E–F). Carapace length 7.89, width 6.89, length/width 1.15, clypeus to fovea length/carapace length 0.72, caput width/carapace width 0.71, carapace red-brown, reflective setae present, heavy on caput, moderate on thorax, fovea procurved, fovea width/carapace length 0.17 (Fig. 42A, F); chelicerae dark red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.55 (Fig. 42A); eye group rectangular, width/length 2.23, eye tubercle present (Fig. 42E).

ABDOMEN (Fig. 42B, D). Abdomen length 6.67, brown, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 42C, G–I). Labium cuspules present, count=2 (Fig. 42H); maxillae heel distinct, cuspules present, count=about 131, extending posteriorly onto heel, extending laterally about 40% of maxillae length (Fig. 42C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 42C, I); sternum length/width 1.27, central sternum with consistent covering of short setae, row of longer setae around posterior edges, some shorter thorn-like setae around anterior edges, darker cuticle around sigilla (Fig. 42G–H); posterior sigilla semi-elongate, central sternum to posterior sigilla length/sternum length 0.21, posterior sigilla length/sternum length 0.12 (Fig. 42G–H); other sigilla small, round and lateral (Fig. 42G–H).

LEG I (Fig. 42N–Q). Leg I dark red-brown, lighter on distal metatarsus and tarsus, femur length 6.57, patella length 4.08, tibia length 4.64, metatarsus length 4.44, tarsus length 2.79, total length 22.53, leg I length/carapace length 2.86 (Fig. 42N–O); scopulae on distal metatarsus and tarsus (Fig. 42N–O); spine count Fe D 1, Fe PL 1, Pa PL 2, Ti PL 0, Ti RL 0, Me PL 0, Me RL 0, Ta 0 (Fig. 42N–O); tibia length/width [TIL/TID] 2.95, widening from proximal end to spur before narrowing again towards distal end, spur present, digitiform, knuckle present, megaspine angled at 14 degrees, length to distal face of spur/tibia length [TIS/TIL] 0.46, spur height/tibia width [TISH/TID] 0.51, megaspine length/tibia length 0.19 (Fig. 42N–P); metatarsus slightly sinuous, proximal excavation present, excavation concave with pronounced heel, heel broadly rounded, excavation length/metatarsus length [MIPEL/MIL] 0.46, metatarsus length/width [MIL/MID] 3.42 (Fig. 42N–O, Q).

PEDIPALP (Fig. 42J–M). Tibia length 3.47, width 1.29, length/width [PTL/PTD] 2.69, asetose depression present, depression length/palp tibia length [PDL/PTL] 0.63, retrolateral face with consistent covering of light setae, ventral face with without any distinctive setae, prolateral face with two disto-ventral spines, disto-medial spine absent (Fig. 42J–K); patella prolateral face with 2 spines (Fig. 42J–K); cymbium with scopulae present distally (Fig. 42J–K); copulatory organ total length 1.88, length/palp tibia length 0.54 (Fig. 42L–M); bulb length/width 0.81 (Fig. 42L–M); embolus demarcated and roughly perpendicular

to bulb, attenuate, with wide base tapering about halfway along into attenuate apical section, one slight bend, at about 0.6 of length, slight bend before tip, width at base/bulb width 0.31, embolus length/bulb length 2.74 (Fig. 42L–M).

Female (holotype, QMB S1283)

GENERAL (Fig. 43A–L). Body length 20.28, in moderate condition, colour faded significantly due to preservation.

DORSAL PROSOMA (Fig. 43A, E–F). Carapace length 7.38, width 6.19, length/width 1.19, clypeus to fovea length/carapace length 0.75, caput width/carapace width 0.80, carapace orange-brown, reflective setae present, moderate on caput, light on thorax, fovea procurved, fovea width/carapace length 0.16 (Fig. 43A, F); chelicerae red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.55 (Fig. 43A); eye group rectangular, width/length 1.9, eye tubercle present (Fig. 43E).

ABDOMEN (Fig. 43B, D). Abdomen length 9.13, light brown, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 43C, G–I). Labium cuspules present, count = 1 (Fig. 43H); maxillae heel distinct, cuspules present, count = about 162, extending posteriorly onto heel, extending laterally about 50% of maxillae length (Fig. 43C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 43C, I); sternum length/width 1.14, central sternum with consistent covering of moderate setae, row of longer setae around posterior edges, some shorter thorn-like setae around anterior edges (Fig. 43G–H); posterior sigilla semi-elongate, central sternum to posterior sigilla length/sternum length 0.22, posterior sigilla length/sternum length 0.18 (Fig. 43G–H); other sigilla small, round and lateral (Fig. 43G–H).

LEG I (Fig. 43J–K). Leg I orange-brown, darker on patella and tibia, femur length 5.62, patella length 3.50, tibia length 3.63, metatarsus length 3.36, tarsus length 2.26, total length 18.38, leg I length/carapace length 2.49; scopulae on distal metatarsus and tarsus; spine count Fe D 1, Fe PL 1, Pa PL 2, Ti PL 4, Ti RL 4, Me PL 2, Me RL 2, Ta 0; tibia length/width [TIL/TID] 2.95.

GENITALIA (Fig. 43D, L). Epigastric furrow unmodified (Fig. 43D); spermathecae with two vesicles each (Fig. 43L); lateral vesicle relatively straight, length 0.52, lateral vesicle length/genitalia width 0.40, length/width at base 1.64, crown un-demarcated (Fig. 43L); medial vesicle with distinct basal section angled medially, before undulating anteriorly, medial vesicle length/genitalia width 0.64, length/width 6.2, medial vesicle length/lateral vesicle length 1.59 (Fig. 43L).

Distribution and natural history

*Aname longithec*a occurs in the ‘Gemfields’ of central Queensland, in the Brigalow Belt North bioregion, where it is known only from near the town of Rubyvale (Fig. 7). It constructs an open, silk-lined burrow without silk outside of the entrance, on an angle, and with a hidden secondary ‘wishbone’ entrance (Fig. 7).

Aname mulgana sp. nov.

[urn:lsid:zoobank.org:act:CA4B69C0-64CD-4DCC-9F61-AC2C8B309D2C](https://zoobank.org/act:CA4B69C0-64CD-4DCC-9F61-AC2C8B309D2C)

Figs 1, 7, 44–45

Diagnosis

Males of *A. mulgana* sp. nov. can be distinguished from all species for which males are known except *A. aurens*is sp. nov., *A. briggs*i sp. nov., *A. eddieorum* sp. nov., *A. hughenden* sp. nov., *A. longithec*a, *A. rupicola* sp. nov., and *A. warrego* sp. nov. by a moderate to large body size (carapace length > 4.0 mm), the presence of a long embolus (embolus length/bulb length > 1.5) that has a relatively wide basal

section tapering into an attenuate, sinuous distal section after about 0.4 of length, and the absence of a prominent sharp heel on metatarsus I (as in the *pallida*-complex) (Fig. 44L–M). Males of *A. mulgana* can be distinguished from those of *A. eddieorum*, *A. longitheca*, and *A. warrego* by the presence of a tibia I that widens from the proximal end to the base of the tibial spur when in lateral view (Fig. 44P; cf. Figs 39, 42, 48). Males of *A. mulgana* can be distinguished from those of *A. aurensis* and *A. rupicola* by the presence of a longer embolus (embolus length/bulb length >2.5) (Fig. 44L–M; cf. Figs 34, 46). Males of *A. mulgana* can be distinguished from those of *A. hughenden* by the presence of a more strongly curving embolus (Fig. 44L–M; cf. Fig. 41). Males of *A. mulgana* can be distinguished from those of *A. briggsi* by the presence of a shorter distal pad and longer proximal excavation on metatarsus I (excavation length/metatarsus length ~0.43; cf. ~0.36 in *A. briggsi*) (Fig. 44Q; cf. Fig. 36).

Females of *A. mulgana* sp. nov. can be distinguished from all species for which females are known except *A. aurensis* sp. nov., *A. briggsi* sp. nov., *A. camara*, *A. dingo* sp. nov., *A. eddieorum* sp. nov., *A. longitheca*, and *A. rupicola* sp. nov. by the presence of spermathecae with two vesicles, with relatively long and straight lateral vesicles (lateral vesicle length/genitalia width >0.25) and long medial vesicles (medial vesicle length/lateral vesicle length >1) that project medially or posteromedially, before undulating anteriorly (Fig. 45L). Females of *A. mulgana* can be distinguished from those of *A. aurensis*, *A. briggsi*, *A. dingo*, *A. longitheca*, and *A. rupicola* by the presence of spermathecae with lateral vesicles terminating in relatively wide ends (Fig. 45L; cf. Figs 35, 37, 38, 43, 47). Females of *A. mulgana* can be distinguished from those of *A. camara* by the presence of a darker body colouration and spermathecae with longer vesicles (lateral vesicle length/genitalia width >0.35) with less widely-spaced crowns (distance between crowns less than length of lateral vesicles) (Fig. 45A–L; cf. Fig. 107). Females of *A. mulgana* can be distinguished from those of *A. eddieorum* by the absence of bald patches on the sternum, lateral of the sigilla, and the presence of thorn-like setae around the anterior edges of the sternum, and more angular medio-ventral corners of the coxae (Fig. 45G–I; cf. Fig. 40).

Etymology

The specific epithet '*mulgana*' is an adjective formed from 'Mulga', the common name of *Acacia aneura*, and the suffix '-ana' signifying an association, referencing its occurrence in the Mulga Lands bioregion of central-southern Queensland and north-western New South Wales.

Type material

Holotype

AUSTRALIA – **Queensland** • ♂; Charleville; 26°23' S, 146°08' E; Oct. 1978; R.C. Turnbull leg.; QMB S9769.

Paratypes

AUSTRALIA – **Queensland** • 1 ♂; Morven, "Ovida"; 26°29' S, 146°49' E; 21 Dec. 1991; M.N. Goodyear leg.; QMB S20267 • 1 ♂; Dunkeld, via Mitchell; 27°10' S, 147°44' E; 2 Nov. 1991; A. Sutton leg.; QMB S25559.

Other material examined

AUSTRALIA – **Queensland** • 1 ♀; Thrushton National Park, near Thrushton Homestead camping area; 27°44' S, 147°42' E; 219 m a.s.l.; 19 Oct. 2021; E.J. Briggs leg.; QMB S118217 • 1 ♂; Markarena Station, 30 miles N of Cunnamulla/Bollon Road; 27°46' S, 146°31' E; 6 Oct. 1984; C. Hembrow leg.; open dry eucalypt at base of sand ridge; QMB S9474 • 1 ♂; Saint George, Wagoo Road; 27°54' S, 148°38' E; 10 Nov. 2001; D. Jenkins leg.; QMB S60387 • 1 ♂; Dirranbandi; 28°16' S, 147°29' E; 18 Oct. 1982; S. Ferguson leg.; QMB S9399. – **New South Wales** • 1 ♂; Angledool; 29°07' S, 147°54' E; 23 Nov. 2001; hand collected, under fibro sheet; AMS KS77357 • 1 ♂; Wilganea Station, 90 km NE of Bourke; 29°21' S, 146°17' E; L. Gibson leg.; AMS KS37161 • 1 ♂; Beleuah Station, 90 km NE

of Bourke; 29°21' S, 146°14' E; 14 Oct. 1993; L. Gibson leg.; pitfall trap; AMS KS37162 • 1 ♂; Collarenebri, on farmland; 29°25' S, 148°15' E; 29 Nov.–3 Dec. 2013; R.C. Santana, I. Armiach and K. Bock leg.; QMB S29116 • 2 ♂♂, 1 ♀; Lightning Ridge; 29°26' S, 147°59' E; 16 Dec. 1991; M. Taylor leg.; AMS KS30687 • 1 ♀; Walgett, “Morendah”; 29°31' S, 147°34' E; 17 Oct. 1982; T. Remond leg.; AMS KS10434 • 1 ♂; Walgett, “Barfield”; 29°48' S, 147°38' E; 15 Oct. 1985; T.S. Willis leg.; AMS KS16028 • 1 ♀; Walgett, “Remington”; 29°52' S, 147°32' E; Mar. 1982; B. Forster leg.; AMS KS8919 • 1 ♂; Walgett; 29°59' S, 148°04' E; AMS KS45847 • 1 ♂; Walgett; 30°01' S, 148°07' E; 23 Nov. 1988; S. Remond leg.; AMS KS19939.

Description

Male (holotype, QMB S9769)

GENERAL (Fig. 44A–Q). Body length 22.81, in good condition, colour presumably faded due to preservation.

DORSAL PROSOMA (Fig. 44A, E–F). Carapace length 7.78, width 7.13, length/width 1.09, clypeus to fovea length/carapace length 0.70, caput width/carapace width 0.72, carapace red, reflective setae present, heavy on caput, moderate on thorax, fovea procurved, fovea width/carapace length 0.16 (Fig. 44A, F); chelicerae red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.74 (Fig. 44A); eye group rectangular, width/length 2.11, eye tubercle present (Fig. 44E).

ABDOMEN (Fig. 44B, D). Abdomen length 8.75, grey-brown, dorsal pattern absent, with some evidence of reflective setae on anterior portion.

VENTRAL PROSOMA (Fig. 44C, G–I). Labium cuspules absent (Fig. 44H); maxillae heel distinct, cuspules present, count=about 80, extending posteriorly onto heel, extending laterally about 25% of maxillae length (Fig. 44C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 44C, I); sternum length/width 1.21, central sternum with consistent covering of moderate setae, row of longer setae around posterior edges, some shorter thorn-like setae around anterior edges (Fig. 44G–H); posterior sigilla elongate, central sternum to posterior sigilla length/sternum length 0.18, posterior sigilla length/sternum length 0.19 (Fig. 44G–H); other sigilla small and lateral, medial sigilla semi-elongate, anterior sigilla round (Fig. 44G–H).

LEG I (Fig. 44N–Q). Leg I orange-brown, lighter on distal metatarsus and tarsus, femur length 7.36, patella length 4.55, tibia length 4.86, metatarsus length 4.84, tarsus length 3.05, total length 24.66, leg I length/carapace length 3.17 (Fig. 44N–O); scopulae on distal metatarsus and tarsus (Fig. 44N–O); spine count Fe D 0, Fe PL 1, Pa PL 2, Ti PL 0, Ti RL 0, Me PL 0, Me RL 0, Ta 0 (Fig. 44N–O); tibia length/width [TIL/TID] 2.75, widening from proximal end to spur before narrowing again towards distal end, spur present, digitiform, knuckle present, megaspine angled at 8 degrees, length to distal face of spur/tibia length [TIS/TIL] 0.41, spur height/tibia width [TISH/TID] 0.47, megaspine length/tibia length 0.21 (Fig. 44N–P); metatarsus slightly sinuous, proximal excavation present, excavation concave with pronounced heel, heel broadly rounded, excavation length/metatarsus length [MIPEL/MIL] 0.43, metatarsus length/width [MIL/MID] 4.34 (Fig. 44N–O, Q).

PEDIPALP (Fig. 44J–M). Tibia length 3.94, width 1.28, length/width [PTL/PTD] 3.09, asetose depression present, depression length/palp tibia length [PDL/PTL] 0.60, retrolateral face with consistent covering of light setae, ventral face with two elongate bristle-like setae below depression, prolateral face with two disto-ventral spines, disto-medial spine absent (Fig. 44J–K); patella prolateral face with 2 spines (Fig. 44J–K); cymbium with scopulae present distally (Fig. 44J–K); copulatory organ total length 2.33, length/palp tibia length 0.59 (Fig. 44L–M); bulb length/width 0.80 (Fig. 44L–M); embolus tapering from bulb, attenuate, with wide base tapering about halfway along into attenuate apical section, one

slight bend, at about 0.4 of length, slight bend before tip, width at base/bulb width 0.29, embolus length/bulb length 2.68 (Fig. 44L–M).

Female (QMB S118217)

GENERAL (Fig. 45A–L). Body length 21.77, in good condition.

DORSAL PROSOMA (Fig. 45A, E–F). Carapace length 9.52, width 7.52, length/width 1.27, clypeus to fovea length/carapace length 0.72, caput width/carapace width 0.79, carapace orange, caput slightly darker than thorax and clypeus darker again, reflective setae present, moderate on caput, light on thorax, fovea procurved, fovea width/carapace length 0.16 (Fig. 45A, F); chelicerae dark red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.40 (Fig. 45A); eye group rectangular, width/length 1.86, eye tubercle present (Fig. 45E).

ABDOMEN (Fig. 45B, D). Abdomen length 8.84, dark grey, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 45C, G–I). Labium cuspules present, count = 1 (Fig. 45H); maxillae heel distinct, cuspules present, count = about 173, extending posteriorly onto heel, extending laterally about 40% of maxillae length (Fig. 45C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 45C, I); sternum length/width 1.24, central sternum with consistent covering of moderate setae, row of longer setae around posterior edges, some shorter thorn-like setae around anterior edges (Fig. 45G–H); posterior sigilla elongate, central sternum to posterior sigilla length/sternum length 0.21, posterior sigilla length/sternum length 0.23 (Fig. 45G–H); other sigilla small and lateral, medial sigilla semi-elongate, anterior sigilla round (Fig. 45G–H).

LEG I (Fig. 45J–K). Leg I orange, darker on metatarsus and tarsus, femur length 6.87, patella length 4.45, tibia length 4.77, metatarsus length 4.46, tarsus length 2.77, total length 23.32, leg I length/carapace length 2.45; scopulae on distal metatarsus and tarsus; spine count Fe D 1, Fe PL 1, Pa PL 2, Ti PL 2, Ti RL 4, Me PL 2, Me RL 3, Ta 0; tibia length/width [TIL/TID] 3.15.

GENITALIA (Fig. 45D, L). Epigastric furrow unmodified (Fig. 45D); spermathecae with two vesicles each (Fig. 45L); lateral vesicle relatively straight, length 0.97, lateral vesicle length/genitalia width 0.39, length/width at base 1.74, crown un-demarcated (Fig. 45L); medial vesicle with distinct basal section angled medially, before undulating towards anterior, medial vesicle length/genitalia width 0.54, length/width 5.25, medial vesicle length/lateral vesicle length 1.37 (Fig. 45L).

Distribution and natural history

Aname mulgana sp. nov. has a widespread distribution in central-southern Queensland and central-northern New South Wales, in the Mulga Lands and Darling Riverine Plains bioregions. It extends from Walgett in the south to Charleville in the north, and from Charleville in the west to St George in the east (Fig. 7). The form of burrows constructed by spiders of this species is unknown, but is likely to be similar to that of other *eddieorum*-complex species (Fig. 7).

Aname rupicola sp. nov.

[urn:lsid:zoobank.org:act:F50EF31A-0935-4312-A06E-8F3F90443E0F](https://zoobank.org/urn:lsid:zoobank.org:act:F50EF31A-0935-4312-A06E-8F3F90443E0F)

Figs 1, 7, 46–47

Diagnosis

Males of *A. rupicola* sp. nov. can be distinguished from all species for which males are known except *A. aurensis* sp. nov., *A. briggsi* sp. nov., *A. eddieorum* sp. nov., *A. hughenden* sp. nov., *A. longitheca*,

A. mulgana sp. nov., and *A. warrego* sp. nov. by a moderate to large body size (carapace length >4.0 mm), the presence of a long embolus (embolus length/bulb length >1.5) that has a relatively wide basal section tapering into an attenuate, sinuous distal section after about 0.4 of length, and the absence of a prominent sharp heel on metatarsus I (as in the *pallida*-complex) (Fig. 46L–M). Males of *A. rupicola* can be distinguished from those of *A. eddieorum*, *A. longithecata*, and *A. warrego* by the presence of a tibia I that widens from the proximal end to the base of the tibial spur when in lateral view (Fig. 46P; cf. Figs 39, 42, 48). Males of *A. rupicola* can be distinguished from those of *A. briggsi*, *A. hughendeni*, and *A. mulgana* by the presence of a shorter embolus (embolus length/bulb length <2.5) (Fig. 46L–M; cf. Figs 36, 41, 44). Males of *A. rupicola* can be distinguished from those of *A. aurensis* by the presence of a shorter distal pad and longer proximal excavation on metatarsus I (excavation length/metatarsus length ~0.46; cf. ~0.37 in *A. aurensis*) (Fig. 46Q; cf. Fig. 34).

Females of *A. rupicola* sp. nov. can be distinguished from all species for which females are known except *A. aurensis* sp. nov., *A. briggsi* sp. nov., *A. camara*, *A. dingo* sp. nov., *A. eddieorum* sp. nov., *A. longithecata*, and *A. mulgana* sp. nov. by the presence of spermathecae with two vesicles, with relatively long and straight lateral vesicles (lateral vesicle length/genitalia width >0.25) and long medial vesicles (medial vesicle length/lateral vesicle length >1) that project medially or posteromedially, before undulating anteriorly (Fig. 47L). Females of *A. rupicola* can be distinguished from those of *A. aurensis*, *A. dingo*, and *A. longithecata* by the presence of spermathecae with slightly bent lateral vesicles (Fig. 47L; cf. Figs 35, 38, 43). Females of *A. rupicola* can be distinguished from those of *A. eddieorum* and *A. mulgana* by the presence of spermathecae with lateral vesicles terminating in narrower ends (Fig. 47L; cf. Figs 40, 45). Females of *A. rupicola* can be distinguished from those of *A. camara* by the presence of a darker body colouration and spermathecae with longer vesicles (lateral vesicle length/genitalia width >0.35) with less widely-spaced crowns (distance between crowns less than length of lateral vesicles) (Fig. 47A–L; cf. Fig. 107). Females of *A. rupicola* can be distinguished from those of *A. briggsi* by the presence of spermathecae with less elongate lateral and medial vesicles (medial vesicle length/genitalia width <0.65) (Fig. 47L; cf. Fig. 37).

Etymology

The specific epithet '*rupicola*' is a Latin adjective combining '*rupes*', meaning 'ravine', and the suffix '-*cola*', meaning 'dweller' or 'inhabitant', referencing the distribution of this species in and around Carnarvon Gorge in central Queensland.

Type material

Holotype

AUSTRALIA – Queensland • ♂; Springsure; 24°07' S, 148°05' E; 28 Nov. 2000; T. Vincent leg.; QMB S54272.

Other material examined

AUSTRALIA – Queensland • 1 juv.; Albinia National Park, off Dawson Highway, W of Rolleston; 24°26' S, 148°31' E; 228 m a.s.l.; 16 Apr. 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground; QMB S118262 • 1 juv.; Carnarvon National Park, off Mickey Creek trail; 25°04' S, 148°15' E; 432 m a.s.l.; 16 Apr. 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground; QMB S118272 • 1 juv.; Carnarvon National Park, off Mickey Creek trail; 25°04' S, 148°15' E; 432 m a.s.l.; 16 Apr. 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground; QMB S118273 • 1 juv.; Carnarvon National Park, off Mickey Creek trail; 25°04' S, 148°15' E; 442 m a.s.l.; 16 Apr. 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground; QMB S118263 • 1 ♀; Carnarvon National Park, near Rock Pool Picnic Area carpark; 25°04' S, 148°15' E; 407 m a.s.l.; 16 Apr. 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground; QMB S118268.

Description

Male (holotype, QMB S54272)

GENERAL (Fig. 46A–Q). Body length 17.98, in good condition, colour presumably faded due to preservation.

DORSAL PROSOMA (Fig. 46A, E–F). Carapace length 7.99, width 6.72, length/width 1.19, clypeus to fovea length/carapace length 0.72, caput width/carapace width 0.76, carapace red, caput slightly darker than thorax, reflective setae present, heavy on caput, moderate on thorax, fovea procurved, fovea width/carapace length 0.14 (Fig. 46A, F); chelicerae red, rastellum absent or inconspicuous, chelicerae length/carapace length 0.46 (Fig. 46A); eye group rectangular, width/length 1.97, eye tubercle present (Fig. 46E).

ABDOMEN (Fig. 46B, D). Abdomen length 6.46, brown, dorsal pattern absent, with some evidence of covering of reflective setae.

VENTRAL PROSOMA (Fig. 46C, G–I). Labium cuspules absent (Fig. 46H); maxillae heel distinct, cuspules present, count=about 125, extending posteriorly onto heel, extending laterally about 40% of maxillae length (Fig. 46C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 46C, I); sternum length/width 1.20, central sternum with consistent covering of moderate setae, row of longer setae around posterior edges, some shorter thorn-like setae around anterior edges (Fig. 46G–H); posterior sigilla ovoid, central sternum to posterior sigilla length/sternum length 0.24, posterior sigilla length/sternum length 0.13 (Fig. 46G–H); other sigilla small, round and lateral (Fig. 46G–H).

LEG I (Fig. 46N–Q). Leg I orange-brown, femur length 6.67, patella length 4.09, tibia length 4.36, metatarsus length 4.29, tarsus length 2.55, total length 21.97, leg I length/carapace length 2.75 (Fig. 46N–O); scopulae on distal metatarsus and tarsus (Fig. 46N–O); spine count Fe D 1, Fe PL 1 (rubbed off), Pa PL 2 (distal rubbed off), Ti PL 0, Ti RL 0, Me PL 0, Me RL 0, Ta 0 (Fig. 46N–O); tibia length/width [TIL/TID] 2.67, widening from proximal end to spur before narrowing again towards distal end, spur present, digitiform, knuckle present, megaspine angled at 18 degrees, length to distal face of spur/tibia length [TIS/TIL] 0.53, spur height/tibia width [TISH/TID] 0.55, megaspine length/tibia length 0.21 (Fig. 46N–P); metatarsus slightly sinuous, proximal excavation present, excavation concave with pronounced heel, heel semi-sharp, excavation length/metatarsus length [MIPEL/MIL] 0.46, metatarsus length/width [MIL/MID] 3.11 (Fig. 46N–O, Q).

PEDIPALP (Fig. 46J–M). Tibia length 3.53, width 1.20, length/width [PTL/PTD] 2.93, asetose depression present, depression length/palp tibia length [PDL/PTL] 0.65, retrolateral face with consistent covering of light setae, ventral face with two elongate bristle-like setae below depression, prolateral face with two disto-ventral spines, disto-medial spine absent (Fig. 46J–K); patella prolateral face with 0 spines (Fig. 46J–K); cymbium with scopulae present distally (Fig. 46J–K); copulatory organ total length 1.95, length/palp tibia length 0.55 (Fig. 46L–M); bulb length/width 0.81 (Fig. 46L–M); embolus tapering from bulb, attenuate, with wide base tapering about halfway along into attenuate apical section, one slight bend, at about 0.3 of length, slight bend before tip, width at base/bulb width 0.39, embolus length/bulb length 2.34 (Fig. 46L–M).

Female (QMB S118268)

GENERAL (Fig. 47A–L). Body length 23.48, in good condition.

DORSAL PROSOMA (Fig. 47A, E–F). Carapace length 8.25, width 7.33, length/width 1.13, clypeus to fovea length/carapace length 0.74, caput width/carapace width 0.75, carapace red-brown, reflective setae present, heavy on caput, moderate on thorax, fovea procurved, fovea width/carapace length 0.19 (Fig. 47A, F); chelicerae red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.53 (Fig. 47A); eye group rectangular, width/length 2.02, eye tubercle present (Fig. 47E).

ABDOMEN (Fig. 47B, D). Abdomen length 10.84, dark brown, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 47C, G–I). Labium cuspules absent (Fig. 47H); maxillae heel distinct, cuspules present, count=about 90, extending posteriorly onto heel, extending laterally about 50% of maxillae length (Fig. 47C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 47C, I); sternum length/width 1.16, central sternum with consistent covering of moderate setae, row of longer setae around posterior edges, some shorter thorn-like setae around anterior edges (Fig. 47G–H); posterior sigilla ovoid, central sternum to posterior sigilla length/sternum length 0.22, posterior sigilla length/sternum length 0.14 (Fig. 47G–H); other sigilla small, round and lateral (Fig. 47G–H).

LEG I (Fig. 47J–K). Leg I orange-brown, darker on patella and tibia, femur length 6.72, patella length 4.31, tibia length 4.49, metatarsus length 4.00, tarsus length 2.59, total length 22.12, leg I length/carapace length 2.68; scopulae on distal metatarsus and tarsus; spine count Fe D 1, Fe PL 1, Pa PL 2, Ti PL 3, Ti RL 4, Me PL 2, Me RL 3, Ta 0; tibia length/width [TIL/TID] 2.98.

GENITALIA (Fig. 47D, L). Epigastric furrow extending slightly, posterior edge with rounded shape (Fig. 47D); spermathecae with two vesicles each (Fig. 47L); lateral vesicle relatively straight, length 0.66, lateral vesicle length/genitalia width 0.37, length/width at base 1.58, crown un-demarcated (Fig. 47L); medial vesicle with distinct basal section angled medially, before undulating towards anterior, medial vesicle length/genitalia width 0.63, length/width 5.26, medial vesicle length/lateral vesicle length 1.71 (Fig. 47L).

Distribution and natural history

Aname rupicola sp. nov. occurs in central Queensland, in the Brigalow Belt South and Brigalow Belt North bioregions, from the Carnarvon Gorge region of Carnarvon National Park north to Spingsure (Fig. 7). It constructs an open, silk-lined burrow without silk outside of the entrance, often on an angle, and with a hidden secondary ‘wishbone’ entrance (Fig. 7).

Aname warrego sp. nov.

[urn:lsid:zoobank.org:act:43450168-880B-425A-98C8-1E22721E21DE](https://zoobank.org/act:43450168-880B-425A-98C8-1E22721E21DE)

Figs 1, 7, 48

Diagnosis

Males of *A. warrego* sp. nov. can be distinguished from all species for which males are known except *A. aurensis* sp. nov., *A. briggsi* sp. nov., *A. eddieorum* sp. nov., *A. hughenden* sp. nov., *A. longithecata*, *A. mulgana* sp. nov., and *A. rupicola* sp. nov. by a moderate to large body size (carapace length >4.0 mm), the presence of a long embolus (embolus length/bulb length >1.5) that has a relatively wide basal section tapering into an attenuate, sinuous distal section after about 0.4 of length, and the absence of a prominent sharp heel on metatarsus I (as in the *pallida*-complex) (Fig. 48L–M). Males of *A. warrego* can be distinguished from those of *A. aurensis*, *A. briggsi*, *A. hughenden*, *A. mulgana*, and *A. rupicola* by the presence of a tibia I that stays about the same width from the proximal end to the base of the tibial spur when in lateral view (Fig. 48P; cf. Figs 34, 36, 41, 44, 46). Males of *A. warrego* can be distinguished from those of *A. eddieorum* and *A. longithecata* by the presence of a thinner palp tibia (palp tibia length/width >3) (Fig. 48J–K; cf. Figs 39, 42).

Females of *A. warrego* sp. nov. are unknown.

Etymology

The specific epithet '*warrego*' is a noun in apposition, referencing the distribution of this species in the Warrego River catchment, in the Carnarvon Range.

Type material

Holotype

AUSTRALIA – Queensland • ♂; Carnarvon Station, near Piebald Spring; 24°50' S, 147°45' E; 821 m a.s.l.; 6–24 Nov. 2010; C. Lambkin, Queensland Museum Team leg.; malaise trap, eucalypt/*Callistemon* in rocky gully beside flowing creek; QMB S96932.

Paratype

AUSTRALIA – Queensland • 1 ♂; Carnarvon Station, 12 km WSW of headquarters; 24°50' S, 147°38' E; 1 Dec. 2012–17 Jan. 2013; G.B. Monteith and C. Wilson leg.; gutter trap, *Callitris*; QMB S104738.

Description

Male (holotype, QMB S96932)

GENERAL (Fig. 48A–Q). Body length 18.90, in good condition, colour presumably faded due to preservation.

DORSAL PROSOMA (Fig. 48A, E–F). Carapace length 7.55, width 6.48, length/width 1.16, clypeus to fovea length/carapace length 0.70, caput width/carapace width 0.71, carapace red-brown, caput slightly darker than thorax, reflective setae present, heavy on caput, moderate on thorax, fovea procurved, fovea width/carapace length 0.14 (Fig. 48A, F); chelicerae dark red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.53 (Fig. 48A); eye group rectangular, width/length 2.01, eye tubercle present (Fig. 48E).

ABDOMEN (Fig. 48B, D). Abdomen length 7.31, light grey, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 48C, G–I). Labium cuspules absent (Fig. 48H); maxillae heel distinct, cuspules present, count=about 102, extending posteriorly onto heel, extending laterally about 45% of maxillae length (Fig. 48C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 48C, I); sternum length/width 1.17, many setae rubbed off, central sternum with consistent covering of short setae, row of longer setae around posterior edges (Fig. 48G–H); posterior sigilla semi-elongate, central sternum to posterior sigilla length/sternum length 0.18, posterior sigilla length/sternum length 0.20 (Fig. 48G–H); other sigilla small, round and lateral (Fig. 48G–H).

LEG I (Fig. 48N–Q). Leg I orange-brown, femur length 6.24, patella length 3.86, tibia length 4.56, metatarsus length 4.25, tarsus length 2.88, total length 21.78, leg I length/carapace length 2.89 (Fig. 48N–O); scopulae on distal metatarsus and tarsus (Fig. 48N–O); spine count Fe D 1, Fe PL 1, Pa PL 2, Ti PL 0, Ti RL 0, Me PL 0, Me RL 0, Ta 0 (Fig. 48N–O); tibia length/width [TIL/TID] 3.24, even width along length, spur present, digitiform, knuckle present, megaspine angled at 10 degrees, length to distal face of spur/tibia length [TIS/TIL] 0.44, spur height/tibia width [TISH/TID] 0.62, megaspine length/tibia length 0.22 (Fig. 48N–P); metatarsus slightly sinuous, proximal excavation present, excavation concave with pronounced heel, heel semi-sharp, excavation length/metatarsus length [MIPEL/MIL] 0.44, metatarsus length/width [MIL/MID] 4.44 (Fig. 48N–O, Q).

PEDIPALP (Fig. 48J–M). Tibia length 3.61, width 1.15, length/width [PTL/PTD] 3.14, asetose depression present, depression length/palp tibia length [PDL/PTL] 0.56, retrolateral face with consistent covering

of light setae, ventral face with one elongate bristle-like seta below depression, prolateral face with two disto-ventral spines, disto-medial spine absent (Fig. 48J–K); patella prolateral face with 2 spines (Fig. 48J–K); cymbium with scopulae present distally (Fig. 48J–K); copulatory organ total length 2.03, length/palp tibia length 0.56 (Fig. 48L–M); bulb length/width 0.77 (Fig. 48L–M); embolus tapering from bulb, attenuate, with wide base tapering about halfway along into attenuate apical section, one slight bend, at about 0.4 of length, slight bend before tip, width at base/bulb width 0.27, embolus length/bulb length 2.63 (Fig. 48L–M).

Distribution and natural history

Aname warrego sp. nov. occurs in central Queensland, in the Brigalow Belt South bioregion. It is known from two locations in Upper Warrego, near Carnarvon National Park (Fig. 7). The form of burrows constructed by spiders of this species is unknown, but is likely to be similar to that of other *eddieorum*-complex species (Fig. 7).

Aname barakula-complex Figs 1, 3C, 5C, 8, 49–55

Remarks

See the key to complexes and Figures 3–5 for diagnostic information. In life, spiders of the *barakula*-complex vary from dark tan to almost black, and are fairly uniform in colour over the carapace and legs (Fig. 8). Females of the *barakula*-complex generally have reflective bronze setae on the carapace, and sometimes also on the dorsal abdomen. Male colour and setation in life is unknown. Spiders of this complex generally construct an open, silk-lined burrow with some silk spilling out from the entrance, sometimes with a slightly built up ‘collar’ of soil around the entrance, and with a hidden secondary ‘wishbone’ entrance. The entrance can be large relative to the spider that inhabits it (see the image of an *A. barakula* sp. nov. individual in its burrow entrance in Fig. 8).

Distribution

The *barakula*-complex is currently known to occur only in the Brigalow Belt South bioregion of south-eastern Queensland, and species tend to have quite small natural ranges (Fig. 8). In the Mount Moffatt region of Carnarvon National Park, two species (*A. ammolithica* sp. nov. and *A. lambkinae* sp. nov.) appear to occur in sympatry (unusually for *Aname* in the same complex).

Composition

The *barakula*-complex includes five described species: *Aname ammolithica* sp. nov., *A. barakula* sp. nov., *A. braemar* sp. nov., *A. lambkinae* sp. nov., and *A. truncata* sp. nov.

Key to species in the *Aname barakula*-complex

Note: males are unknown for *A. braemar* sp. nov., and *A. truncata* sp. nov., and females are unknown for *A. ammolithica* sp. nov.

1. Males..... 2
- Females..... 4

Males

2. Sternum length $\sim 1.3 \times$ width; metatarsus I with a more pronounced heel (Fig. 53)..... *A. lambkinae* sp. nov.
- Sternum more elongate (length $> 1.35 \times$ width); metatarsus I with a less pronounced heel (Figs 49, 50)..... 3

3. Posterior sternal sigilla positioned medially (distance of posterior sigilla from sternum centre/ sternum length ~ 0.17); tibia I length $\sim 3.2 \times$ width (Fig. 49) *A. ammolithica* sp. nov.
- Posterior sternal sigilla positioned more laterally (distance of posterior sigilla from sternum centre/ sternum length ~ 0.26); tibia I more elongate (length $\sim 3.5 \times$ width) (Fig. 50) *A. barakula* sp. nov.

Females

4. Spermathecae with lateral vesicles with distinct, widened crowns (Figs 51–52) 5
- Spermathecae with lateral vesicles without widened crowns (Figs 54–55) 6
5. Spermathecae medial vesicle length $\sim 0.8 \times$ lateral vesicle length (Fig. 51) *A. barakula* sp. nov.
- Spermathecae with longer medial vesicles ($\sim 1.2 \times$ lateral vesicle length) (Fig. 52)
..... *A. braemar* sp. nov.
6. Spermathecae lateral vesicle length $\sim 3.6 \times$ width; medial vesicles strongly bent and with distinct crowns (Fig. 54) *A. lambkinae* sp. nov.
- Spermathecae with less elongate medial vesicles (length $\sim 1.6 \times$ width), and medial vesicles that are straighter and with less distinct crowns (Fig. 55) *A. truncata* sp. nov.

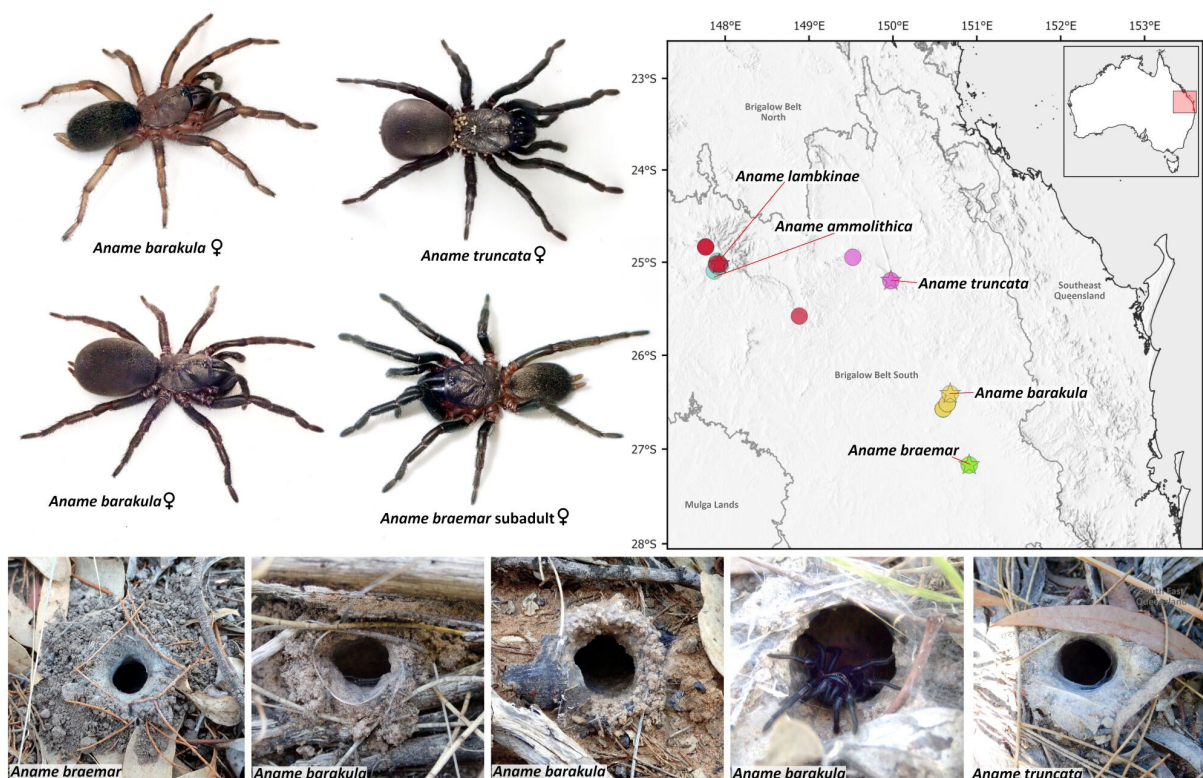


Fig. 8. *Aname barakula*-complex species habitus images, distribution map, and burrow architecture. Points on the map represented by a star are type localities. Note that intraspecific variation occurs in both physical appearance and burrow architecture, and images shown here should be treated only as examples, not used for species diagnosis.

Aname ammolithica sp. nov.

urn:lsid:zoobank.org:act:DCAB1BC0-DA42-40E0-A4A8-3180B056A097

Figs 8, 49

Diagnosis

Males of *A. ammolithica* sp. nov. can be distinguished from all species for which males are known except *A. barakula* sp. nov. and *A. lambkinae* sp. nov. by a moderate to large body size (carapace length >4.0 mm), the presence of a long embolus (embolus length/bulb length > 1.5) that is relatively straight, a triangular tibial spur (rather than more digitiform), and a thin metatarsus I (metatarsus I length/width >3.9) with an unpronounced heel (Fig. 49A–Q). Males of *A. ammolithica* can be distinguished from those of *A. lambkinae* by the presence of a narrower sternum (sternum length/width > 1.4) and a less pronounced heel on metatarsus I (Fig. 49A–Q; cf. Fig. 53). Males of *A. ammolithica* can be distinguished from those of *A. barakula* by the presence of more medially-positioned posterior sternal sigilla (distance of posterior sigilla from sternum centre/sternum length ~0.17; cf. ~0.26 in *A. barakula*), and a thicker tibia I (tibia I length/width ~3.2; cf. ~3.5 in *A. barakula*) (Fig. 49H, P; cf. Fig. 50).

Females of *A. ammolithica* sp. nov. are unknown.

Etymology

The specific epithet ‘*ammolithica*’ is an adjective formed from the Greek ‘*ammos*’, meaning sand, and ‘*lithos*’ meaning stone, in reference to the distribution of this species in the Mount Moffatt section of Carnarvon National Park, an area with sandy soil and sandstone outcrops.

Type material

Holotype

AUSTRALIA – Queensland • ♂; Carnarvon National Park, Mount Moffatt Section; 25°01' S, 147°56' E; 770 m a.s.l.; 13 Jan.–22 Apr. 2013; G. Keith leg.; gutter trap, *Eucalyptus/Acacia* woodland, sandy; QMB S24079.

Paratypes

AUSTRALIA – Queensland • 1 ♂; Carnarvon National Park, Mount Moffatt Section, behind Marlong Arch; 24°59' S, 147°54' E; 760 m a.s.l.; 16 Jan.–22 Apr. 2013; G. Keith leg.; gutter trap, spinifex; QMB S52898 • 1 ♂; Carnarvon National Park, Mount Moffatt Section; 25°01' S, 147°56' E; 26 Jan. 1999; C. Eddie, R. Johnson and A. Young leg.; pitfall trap, *Callitris*; QMB S42845 • 1 ♂; Carnarvon National Park, Mount Moffatt Section; 25°01' S, 147°56' E; 770 m a.s.l.; 13 Jan.–22 Apr. 2013; G. Keith leg.; gutter trap, *Eucalyptus/Acacia* woodland, sandy; QMB S24855 • 1 ♂; Carnarvon National Park, Mount Moffatt Section; 25°01' S, 147°55' E; 730 m a.s.l.; 13 Jan.–22 Apr. 2013; G. Keith leg.; gutter trap, *Callitris*; QMB S24063 • 1 ♂; Carnarvon National Park, Mount Moffatt Section; 25°02' S, 147°56' E; 24 Jan. 1999; C. Eddie, R. Johnson and A. Young leg.; hand collected, active on road during rain; QMB S42843 • 2 ♂♂; Carnarvon National Park, Mount Moffatt Section; 25°03' S, 147°55' E; 26 Jan. 1999; C. Eddie, R. Johnson and A. Young leg.; pitfall trap, *Angophora* woodland; QMB S42844 • 1 ♂; Carnarvon National Park, Mount Moffatt Section; 25°06' S, 147°52' E; 25 Jan. 1999; C. Eddie, R. Johnson and A. Young leg.; QMB S42842.

Description

Male (holotype, QMB S24079)

GENERAL (Fig. 49A–Q). Body length 15.10, in good condition, colour presumably faded due to preservation.

DORSAL PROSOMA (Fig. 49A, E–F). Carapace length 6.42, width 4.97, length/width 1.29, clypeus to fovea length/carapace length 0.69, caput width/carapace width 0.73, carapace red-brown, reflective setae present, moderate on caput, moderate on thorax, fovea procurved, fovea width/carapace length 0.13 (Fig. 49A, F); chelicerae red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.50 (Fig. 49A); eye group rectangular, width/length 1.92, eye tubercle present (Fig. 49E).

ABDOMEN (Fig. 49B, D). Abdomen length 5.48, dark grey, dorsal pattern absent, with some evidence of reflective setae on anterior portion.

VENTRAL PROSOMA (Fig. 49C, G–I). Labium cuspules absent (Fig. 49H); maxillae heel distinct, cuspules present, count=about 75, extending posteriorly onto heel, extending laterally about 30% of maxillae length (Fig. 49C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 49C, I); sternum length/width 1.42, central sternum with consistent covering of moderate setae, row of longer setae around posterior edges (Fig. 49G–H); posterior sigilla circular, central sternum to posterior sigilla length/sternum length 0.17, posterior sigilla length/sternum length 0.12 (Fig. 49G–H); other sigilla small, round and lateral (Fig. 49G–H).

LEG I (Fig. 49N–Q). Leg I red-brown, femur length 4.89, patella length 3.08, tibia length 3.59, metatarsus length 3.68, tarsus length 2.48, total length 17.72, leg I length/carapace length 2.76 (Fig. 49N–O); scopulae on distal metatarsus and tarsus (Fig. 49N–O); spine count Fe D 2, Fe PL 1, Pa PL 2, Ti PL 0, Ti RL 0, Me PL 0, Me RL 0, Ta 0 (Fig. 49N–O); tibia length/width [TIL/TID] 3.17, even width along length, spur present, triangular, knuckle absent, megaspine angled at 18 degrees, length to distal face of spur/tibia length [TIS/TIL] 0.47, spur height/tibia width [TISH/TID] 0.51, megaspine length/tibia length 0.24 (Fig. 49N–P); metatarsus relatively straight, proximal excavation present, excavation concave with slight heel, heel semi-sharp, excavation length/metatarsus length [MIPEL/MIL] 0.46, metatarsus length/width [MIL/MID] 3.96 (Fig. 49N–O, Q).

PEDIPALP (Fig. 49J–M). Tibia length 2.57, width 1.04, length/width [PTL/PTD] 2.47, asetose depression present, depression length/palp tibia length [PDL/PTL] 0.63, retrolateral face with consistent covering of light setae, ventral face with two elongate bristle-like setae below depression, prolateral face with patch of spines on distal half, disto-medial spine present (Fig. 49J–K); patella prolateral face with 2 spines (Fig. 49J–K); cymbium with scopulae present distally (Fig. 49J–K); copulatory organ total length 1.45, length/palp tibia length 0.57 (Fig. 49L–M); bulb length/width 0.97 (Fig. 49L–M); embolus tapering from bulb, attenuate, tapering and curving relatively evenly to point, one slight bend, at about 0.5 of length, slight bend before tip, width at base/bulb width 0.38, embolus length/bulb length 2.22 (Fig. 49L–M).

Distribution and natural history

Aname ammolithica sp. nov. occurs in central Queensland, in the Brigalow Belt South bioregion, in the Mount Moffatt region of Carnarvon National Park (Fig. 8). The form of burrows constructed by spiders of this species is unknown, but is likely to be similar to that of other *barakula*-complex species (Fig. 8).

Aname barakula sp. nov.

[urn:lsid:zoobank.org:act:8D9C4C85-1CC2-4D86-9071-F0491E77EE45](https://doi.org/10.21203/rs.3.rs-5111111/v1)

Figs 1, 8, 50–51

Diagnosis

Males of *A. barakula* sp. nov. can be distinguished from all species for which males are known except *A. ammolithica* sp. nov. and *A. lambkinae* sp. nov. by a moderate to large body size (carapace length

>4.0 mm), the presence of a long embolus (embolus length/bulb length > 1.5) that is relatively straight, a triangular tibial spur (rather than more digitiform), and a thin metatarsus I (metatarsus I length/width > 3.9) with an unpronounced heel (Fig. 50A–Q). Males of *A. barakula* can be distinguished from those of *A. lambkinae* by the presence of a narrower sternum (sternum length/width > 1.4) and a less pronounced heel on metatarsus I (Fig. 50A–Q; cf. Fig. 53). Males of *A. barakula* can be distinguished from those of *A. ammolithica* by the presence of more laterally-positioned posterior sternal sigilla (distance of posterior sigilla from sternum centre/sternum length ~0.26; cf. ~0.17 in *A. ammolithica*), and a thinner tibia I (tibia I length/width ~3.5; cf. ~3.2 in *A. ammolithica*) (Fig. 50H, P; cf. Fig. 49).

Females of *A. barakula* sp. nov. can be distinguished from all species for which females are known except *A. braemar* sp. nov., *A. lambkinae* sp. nov., and *A. truncata* sp. nov. by the presence of spermathecae with two vesicles, with relatively long and straight lateral vesicles (lateral vesicle length/genitalia width > 0.25) and medial vesicles with few bends (usually one or two), and a narrow sternum (sternum length/width > 1.3) (Fig. 51A–L). Females of *A. barakula* can be distinguished from those of *A. lambkinae* and *A. truncata* by the presence of spermathecae with lateral vesicles with a wide base and distinct, slightly wider crowns (Fig. 51L; cf. Figs 54, 55). Females of *A. barakula* can be distinguished from those of *A. braemar* by the presence of spermathecae with shorter medial vesicles (medial vesicle length/lateral vesicle length ~0.8; cf. ~1.2 in *A. braemar*) (Fig. 51L; cf. Fig. 52).

Etymology

The specific epithet '*barakula*' is a noun in apposition, referencing the distribution of this species within and around Barakula State Forest in south-eastern Queensland.

Type material

Holotype

AUSTRALIA – Queensland • ♂; Barakula State Forest, off Auburn Road; 26°25' S, 150°41' E; 3 Dec. 2012–19 Apr. 2013; C. Moeseneder and S. Moeseneder leg.; flight intercept trap; QMB S109544.

Paratype

AUSTRALIA – Queensland • 1 ♀; Barakula State Forest, off Auburn Road; 26°25' S, 150°41' E; 360 m a.s.l.; 14 Apr. 2023; J.D. Wilson, M.G. Rix and G. Hearle leg.; excavated, open burrow on ground; QMB S118249.

Other material examined

AUSTRALIA – Queensland • 1 juv.; Barakula State Forest, off Auburn Road; 26°31' S, 150°39' E; 364 m a.s.l.; 14 Apr. 2023; J.D. Wilson, M.G. Rix and G. Hearle leg.; excavated, open burrow on ground; QMB S118247 • 1 juv.; Barakula State Forest, off Auburn Road; 26°31' S, 150°39' E; 359 m a.s.l.; 14 Apr. 2023; J.D. Wilson, M.G. Rix and G. Hearle leg.; excavated, open burrow on ground; QMB S118248 • 1 ♀; Barakula State Forest, off Auburn Road; 26°34' S, 150°36' E; 349 m a.s.l.; 14 Apr. 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground; QMB S118252 • 1 juv.; Barakula State Forest, off Auburn Road; 26°34' S, 150°36' E; 354 m a.s.l.; 14 Apr. 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground; QMB S118250 • 1 juv.; Barakula State Forest, off Auburn Road; 26°34' S, 150°36' E; 354 m a.s.l.; 14 Apr. 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground; QMB S118251.

Description

Male (holotype, QMB S109544)

GENERAL (Fig. 50A–Q). Body length 17.73, in good condition, colour presumably faded due to preservation.

DORSAL PROSOMA (Fig. 50A, E–F). Carapace length 6.89, width 5.43, length/width 1.27, clypeus to fovea length/carapace length 0.66, caput width/carapace width 0.67, carapace dark red-brown, reflective setae present, moderate on caput, moderate on thorax, fovea straight, fovea width/carapace length 0.12 (Fig. 50A, F); chelicerae dark red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.48 (Fig. 50A); eye group rectangular, width/length 2, eye tubercle present (Fig. 50E).

ABDOMEN (Fig. 50B, D). Abdomen length 6.79, light grey, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 50C, G–I). Labium cuspules absent (Fig. 50H); maxillae heel distinct, cuspules present, count=about 80, extending posteriorly onto heel, extending laterally about 20% of maxillae length (Fig. 50C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 50C, I); sternum length/width 1.61, central sternum with consistent covering of short setae, row of longer setae around posterior edges (Fig. 50G–H); posterior sigilla circular, central sternum to posterior sigilla length/sternum length 0.26, posterior sigilla length/sternum length 0.10 (Fig. 50G–H); other sigilla small, round and lateral (Fig. 50G–H).

LEG I (Fig. 50N–Q). Leg I dark red-brown, femur length 5.37, patella length 3.40, tibia length 3.91, metatarsus length 3.85, tarsus length 2.64, total length 19.17, leg I length/carapace length 2.78 (Fig. 50N–O); scopulae on distal metatarsus and tarsus (Fig. 50N–O); spine count Fe D 2, Fe PL 1, Pa PL 2, Ti PL 0, Ti RL 0, Me PL 0, Me RL 0, Ta 0 (Fig. 50N–O); tibia length/width [TIL/TID] 3.55, even width along length, spur present, triangular, knuckle absent, megaspine angled at 30 degrees, length to distal face of spur/tibia length [TIS/TIL] 0.52, spur height/tibia width [TISH/TID] 0.55, megaspine length/tibia length 0.20 (Fig. 50N–P); metatarsus relatively straight, proximal excavation present, excavation concave with slight heel, heel semi-sharp, excavation length/metatarsus length [MIPEL/MIL] 0.41, metatarsus length/width [MIL/MID] 3.93 (Fig. 50N–O, Q).

PEDIPALP (Fig. 50J–M). Tibia length 3.00, width 0.98, length/width [PTL/PTD] 3.07, asetose depression present, depression length/palp tibia length [PDL/PTL] 0.51, retrolateral face with consistent covering of light setae, ventral face with two elongate bristle-like setae below depression, prolateral face with patch of spines on distal half, disto-medial spine present (Fig. 50J–K); patella prolateral face with 2 spines (Fig. 50J–K); cymbium with scopulae present distally (Fig. 50J–K); copulatory organ total length 1.52, length/palp tibia length 0.51 (Fig. 50L–M); bulb length/width 0.97 (Fig. 50L–M); embolus tapering from bulb, attenuate, tapering and curving relatively evenly to point, one slight bend, at about 0.5 of length, slight bend before tip, width at base/bulb width 0.31, embolus length/bulb length 2.03 (Fig. 50L–M).

Female (paratype, QMB S118249)

GENERAL (Fig. 51A–L). Body length 22.59, in good condition.

DORSAL PROSOMA (Fig. 51A, E–F). Carapace length 6.73, width 5.74, length/width 1.17, clypeus to fovea length/carapace length 0.71, caput width/carapace width 0.76, carapace red-brown, reflective setae present, light on caput, light on thorax, fovea straight, fovea width/carapace length 0.14 (Fig. 51A, F); chelicerae red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.61 (Fig. 51A); eye group rectangular, width/length 1.94, eye tubercle present (Fig. 51E).

ABDOMEN (Fig. 51B, D). Abdomen length 11.12, dark brown, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 51C, G–I). Labium cuspules absent (Fig. 51H); maxillae heel distinct, cuspules present, count=about 93, extending posteriorly onto heel, extending laterally about 30% of maxillae

length (Fig. 51C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 51C, I); sternum length/width 1.38, central sternum with consistent covering of moderate setae, row of longer setae around posterior edges (Fig. 51G–H); posterior sigilla ovoid, central sternum to posterior sigilla length/sternum length 0.27, posterior sigilla length/sternum length 0.10 (Fig. 51G–H); other sigilla small, round and lateral (Fig. 51G–H).

LEG I (Fig. 51J–K). Leg I red-brown, darker on patella and tibia, femur length 5.03, patella length 3.35, tibia length 3.44, metatarsus length 3.11, tarsus length 2.07, total length 17.00, leg I length/carapace length 2.53; scopulae on distal metatarsus and tarsus; spine count Fe D 1, Fe PL 1, Pa PL 2, Ti PL 1, Ti RL 4, Me PL 1, Me RL 3, Ta 0; tibia length/width [TIL/TID] 3.13.

GENITALIA (Fig. 51D, L). Epigastric furrow unmodified (Fig. 51D); spermathecae with two vesicles each (Fig. 51L); lateral vesicle relatively straight, length 0.32, lateral vesicle length/genitalia width 0.28, length/width at base 2.79, crown slightly wider than stem (Fig. 51L); medial vesicle short, projecting medially and curving from medial to lateral angle, medial vesicle length/genitalia width 0.22, length/width 3.28, medial vesicle length/lateral vesicle length 0.79 (Fig. 51L).

Distribution and natural history

Aname barakula sp. nov. occurs in south-eastern Queensland, in the Brigalow Belt South bioregion, in and around Barakula State Forest, near the town of Miles (Fig. 8). It constructs an open, silk-lined burrow with silk spilling out from the entrance, and sometimes with a slightly built up ‘collar’ of soil around the entrance, and with a hidden secondary ‘wishbone’ entrance (Fig. 8).

Aname braemar sp. nov.

[urn:lsid:zoobank.org:act:CA750714-9BD0-447B-9057-10BFEF64BC7C](https://zoobank.org/act:CA750714-9BD0-447B-9057-10BFEF64BC7C)

Figs 1, 8, 52

Diagnosis

Males of *A. braemar* sp. nov. are unknown.

The single female holotype (probably subadult) of *A. braemar* sp. nov. can be distinguished from all species for which females are known except *A. barakula* sp. nov., *A. lambkinae* sp. nov., and *A. truncata* sp. nov. by the presence of spermathecae with two vesicles, with relatively long and straight lateral vesicles (lateral vesicle length/genitalia width >0.25) and medial vesicles with few bends (usually one or two), and a narrow sternum (sternum length/width >1.3) (Fig. A–L). This subadult female of *A. braemar* can be distinguished from those of *A. lambkinae* and *A. truncata* by the presence of (likely rudimentary) spermathecae with lateral vesicles with a wide base and distinct, slightly wider crowns (Fig. 52L; cf. Figs 54–55), and from those of *A. barakula* by the presence of spermathecae with longer medial vesicles (medial vesicle length/lateral vesicle length ~1.2; cf. ~0.8 in *A. barakula*) (Fig. 52L; cf. Fig. 51).

Etymology

The specific epithet ‘*braemar*’ is a noun in apposition, referencing the distribution of this species within and around Braemar State Forest in south-eastern Queensland.

Type material

Holotype

AUSTRALIA – Queensland • female (potentially subadult); Braemar State Forest, off Kumbarilla Lane; 27°10' S, 150°55' E; 354 m a.s.l.; 4 Oct. 2020; M.G. Rix, A.G. Rix, A. Wojcieszek and M. Brien leg.; excavated, open woodland with cypress pine; QMB S124055.

Paratype

AUSTRALIA – Queensland • 1 juv.; same data as for holotype; QMB S124054.

Description

Female (holotype, potentially subadult, QMB S124055)

GENERAL (Fig. 52A–L). Body length 15.12, in good condition.

DORSAL PROSOMA (Fig. 52A, E–F). Carapace length 5.31, width 4.43, length/width 1.20, clypeus to fovea length/carapace length 0.69, caput width/carapace width 0.83, carapace orange-brown, reflective setae present, moderate on caput, moderate on thorax, fovea procurved, fovea width/carapace length 0.16 (Fig. 52A, F); chelicerae orange-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.64 (Fig. 52A); eye group rectangular, width/length 1.84, eye tubercle present (Fig. 52E).

ABDOMEN (Fig. 52B, D). Abdomen length 5.91, brown, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 52C, G–I). Labium cuspules absent (Fig. 52H); maxillae heel distinct, cuspules present, count=about 81, extending posteriorly onto heel, extending laterally about 30% of maxillae length (Fig. 52C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 52C, I); sternum length/width 1.43, central sternum with consistent covering of moderate setae, row of longer setae around posterior edges (Fig. 52G–H); posterior sigilla ovoid, central sternum to posterior sigilla length/sternum length 0.26, posterior sigilla length/sternum length 0.10 (Fig. 52G–H); other sigilla small, round and lateral (Fig. 52G–H).

LEG I (Fig. 52J–K). Leg I orange-brown, femur length 4.36, patella length 2.79, tibia length 2.78, metatarsus length 2.61, tarsus length 1.96, total length 14.48, leg I length/carapace length 2.73; scopulae on distal metatarsus and tarsus; spine count Fe D 1, Fe PL 1 (rubbed off), Pa PL 2, Ti PL 1 (rubbed off), Ti RL 4 (proximal two are weak), Me PL 1, Me RL 3, Ta 0; tibia length/width [TIL/TID] 2.72.

GENITALIA (Fig. 52D, L). Epigastric furrow unmodified (Fig. 52D); spermathecae with two vesicles each (Fig. 52L); lateral vesicle relatively straight, length 0.24, lateral vesicle length/genitalia width 0.31, length/width at base 1.46, crown slightly wider than stem (Fig. 52L); medial vesicle relatively short, projecting medially and undulating, medial vesicle length/genitalia width 0.39, length/width 6.66, medial vesicle length/lateral vesicle length 1.25 (Fig. 52L).

Distribution and natural history

Aname braemar sp. nov. occurs in south-eastern Queensland, in the Brigalow Belt South bioregion, in and around Braemar State Forest, near the town of Dalby (Fig. 8). It constructs an open, silk-lined burrow with silk spilling out from the entrance, and sometimes with a slightly built up ‘collar’ of soil around the entrance, and with a hidden secondary ‘wishbone’ entrance (Fig. 8).

Remarks

The holotype of *A. braemar* sp. nov. is probably subadult. However, because the spermathecae are relatively well formed and distinct, and morphological and molecular data both indicate that *A. braemar* is a distinct species, and in the interests of comprehensively documenting the genus in the region, we have chosen to describe *A. braemar* here despite the morphologically suboptimal holotype specimen.

Aname lambkinae sp. nov.

[urn:lsid:zoobank.org:act:72155011-C47E-459F-B00F-0FEA858C564E](https://doi.org/10.21203/rs.3.rs-1234567/v1)

Figs 1, 8, 53–54

Diagnosis

Males of *A. lambkinae* sp. nov. can be distinguished from all species for which males are known except *A. ammolithica* sp. nov. and *A. barakula* sp. nov. by a moderate to large body size (carapace length >4.0 mm), the presence of a long embolus (embolus length/bulb length > 1.5) that is relatively straight, a triangular tibial spur (rather than more digitiform), and a thin metatarsus I (metatarsus I length/width >3.9) with an unpronounced heel (Fig. 53A–Q). Males of *A. lambkinae* can be distinguished from those of *A. ammolithica* and *A. barakula* by the presence of a wider sternum (sternum length/width ~1.3; cf. > 1.4) and a more pronounced heel on metatarsus I (Fig. 53A–Q; cf. Figs 49–50).

Females of *A. lambkinae* sp. nov. can be distinguished from all species for which females are known except *A. barakula* sp. nov., *A. braemar* sp. nov., and *A. truncata* sp. nov. by the presence of spermathecae with two vesicles, with relatively long and straight lateral vesicles (lateral vesicle length/genitalia width >0.25) and medial vesicles with few bends (usually one or two), and a narrow sternum (sternum length/width >1.3) (Fig. 54A–L). Females of *A. lambkinae* can be distinguished from those of *A. barakula* and *A. braemar* by the presence of spermathecae with lateral vesicles without distinct, widened crowns (Fig. 54L; cf. Fig. 51). Females of *A. lambkinae* can be distinguished from those of *A. truncata* by the presence of spermathecae with more elongate lateral vesicles (lateral vesicle length/width ~3.6; cf. ~1.6 in *A. truncata*) and strongly bent medial vesicles with distinct crowns (Fig. 54L; cf. Fig. 55).

Etymology

The specific epithet '*lambkinae*' honours Dr Christine Lambkin, for her contributions to Australian entomology and biodiversity science. Christine was involved in collecting several specimens of this species.

Type material

Holotype

AUSTRALIA – Queensland • ♂; Carnarvon National Park, Mount Moffatt Section; 25°01' S, 147°56' E; 770 m a.s.l.; 9–26 Sep. 2012; C. Lambkin and G. Keith leg.; gutter trap, eucalypt forest; QMB S24949.

Paratypes

AUSTRALIA – Queensland • 2 ♂♂; Carnarvon National Park, Mount Moffatt Section; 25°01' S, 147°56' E; 770 m a.s.l.; 26 Sep.–2 Nov. 2012; Queensland Museum Party, P. Mowatt leg.; monster trap; QMB S52416 • 1 ♂; Carnarvon National Park, Mount Moffatt Section; 25°01' S, 147°54' E; 720 m a.s.l.; 16 Jan.–22 Apr. 2013; G. Keith leg.; gutter trap; QMB S52874.

Other material examined

AUSTRALIA – Queensland • 3 ♂♂, 1 juv.; Carnarvon Station, Swers Lookout; 24°50' S, 147°46' E; 870 m a.s.l.; 23 Sep.–1 Nov. 2012; N. Starick, C. Lambkin, S. Wright and J. Wilson leg.; monster trap, sandy gully; QMB S104691 • 1 ♀, 1 juv.; Carnarvon Station, Swers Lookout; 24°50' S, 147°46' E; 870 m a.s.l.; 1 Dec. 2012–17 Jan. 2013; G.B. Monteith and C. Wilson leg.; gutter trap, *Acacia* scrub; QMB S118364 • 1 ♂; Carnarvon Station; 24°50' S, 147°46' E; 853 m a.s.l.; 8–16 Oct. 2014; B. Baehr leg.; pitfall trap; QMB S99407 • 1 ♀; Kentucky Station, 43.2 km NNE of Injune, adjoining Beilba Road; 25°35' S, 148°53' E; 15 Mar. 2021; E. Amsters leg.; excavated, short, 'y' shaped burrow on flat of grassy creek bed with dense leaf litter, *Eucalyptus*, *Callitris*, *Acacia* forest, pale brown sandy loam with surface gravel; QMB S118233.

Description

Male (holotype, QMB S24949)

GENERAL (Fig. 53A–Q). Body length 16.89, in good condition, colour presumably faded due to preservation.

DORSAL PROSOMA (Fig. 53A, E–F). Carapace length 6.67, width 5.26, length/width 1.27, clypeus to fovea length/carapace length 0.66, caput width/carapace width 0.64, carapace red-brown, reflective setae present, heavy on caput, heavy on thorax, fovea procurved, fovea width/carapace length 0.12 (Fig. 53A, F); chelicerae dark red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.46 (Fig. 53A); eye group rectangular, width/length 1.91, eye tubercle present (Fig. 53E).

ABDOMEN (Fig. 53B, D). Abdomen length 7.06, light grey, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 53C, G–I). Labium cuspules absent (Fig. 53H); maxillae heel distinct, cuspules present, count=about 86, extending posteriorly onto heel, extending laterally about 35% of maxillae length (Fig. 53C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 53C, I); sternum length/width 1.30, central sternum with consistent covering of short setae, row of longer setae around posterior edges (Fig. 53G–H); posterior sigilla circular, central sternum to posterior sigilla length/sternum length 0.28, posterior sigilla length/sternum length 0.09 (Fig. 53G–H); other sigilla small, round and lateral (Fig. 53G–H).

LEG I (Fig. 53N–Q). Leg I red-brown, femur length 5.32, patella length 3.30, tibia length 4.10, metatarsus length 4.02, tarsus length 2.69, total length 19.43, leg I length/carapace length 2.91 (Fig. 53N–O); scopulae on distal metatarsus and tarsus (Fig. 53N–O); spine count Fe D 3, Fe PL 1, Pa PL 2, Ti PL 0, Ti RL 0, Me PL 0, Me RL 0, Ta 0 (Fig. 53N–O); tibia length/width [TIL/TID] 3.57, even width along length, spur present, triangular, knuckle absent, megaspine angled at 29 degrees, length to distal face of spur/tibia length [TIS/TIL] 0.46, spur height/tibia width [TISH/TID] 0.49, megaspine length/tibia length 0.23 (Fig. 53N–P); metatarsus relatively straight, proximal excavation present, excavation concave with slight heel, heel semi-sharp, excavation length/metatarsus length [MIPEL/MIL] 0.41, metatarsus length/width [MIL/MID] 4.26 (Fig. 53N–O, Q).

PEDIPALP (Fig. 53J–M). Tibia length 2.77, width 0.89, length/width [PTL/PTD] 3.11, asetose depression present, depression length/palp tibia length [PDL/PTL] 0.54, retrolateral face with short, thorn-like setae along retrolateral edge of depression, ventral face with two elongate bristle-like setae below depression, prolateral face with patch of spines on distal half, disto-medial spine present (Fig. 53J–K); patella prolateral face with 2 spines (Fig. 53J–K); cymbium with scopulae present distally (Fig. 53J–K); copulatory organ total length 1.48, length/palp tibia length 0.53 (Fig. 53L–M); bulb length/width 0.93 (Fig. 53L–M); embolus tapering from bulb, attenuate, tapering and curving relatively evenly to point, width at base/bulb width 0.30, embolus length/bulb length 1.97 (Fig. 53L–M).

Female (QMB S118233)

GENERAL (Fig. 54A–L). Body length 25.03, in good condition.

DORSAL PROSOMA (Fig. 54A, E–F). Carapace length 9.42, width 7.80, length/width 1.21, clypeus to fovea length/carapace length 0.71, caput width/carapace width 0.75, carapace red-brown, reflective setae present, moderate on caput, moderate on thorax, fovea procurved, fovea width/carapace length 0.12 (Fig. 54A, F); chelicerae dark red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.55 (Fig. 54A); eye group rectangular, width/length 2.18, eye tubercle present (Fig. 54E).

ABDOMEN (Fig. 54B, D). Abdomen length 10.17, light grey, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 54C, G–I). Labium cuspules absent (Fig. 54H); maxillae heel distinct, cuspules present, count=about 140, extending posteriorly onto heel, extending laterally about 30% of maxillae length (Fig. 54C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 54C, I); sternum length/width 1.44, central sternum with consistent covering of short setae, row of longer setae around posterior edges (Fig. 54G–H); posterior sigilla ovoid, central sternum to posterior sigilla length/sternum length 0.24, posterior sigilla length/sternum length 0.10 (Fig. 54G–H); other sigilla small, round and lateral (Fig. 54G–H).

LEG I (Fig. 54J–K). Leg I red-brown, reflective setae on dorsal femur, femur length 7.38, patella length 4.86, tibia length 5.01, metatarsus length 4.88, tarsus length 2.98, total length 25.11, leg I length/carapace length 2.67; scopulae on distal metatarsus and tarsus; spine count Fe D 1, Fe PL 1, Pa PL 2, Ti PL 3, Ti RL 4, Me PL 2, Me RL 2, Ta 0; tibia length/width [TIL/TID] 3.54.

GENITALIA (Fig. 54D, L). Epigastric furrow extending slightly, posterior edge with rounded shape (Fig. 54D); spermathecae with two vesicles each (Fig. 54L); lateral vesicle relatively straight, length 0.58, lateral vesicle length/genitalia width 0.27, length/width at base 3.61, crown un-demarcated (Fig. 54L); medial vesicle short, projecting medially and curving from medial to lateral angle, medial vesicle length/genitalia width 0.20, length/width 2.58, medial vesicle length/lateral vesicle length 0.73 (Fig. 54L).

Distribution and natural history

Aname lambkinae sp. nov. occurs in central Queensland, in the Brigalow Belt South bioregion, extending from the Mount Moffatt and Upper Warrego regions of Carnarvon National Park and Carnarvon Station Reserve in the west, to near the Beilba region in the east (Fig. 8). The form of burrows constructed by spiders of this species is unknown, but is likely to be similar to that of other *barakula*-complex species (Fig. 8).

Aname truncata sp. nov.

[urn:lsid:zoobank.org:act:D2026664-38CE-4036-9196-8F93B8300690](https://zoobank.org/act:D2026664-38CE-4036-9196-8F93B8300690)

Figs 1, 8, 55

Diagnosis

Males of *A. truncata* sp. nov. are unknown.

Females of *A. truncata* sp. nov. can be distinguished from all species for which females are known except *A. barakula* sp. nov., *A. braemar* sp. nov., and *A. lambkinae* sp. nov. by the presence of spermathecae with two vesicles, with relatively long and straight lateral vesicles (lateral vesicle length/genitalia width >0.25) and medial vesicles with few bends (usually one or two), and a narrow sternum (sternum length/width >1.3) (Fig. 55A–L). Females of *A. truncata* can be distinguished from those of *A. barakula* and *A. braemar* by the presence of spermathecae with lateral vesicles without distinct, widened crowns (Fig. 55L; cf. Figs 51). Females of *A. truncata* can be distinguished from those of *A. lambkinae* by the presence of spermathecae with less elongate lateral vesicles (lateral vesicle length/width ~1.6; cf. ~3.6 in *A. lambkinae*) and straighter medial vesicles without distinct crowns (Fig. 55L; cf. Fig. 54).

Etymology

The specific epithet '*truncata*' is a Latin adjective meaning 'truncated' or 'cut-off', in reference to the wide, truncate abdomen of this species relative to others.

Type material

Holotype

AUSTRALIA – Queensland • ♀; Isla Gorge National Park, off Isla Gorge Road; 25°12' S, 149°59' E; 395 m a.s.l.; 15 Apr. 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground; QMB S118253.

Paratype

AUSTRALIA – Queensland • 1 ♀; Isla Gorge National Park, off Isla Gorge Road; 25°12' S, 149°59' E; 399 m a.s.l.; 15 Apr. 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground; QMB S118254.

Other material examined

AUSTRALIA – Queensland • 1 juv.; Taroom-Bauhinia Downs Road, near Palmgrove National Park; 24°57' S, 149°31' E; 409 m a.s.l.; 15 Apr. 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground; QMB S118260.

Description

Female (holotype, QMB S118253)

GENERAL (Fig. 55A–L). Body length 23.37, in good condition.

DORSAL PROSOMA (Fig. 55A, E–F). Carapace length 7.96, width 6.13, length/width 1.30, clypeus to fovea length/carapace length 0.66, caput width/carapace width 0.85, carapace red-brown, reflective setae present, heavy on caput, heavy on thorax, fovea procurved, fovea width/carapace length 0.13 (Fig. 55A, F); chelicerae dark red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.53 (Fig. 55A); eye group rectangular, width/length 2.03, eye tubercle present (Fig. 55E).

ABDOMEN (Fig. 55B, D). Abdomen length 11.13, dark brown, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 55C, G–I). Labium cuspules absent (Fig. 55H); maxillae heel distinct, cuspules present, count=about 90, extending posteriorly onto heel, extending laterally about 30% of maxillae length (Fig. 55C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 55C, I); sternum length/width 1.46, central sternum with consistent covering of moderate setae, row of longer setae around posterior edges, some shorter thorn-like setae around anterior edges (Fig. 55G–H); posterior sigilla ovoid, central sternum to posterior sigilla length/sternum length 0.24, posterior sigilla length/sternum length 0.13 (Fig. 55G–H); other sigilla small, round and lateral (Fig. 55G–H).

LEG I (Fig. 55J–K). Leg I dark red-brown, femur length 5.63, patella length 3.65, tibia length 3.96, metatarsus length 3.63, tarsus length 2.43, total length 19.31, leg I length/carapace length 2.43; scopulae on distal metatarsus and tarsus; spine count Fe D 1, Fe PL 1, Pa PL 2, Ti PL 0, Ti RL 4, Me PL 2, Me RL 3, Ta 0; tibia length/width [TIL/TID] 3.03.

GENITALIA (Fig. 55D, L). Epigastric furrow unmodified (Fig. 55D); spermathecae with two vesicles each (Fig. 55L); lateral vesicle relatively straight, length 0.42, lateral vesicle length/genitalia width 0.30, length/width at base 1.61, crown un-demarcated (Fig. 55L); medial vesicle short, projecting medially

and curving from medial to lateral angle, medial vesicle length/genitalia width 0.14, length/width 1.67, medial vesicle length/lateral vesicle length 0.45 (Fig. 55L).

Distribution and natural history

Aname truncata sp. nov. occurs in central Queensland, in the Brigalow Belt South bioregion. It is known from two locations, both located in or near Palmgrove and Isla Gorge National Parks (Fig. 8). It constructs an open, silk-lined burrow with silk spilling out from the entrance, usually with a slightly built up ‘collar’ of soil around the entrance, and with a hidden secondary ‘wishbone’ entrance (Fig. 8).

Aname robertsorum-complex

Figs 1, 3D, 5D, 9, 56–63

Remarks

See the key to complexes and Figures 3–5 for diagnostic information. In life, spiders of the *robertsorum*-complex have a dark carapace and chelicerae, a brown abdomen, and bicoloured legs, with dark femora and light orange distal segments and coxae (Fig. 9). Females of the *robertsorum*-complex generally have reflective bronze setae on the carapace and dorsal abdomen and may also have slight banding on the

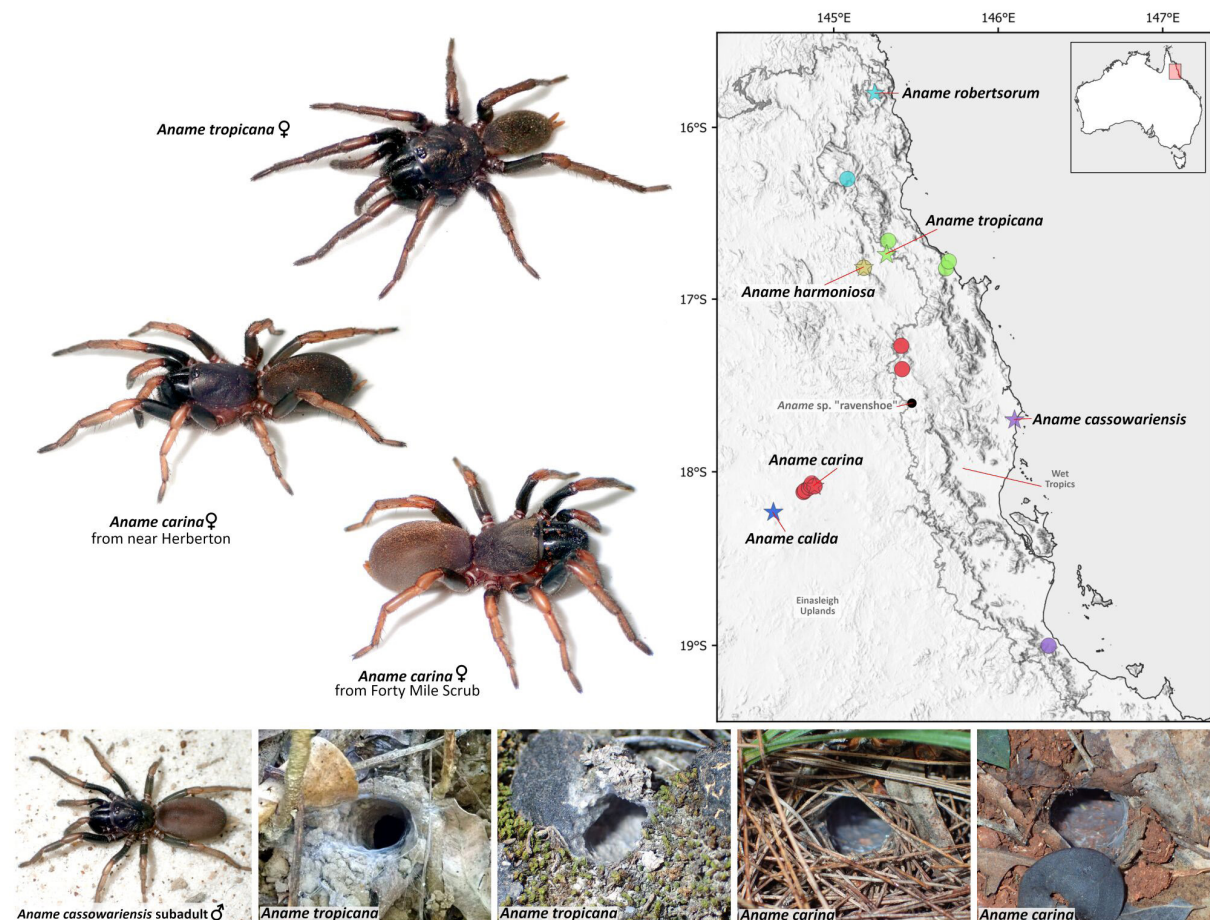


Fig. 9. *Aname robertsorum*-complex species habitus images, distribution map, and burrow architecture. Points on the map represented by a star are type localities. Note that intraspecific variation occurs in both physical appearance and burrow architecture, and images shown here should be treated only as examples, not used for species diagnosis.

dorsal abdomen (Fig. 9). Male colour and setation in life is unknown. Spiders of this complex generally make an open, silk-lined burrow without silk outside of the entrance, with the entrance often on an angle, and with a hidden secondary ‘wishbone’ entrance. The burrows are sometimes found in areas with a leaf-litter layer, and indeed the entrance may be somewhat embedded in the leaf-litter (Fig. 9).

Distribution

The *robertsorum*-complex is currently known only from north Queensland, in the Einasleigh Uplands and Wet Tropics bioregions. Species tend to have quite small natural ranges.

Composition

The *robertsorum*-complex includes six described species: *Aname calida* sp. nov., *A. carina* Raven, 1985, *A. cassowariensis* sp. nov., *A. harmoniosa* sp. nov., *A. robertsorum* Raven, 1985, and *A. tropicana* sp. nov.. Juveniles of another putative species, here called *Aname* sp. “ravenshoe” are included in our phylogeny (Fig. 1), and the map for this complex (Fig. 9) but the species cannot be described due to the lack of adult specimens.

Key to species in the *Aname robertsorum*-complex

Note: females are unknown for *A. calida* sp. nov., *A. cassowariensis* sp. nov., *A. harmoniosa* sp. nov., and *A. robertsorum*.

1. Male 2
- Female..... 7

Males

2. Embolus length $>2 \times$ bulb length (Figs 57, 60–61) 3
- Embolus shorter (Figs 56, 59, 62) 5
3. Tibia I distance from proximal end to spur $\sim 0.7 \times$ tibia I length (Fig. 57) *A. carina* Raven, 1985
- Tibial spur closer to proximal end of tibia I (distance from proximal end to spur $<0.6 \times$ tibia I length) 4
4. Metatarsus I excavation length $\sim 0.55 \times$ metatarsus I length; embolus more sinuous (Fig. 60) *A. harmoniosa* sp. nov.
- Metatarsus I with a shorter proximal excavation ($\sim 0.44 \times$ metatarsus I length) and embolus straighter (Fig. 61) *A. robertsorum* Raven, 1985
5. Metatarsus I length $<4 \times$ width (Fig. 62) *A. tropicana* sp. nov.
- Metatarsus I thinner 6
6. Palp tibia length $\sim 2.6 \times$ width (Fig. 56) *A. calida* sp. nov.
- Palp tibia less elongate (length $\sim 2.3 \times$ width) (Fig. 59) *A. cassowariensis* sp. nov.

Females

7. Spermathecae medial vesicle length about equal to lateral vesicle length (Fig. 58) *A. carina* Raven, 1985
- Spermathecae with shorter medial vesicles ($\sim 0.7 \times$ lateral vesicle length) (Fig. 63) *A. tropicana* sp. nov.

Aname calida sp. nov.

[urn:lsid:zoobank.org:act:D4EE1841-81E9-4A90-8EA6-015C5E695723](https://zoobank.org/urn:lsid:zoobank.org:act:D4EE1841-81E9-4A90-8EA6-015C5E695723)

Figs 9, 56

Diagnosis

Males of *A. calida* sp. nov. can be distinguished from all species for which males are known except *A. carina*, *A. cassowariensis* sp. nov., *A. harmoniosa* sp. nov., *A. robertsorum*, and *A. tropicana* sp. nov. by a moderate to large body size (carapace length > 4.0 mm), and the presence of a long embolus (embolus length/bulb length > 1.5) that is thin, with a sharp bend near its base before a relatively straight distal section (Fig. 56L–M). Males of *A. calida* can be distinguished from those of *A. carina*, *A. harmoniosa*, and *A. robertsorum* by the presence of a shorter embolus (embolus length/bulb length < 2) (Fig. 56L–M; cf. Figs 57, 60–61). Males of *A. calida* can be distinguished from those of *A. tropicana* by the presence of thinner leg and pedipalp segments (e.g., metatarsus I length/width > 4) (Fig. 56J–K, N–Q; cf. Fig. 62). Males of *A. calida* can be distinguished from those of *A. cassowariensis* by the presence of a more elongate palp tibia (palp tibia length/width ~2.6; cf. 2.3 in *A. cassowariensis*) (Fig. 56J–K cf. Fig. 59).

Females of *A. calida* sp. nov. are unknown.

Etymology

The specific epithet ‘*calida*’ is a Latin adjective meaning ‘hot’ or ‘warm’, referencing the heat of tropical Queensland, and the occurrence of this species near the volcanic Undara Lava Tubes.

Type material

Holotype

AUSTRALIA – Queensland • ♂; Undara Volcanic National Park, Wind Tunnel; 18°14' S, 144°38' E; 8 Dec. 2002–8 Feb. 2003; G.B. Monteith leg.; flight intercept trap, vine scrub; QMB S95243.

Description

Male (holotype, QMB S95243)

GENERAL (Fig. 56A–Q). Body length 19.90, in good condition, colour presumably faded due to preservation.

DORSAL PROSOMA (Fig. 56A, E–F). Carapace length 7.44, width 5.91, length/width 1.26, clypeus to fovea length/carapace length 0.71, caput width/carapace width 0.66, carapace red-brown, caput slightly darker than thorax, reflective setae present, moderate on caput, very light on thorax, fovea procurved, fovea width/carapace length 0.14 (Fig. 56A, F); chelicerae dark red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.63 (Fig. 56A); eye group rectangular, width/length 1.89, eye tubercle present (Fig. 56E).

ABDOMEN (Fig. 56B, D). Abdomen length 7.40, light grey, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 56C, G–I). Labium cuspules absent (Fig. 56H); maxillae heel distinct, cuspules present, count=about 82, extending posteriorly onto heel, extending laterally about 40% of maxillae length (Fig. 56C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 56C, I); sternum length/width 1.20, most setae rubbed off, row of longer setae around posterior edges (Fig. 56G–H); posterior sigilla semi-elongate, central sternum to posterior sigilla length/sternum length 0.21, posterior sigilla length/sternum length 0.15 (Fig. 56G–H); other sigilla small, round and lateral (Fig. 56G–H).

LEG I (Fig. 56N–Q). Leg I red-brown, lighter on distal metatarsus and tarsus, femur length 5.97, patella length 4.10, tibia length 4.35, metatarsus length 4.46, tarsus length 2.47, total length 21.34, leg I length/carapace length 2.87 (Fig. 56N–O); scopulae on distal metatarsus and tarsus (Fig. 56N–O); spine count Fe D 1, Fe PL 1, Pa PL 2, Ti PL 2, Ti RL 0, Me PL 0, Me RL 0, Ta 0 (Fig. 56N–O); tibia length/width [TIL/TID] 3.20, even width along length, spur present, intermediate triangular/digitiform, knuckle absent, megaspine angled at 24 degrees, length to distal face of spur/tibia length [TIS/TIL] 0.63, spur height/tibia width [TISH/TID] 0.65, megaspine length/tibia length 0.20 (Fig. 56N–P); metatarsus relatively straight, proximal excavation present, excavation concave with slight heel, heel rounded, excavation length/metatarsus length [MIPEL/MIL] 0.48, metatarsus length/width [MIL/MID] 4.18 (Fig. 56N–O, Q).

PEDIPALP (Fig. 56J–M). Tibia length 3.34, width 1.29, length/width [PTL/PTD] 2.60, aetose depression present, depression length/palp tibia length [PDL/PTL] 0.53, retrolateral face with short, thorn-like setae along retrolateral edge of depression, getting denser proximally, ventral face with two elongate bristle-like setae below depression, prolateral face with patch of spines on distal half, disto-medial spine absent (Fig. 56J–K); patella prolateral face with 2 (both rubbed off) spines (Fig. 56J–K); cymbium with scopulae present distally (Fig. 56J–K); copulatory organ total length 1.69, length/palp tibia length 0.51 (Fig. 56L–M); bulb length/width 0.89 (Fig. 56L–M); embolus tapering from bulb, attenuate, very thin, protruding laterally with strong basal curve, one strong bend, at about 0.3 of length, slight bend before tip, width at base/bulb width 0.23, embolus length/bulb length 1.77 (Fig. 56L–M).

Distribution and natural history

Aname calida sp. nov. occurs in northern Queensland, in the Einasleigh Uplands bioregion. It is known from a single location in Undara Volcanic National Park (Fig. 9). The form of burrows constructed by spiders of this species is unknown, but is likely to be similar to that of other *robertsorum*-complex species (Fig. 9).

Aname carina Raven, 1985
Figs 1, 9, 57–58

Aname carina Raven, 1985: 390, figs 1, 17, 34, 64.

Diagnosis

Males of *A. carina* can be distinguished from all species for which males are known except *A. calida* sp. nov., *A. cassowariensis* sp. nov., *A. harmoniosa* sp. nov., *A. robertsorum*, and *A. tropicana* sp. nov. by a moderate to large body size (carapace length >4.0 mm), and the presence of a long embolus (embolus length/bulb length >1.5) that is thin, with a sharp bend near its base before a relatively straight distal section (Fig. 57L–M). Males of *A. carina* can be distinguished from those of *A. calida*, *A. cassowariensis*, and *A. tropicana* by the presence of a longer embolus (embolus length/bulb length >2) (Fig. 57L–M; cf. Figs 56, 59, 62). Males of *A. carina* can be distinguished from those of *A. harmoniosa* and *A. robertsorum* by the presence of a distally-positioned tibial spur (distance to spur/tibia length ~0.71) (Fig. 57P; cf. Figs 60–61).

Females of *A. carina* can be distinguished from all species for which females are known except *A. tropicana* sp. nov. by the presence of bicoloured legs, with darker femurs and lighter distal segments, and spermathecae with two vesicles, with relatively long and straight lateral vesicles (lateral vesicle length/genitalia width >0.25) that are laterally angled, and medial vesicles that are shorter or about equal in length to the lateral vesicles, and curve gradually from a medial to a lateral angle (Fig. 58J–L). Females of *A. carina* can be distinguished from those of *A. tropicana* by the presence of spermathecae with longer medial vesicles (medial vesicle length/lateral vesicle length ~1; cf. ~0.7 in *A. tropicana*) (Fig. 58L; cf. Fig. 63).

Type material**Holotype**

AUSTRALIA – **Queensland** • ♀; Forty Mile Scrub National Park; 18°05' S, 144°53' E; 10 Apr. 1978; R.J. Raven leg.; QMB S1253.

Paratypes

AUSTRALIA – **Queensland** • 3 ♀♀; Forty Mile Scrub National Park; 18°05' S, 144°53' E; 10 Apr. 1978; R.J. Raven leg.; QMB S1254 • 5 ♀♀; Forty Mile Scrub National Park; 18°05' S, 144°53' E; 9–14 Apr. 1978; R.J. Raven leg.; QMB S1255.

Other material examined

AUSTRALIA – **Queensland** • 2 ♂♂; Atherton; 17°16' S, 145°25' E; 22 Sep. 1993; D. Stewart leg.; QMB S118368 • 2 ♂♂; Atherton; 17°16' S, 145°25' E; 22 Sep. 1993; D. Stewart leg.; QMB S22457 • 1 ♀; Gold Finch Road, SE of Herberton; 17°24' S, 145°25' E; 890 m a.s.l.; 12 May 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on bank; QMB S118323 • 1 juv.; Gold Finch Road, SE of Herberton; 17°24' S, 145°25' E; 885 m a.s.l.; 12 May 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground; QMB S118324 • 1 ♂; Forty Mile Scrub National Park; 18°04' S, 144°52' E; 8 Dec. 2002–10 Feb. 2003; G.B. Monteith leg.; pitfall trap, vine scrub; QMB S73864 • 1 ♂; Forty Mile Scrub National Park; 18°05' S, 144°51' E; 25 Jul.–1 Dec. 1992; R.J. Raven, P. Lawless, E. Lawless and M. Shaw leg.; pitfall trap, vine scrub; QMB S24426 • 1 ♂; Forty Mile Scrub National Park; 18°05' S, 144°51' E; 1 Dec. 1992–15 Apr. 1993; R.J. Raven leg.; pitfall trap, vine scrub; QMB S33633 • 1 ♂; Forty Mile Scrub National Park; 18°05' S, 144°51' E; 6 Nov. 1991–25 Jul. 1992; R.J. Raven, P. Lawless and M. Shaw leg.; pitfall trap, vine scrub; QMB S57969 • 1 juv.; Forty Mile Scrub National Park, off Kennedy Highway; 18°05' S, 144°52' E; 755 m a.s.l.; 13 May 2023; J.D. Wilson and M.G. Rix leg.; vine scrub; QMB S118334 • 1 juv.; Forty Mile Scrub National Park, off Kennedy Highway; 18°05' S, 144°52' E; 756 m a.s.l.; 13 May 2023; J.D. Wilson and M.G. Rix leg.; vine scrub; QMB S118333 • 1 ♀; Forty Mile Scrub National Park, off Kennedy Highway; 18°06' S, 144°49' E; 766 m a.s.l.; 13 May 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground, vine scrub; QMB S118337 • 1 ♂; Forty Mile Scrub National Park; 18°07' S, 144°49' E; 8 Dec. 2002–10 Feb. 2003; G.B. Monteith leg.; QMB S118367 • 1 ♂; Forty Mile Scrub National Park; 18°07' S, 144°49' E; 8 Dec. 2002–10 Feb. 2003; G.B. Monteith leg.; pitfall trap, vine scrub; QMB S95241 • 1 ♀; Forty Mile Scrub National Park, off Kennedy Highway; 18°07' S, 144°50' E; 772 m a.s.l.; 13 May 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground, vine scrub; QMB S118335 • 1 juv.; Forty Mile Scrub National Park, off Kennedy Highway; 18°07' S, 144°49' E; 768 m a.s.l.; 13 May 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground, vine scrub; QMB S118336.

Description**Male** (QMB S95241)

GENERAL (Fig. 57A–Q). Body length 24.80, in good condition, colour presumably faded due to preservation.

DORSAL PROSOMA (Fig. 57A, E–F). Carapace length 8.95, width 7.52, length/width 1.19, clypeus to fovea length/carapace length 0.72, caput width/carapace width 0.64, carapace red-brown, caput slightly darker than thorax, reflective setae present, moderate on caput, light on thorax, fovea procurved, fovea width/carapace length 0.14 (Fig. 57A, F); chelicerae dark red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.68 (Fig. 57A); eye group rectangular, width/length 1.88, eye tubercle present (Fig. 57E).

ABDOMEN (Fig. 57B, D). Abdomen length 8.69, light grey, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 57C, G–I). Labium cuspules absent (Fig. 57H); maxillae heel distinct, cuspules present, count=about 100, extending posteriorly onto heel, extending laterally about 45% of maxillae length (Fig. 57C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 57C, I); sternum length/width 1.18, central sternum with consistent covering of moderate setae, row of longer setae around posterior edges (Fig. 57G–H); posterior sigilla ovoid, central sternum to posterior sigilla length/sternum length 0.19, posterior sigilla length/sternum length 0.15 (Fig. 57G–H); other sigilla small, round and lateral (Fig. 57G–H).

LEG I (Fig. 57N–Q). Leg I red-brown, femur length 7.36, patella length 4.69, tibia length 5.35, metatarsus length 5.37, tarsus length 3.04, total length 25.81, leg I length/carapace length 2.88 (Fig. 57N–O); scopulae on distal metatarsus and tarsus (Fig. 57N–O); spine count Fe D 0, Fe PL 1, Pa PL 2, Ti PL 0, Ti RL 0, Me PL 0, Me RL 0, Ta 0 (Fig. 57N–O); tibia length/width [TIL/TID] 3.12, widening from proximal end to spur before narrowing again towards distal end, spur present, intermediate triangular/digitiform, knuckle absent, megaspine angled at 25 degrees, length to distal face of spur/tibia length [TIS/TIL] 0.71, spur height/tibia width [TISH/TID] 0.67, megaspine length/tibia length 0.20 (Fig. 57N–P); metatarsus relatively straight, proximal excavation present, excavation straight with inconspicuous heel, heel rounded, excavation length/metatarsus length [MIPEL/MIL] 0.43, metatarsus length/width [MIL/MID] 4.16 (Fig. 57N–O, Q).

PEDIPALP (Fig. 57J–M). Tibia length 4.06, width 1.66, length/width [PTL/PTD] 2.44, aetose depression present, depression length/palp tibia length [PDL/PTL] 0.61, retrolateral face with short, thorn-like setae along retrolateral edge of depression, getting denser proximally, ventral face with two elongate bristle-like setae below depression, prolateral face with two disto-ventral spines, disto-medial spine absent (Fig. 57J–K); patella prolateral face with 2 spines (Fig. 57J–K); cymbium with scopulae present distally (Fig. 57J–K); copulatory organ total length 2.34, length/palp tibia length 0.58 (Fig. 57L–M); bulb length/width 0.96 (Fig. 57L–M); embolus slightly reflexed, attenuate, very thin, protruding laterally with strong basal curve, one strong bend, at about 0.3 of length, slight bend before tip, width at base/bulb width 0.26, embolus length/bulb length 2.10 (Fig. 57L–M).

Female (holotype, QMB S1253)

GENERAL (Fig. 58A–L). Body length 26.69, in moderate condition, colour faded significantly due to preservation.

DORSAL PROSOMA (Fig. 58A, E–F). Carapace length 9.68, width 8.27, length/width 1.17, clypeus to fovea length/carapace length 0.73, caput width/carapace width 0.76, carapace orange-brown, reflective setae present, light on caput, light on thorax, fovea procurved, fovea width/carapace length 0.17 (Fig. 58A, F); chelicerae red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.64 (Fig. 58A); eye group rectangular, width/length 2.13, eye tubercle present (Fig. 58E).

ABDOMEN (Fig. 58B, D). Abdomen length 11.23, brown, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 58C, G–I). Labium cuspules absent (Fig. 58H); maxillae heel distinct, cuspules present, count=about 185, extending posteriorly onto heel, extending laterally about 50% of maxillae length (Fig. 58C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 58C, I); sternum length/width 1.27, central sternum with consistent covering of moderate setae, row of longer setae around posterior edges (Fig. 58G–H); posterior sigilla semi-elongate, central sternum to posterior sigilla length/sternum length 0.19, posterior sigilla length/sternum length 0.17 (Fig. 58G–H); other sigilla small and lateral, medial sigilla semi-elongate, anterior sigilla round (Fig. 58G–H).

LEG I (Fig. 58J–K). Leg I orange-brown, darker on femur, femur length 7.68, patella length 5.27, tibia length 5.11, metatarsus length 5.14, tarsus length 2.95, total length 26.15, leg I length/carapace length 2.70; scopulae on distal metatarsus and tarsus; spine count Fe D 1, Fe PL 1 (rubbed off), Pa PL 2 (both rubbed off), Ti PL 3, Ti RL 4, Me PL 1, Me RL 2, Ta 0; tibia length/width [TIL/TID] 3.04.

GENITALIA (Fig. 58D, L). Epigastric furrow unmodified (Fig. 58D); spermathecae with two vesicles each (Fig. 58L); lateral vesicle relatively straight, length 0.78, lateral vesicle length/genitalia width 0.33, length/width at base 1.43, crown un-demarcated (Fig. 58L); medial vesicle long and curving evenly from medial to lateral angle, medial vesicle length/genitalia width 0.32, length/width 2.79, medial vesicle length/lateral vesicle length 0.98 (Fig. 58L).

Distribution and natural history

Aname carina occurs in northern Queensland, in the Einasleigh Uplands and Wet Tropics bioregions, and is known from two areas, in and around the Forty Mile Scrub National Park, and further east near the town of Herberton (Fig. 9). It constructs an open, silk-lined burrow without silk outside of the entrance, often at an angle, and with a hidden secondary ‘wishbone’ entrance (Fig. 9).

Remarks

Two disjunct populations of this species are known, one near Forty Mile Scrub (the type locality), and another closer to the coast, near Herberton. Despite differences in the average size of individuals from these two populations, both genitalic morphology and genetics (*COI* average pairwise divergence of 5.26%) strongly indicate that they are the same species.

Aname cassowariensis sp. nov.

[urn:lsid:zoobank.org:act:4D59A0A4-D4F8-4D99-AE65-970EA62C9A69](https://doi.org/10.21203/rs.3.rs-10000000/v1)

Figs 9, 59

Aname “MYG685” – Rix *et al.* 2021: figs 3, 5, 7.

Diagnosis

Males of *A. cassowariensis* sp. nov. can be distinguished from all species for which males are known except *A. calida* sp. nov., *A. carina*, *A. harmoniosa* sp. nov., *A. robertorum*, and *A. tropicana* sp. nov. by a moderate to large body size (carapace length >4.0 mm), and the presence of a long embolus (embolus length/bulb length > 1.5) that is thin, with a sharp bend near its base before a relatively straight distal section (Fig. 59L–M). Males of *A. cassowariensis* can be distinguished from those of *A. carina*, *A. harmoniosa*, and *A. robertorum* by the presence of a shorter embolus (embolus length/bulb length <2) (Fig. 59L–M; cf. Figs 57, 60, 61). Males of *A. cassowariensis* can be distinguished from those of *A. tropicana* by the presence of thinner leg and pedipalp segments (e.g., metatarsus I length/width >4) (Fig. 59J–K, N–Q; cf. Fig. 62). Males of *A. cassowariensis* can be distinguished from those of *A. calida* by the presence of a less elongate palp tibia (palp tibia length/width ~2.3; cf. 2.6 in *A. calida*) (Fig. 59J–K; cf. Fig. 56).

Females of *A. cassowariensis* sp. nov. are unknown.

Etymology

The specific epithet ‘*cassowariensis*’ references the known distribution of this species in the Cassowary Coast region of tropical Queensland.

Type material

Holotype

AUSTRALIA – Queensland • ♂; 1 km W of Cowley Beach; 17°42' S, 146°06' E; 5 m a.s.l.; 5–11 Feb. 1998; G.B. Monteith and D.J. Cook leg.; pitfall trap, open forest; QMB S63052.

Other material examined

AUSTRALIA – Queensland • 1 ♂; Caleo Road, Mutarnee, E of Paluma Range; 19°00' S, 146°18' E; 20 Apr. 2019; S. Brennan leg.; excavated, burrow under pot, fruit farm; QMB S111473.

Description

Male (holotype, QMB S63052)

GENERAL (Fig. 59A–Q). Body length 14.61, in good condition, colour presumably faded due to preservation.

DORSAL PROSOMA (Fig. 59A, E–F). Carapace length 5.56, width 4.33, length/width 1.28, clypeus to fovea length/carapace length 0.69, caput width/carapace width 0.65, carapace red-brown, caput slightly darker than thorax, reflective setae present, moderate on caput, light on thorax, fovea procurved, fovea width/carapace length 0.14 (Fig. 59A, F); chelicerae dark red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.55 (Fig. 59A); eye group rectangular, width/length 1.91, eye tubercle present (Fig. 59E).

ABDOMEN (Fig. 59B, D). Abdomen length 5.60, light grey, dorsal pattern absent, with evidence of reflective setae covering dorsal abdomen.

VENTRAL PROSOMA (Fig. 59C, G–I). Labium cuspules absent (Fig. 59H); maxillae heel distinct, cuspules present, count=about 80, extending posteriorly onto heel, extending laterally about 35% of maxillae length (Fig. 59C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 59C, I); sternum length/width 1.19, many setae rubbed off, central sternum with consistent covering of short setae, row of longer setae around posterior edges, some shorter thorn-like setae around anterior edges (Fig. 59G–H); posterior sigilla ovoid, central sternum to posterior sigilla length/sternum length 0.29, posterior sigilla length/sternum length 0.11 (Fig. 59G–H); other sigilla small, round and lateral (Fig. 59G–H).

LEG I (Fig. 59N–Q). Leg I orange-brown, lighter on patella, tibia, distal metatarsus and tarsus, reflective setae on dorsal femur, femur length 4.44, patella length 3.08, tibia length 3.44, metatarsus length 3.31, tarsus length 2.09, total length 16.36, leg I length/carapace length 2.94 (Fig. 59N–O); scopulae on distal metatarsus and tarsus (Fig. 59N–O); spine count Fe D 1, Fe PL 1, Pa PL 2 (proximal rubbed off), Ti PL 0, Ti RL 0, Me PL 0, Me RL 0, Ta 0 (Fig. 59N–O); tibia length/width [TIL/TID] 3.21, widening from proximal end to spur before narrowing again towards distal end, spur present, intermediate triangular/digitiform, knuckle absent, megaspine angled at 30 degrees, length to distal face of spur/tibia length [TIS/TIL] 0.59, spur height/tibia width [TISH/TID] 0.65, megaspine length/tibia length 0.23 (Fig. 59N–P); metatarsus relatively straight, proximal excavation present, excavation straight with inconspicuous heel, heel rounded, excavation length/metatarsus length [MIPEL/MIL] 0.49, metatarsus length/width [MIL/MID] 4.34 (Fig. 59N–O, Q).

PEDIPALP (Fig. 59J–M). Tibia length 2.46, width 1.07, length/width [PTL/PTD] 2.31, aetose depression present, depression length/palp tibia length [PDL/PTL] 0.59, retrolateral face with short, thorn-like setae along retrolateral edge of depression, getting denser proximally, ventral face with two elongate bristle-like setae below depression, prolateral face with two disto-ventral spines, disto-medial spine absent (Fig. 59J–K); patella prolateral face with 2 (both rubbed off) spines (Fig. 59J–K); cymbium with

scopulae present distally (Fig. 59J–K); copulatory organ total length 1.31, length/palp tibia length 0.53 (Fig. 59L–M); bulb length/width 1.00 (Fig. 59L–M); embolus tapering from bulb, attenuate, very thin, protruding laterally with strong basal curve, one strong bend, at about 0.3 of length, width at base/bulb width 0.24, embolus length/bulb length 1.71 (Fig. 59L–M).

Distribution and natural history

Aname cassowariensis sp. nov. occurs in northern Queensland, in the Wet Tropics bioregion, with specimens known from two lowland locations, a northern location near Mission Beach, and a southern location near Paluma (Fig. 9). The form of burrows constructed by spiders of this species is unknown, but is likely to be similar to that of other *robertsorum*-complex species (Fig. 9).

Aname harmoniosa sp. nov.

[urn:lsid:zoobank.org:act:3D87A3A5-4536-40E0-BA01-FAE2A402FE5F](https://zoobank.org/act:3D87A3A5-4536-40E0-BA01-FAE2A402FE5F)

Figs 9, 60

Diagnosis

Males of *A. harmoniosa* sp. nov. can be distinguished from all species for which males are known except *A. calida* sp. nov., *A. carina*, *A. cassowariensis* sp. nov., *A. robertsorum*, and *A. tropicana* sp. nov. by a moderate to large body size (carapace length >4.0 mm), and the presence of a long embolus (embolus length/bulb length >1.5) that is thin, with a sharp bend near its base before a relatively straight distal section (Fig. 60L–M). Males of *A. harmoniosa* can be distinguished from those of *A. calida*, *A. cassowariensis*, and *A. tropicana* by the presence of a longer embolus (embolus length/bulb length >2) (Fig. 60L–M; cf. Figs 56, 59, 62). Males of *A. harmoniosa* can be distinguished from those of *A. carina* by the presence of a more proximally-positioned tibial spur (distance to spur/tibia length <0.6) (Fig. 60P; cf. Fig. 57). Males of *A. harmoniosa* can be distinguished from those of *A. robertsorum* by the presence of a longer proximal excavation on metatarsus I (excavation length/metatarsus length ~0.55; cf. ~0.44 in *A. robertsorum*), and a more sinuous embolus (Fig. 60L–Q; cf. Fig. 61).

Females of *A. harmoniosa* sp. nov. are unknown.

Etymology

The specific epithet ‘*harmoniosa*’ is a Latin adjective meaning ‘harmonious’ or ‘graceful’, in reference to the gracile morphology of this species.

Type material

Holotype

AUSTRALIA – Queensland • ♂; Hann Tableland; 16°49′ S, 145°11′ E; 950–1000 m a.s.l.; 11–14 Dec. 1995; G.B. Monteith, G. Thompson and D.J. Cook leg.; pitfall trap, rainforest; QMB S40518.

Paratypes

AUSTRALIA – Queensland • 1 ♂; Hann Tableland; 16°49′ S, 145°11′ E; 950–1000 m a.s.l.; 11–14 Dec. 1995; G.B. Monteith, G. Thompson and D.J. Cook leg.; pitfall trap, rainforest; QMB S118369 • 2 ♂♂, 1 juv.; Hann Tableland; 16°49′ S, 145°11′ E; 1000 m a.s.l.; 11–13 Dec. 1995; D.J. Cook leg.; pitfall trap, rainforest; QMB S40534.

Description

Male (holotype, QMB S40518)

GENERAL (Fig. 60A–Q). Body length 19.22, in good condition, colour presumably faded due to preservation.

DORSAL PROSOMA (Fig. 60A, E–F). Carapace length 7.67, width 6.15, length/width 1.25, clypeus to fovea length/carapace length 0.70, caput width/carapace width 0.67, carapace dark red-brown, caput slightly darker than thorax, reflective setae present, moderate on caput, light on thorax, fovea procurved, fovea width/carapace length 0.14 (Fig. 60A, F); chelicerae dark red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.54 (Fig. 60A); eye group rectangular, width/length 1.91, eye tubercle present (Fig. 60E).

ABDOMEN (Fig. 60B, D). Abdomen length 6.92, grey, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 60C, G–I). Labium cuspules absent (Fig. 60H); maxillae heel distinct, cuspules present, count=about 75, extending posteriorly onto heel, extending laterally about 30% of maxillae length (Fig. 60C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 60C, I); sternum length/width 1.18, central sternum with consistent covering of short setae, row of longer setae around posterior edges (Fig. 60G–H); posterior sigilla ovoid, central sternum to posterior sigilla length/sternum length 0.22, posterior sigilla length/sternum length 0.13 (Fig. 60G–H); other sigilla small, round and lateral (Fig. 60G–H).

LEG I (Fig. 60N–Q). Leg I red-brown, lighter on patella, tibia, distal metatarsus and tarsus, reflective setae on dorsal femur, femur length 5.55, patella length 3.79, tibia length 4.39, metatarsus length 4.48, tarsus length 2.48, total length 20.68, leg I length/carapace length 2.70 (Fig. 60N–O); scopulae on distal metatarsus and tarsus (Fig. 60N–O); spine count Fe D 0, Fe PL 1, Pa PL 2, Ti PL 0, Ti RL 0, Me PL 0, Me RL 0, Ta 0 (Fig. 60N–O); tibia length/width [TIL/TID] 3.83, even width along length, spur present, intermediate triangular/digitiform, knuckle absent, megaspine angled at 27 degrees, length to distal face of spur/tibia length [TIS/TIL] 0.58, spur height/tibia width [TISH/TID] 0.69, megaspine length/tibia length 0.24 (Fig. 60N–P); metatarsus slightly sinuous, proximal excavation present, excavation concave with inconspicuous heel, heel rounded, excavation length/metatarsus length [MIPEL/MIL] 0.55, metatarsus length/width [MIL/MID] 4.62 (Fig. 60N–O, Q).

PEDIPALP (Fig. 60J–M). Tibia length 3.40, width 1.24, length/width [PTL/PTD] 2.73, asetose depression present, depression length/palp tibia length [PDL/PTL] 0.57, retrolateral face with short, thorn-like setae along retrolateral edge of depression, getting denser proximally, ventral face with two elongate bristle-like setae below depression, prolateral face with two disto-ventral spines, disto-medial spine absent (Fig. 60J–K); patella prolateral face with 2 (both rubbed off) spines (Fig. 60J–K); cymbium with scopulae present distally (Fig. 60J–K); copulatory organ total length 1.84, length/palp tibia length 0.54 (Fig. 60L–M); bulb length/width 0.87 (Fig. 60L–M); embolus tapering from bulb, attenuate, very thin, protruding laterally with strong basal curve, one strong bend, at about 0.4 of length, sinuous tip, width at base/bulb width 0.21, embolus length/bulb length 2.15 (Fig. 60L–M).

Distribution and natural history

Aname harmoniosa sp. nov. occurs in northern Queensland, in the Einasleigh Uplands bioregion, on the Hann Tableland, near the town of Mareeba (Fig. 9). The form of burrows constructed by spiders of this species is unknown, but is likely to be similar to that of other *robertsorum*-complex species (Fig. 9).

Aname robertsorum Raven, 1985

Figs 9, 61

Aname robertsorum Raven, 1985: 404, figs 24, 39, 49.

Diagnosis

Males of *A. robertsorum* can be distinguished from all species for which males are known except *A. calida* sp. nov., *A. carina*, *A. cassowariensis* sp. nov., *A. harmoniosa* sp. nov., and *A. tropicana* sp. nov. by a moderate to large body size (carapace length > 4.0 mm), and the presence of a long embolus (embolus length/bulb length > 1.5) that is thin, with a sharp bend near its base before a relatively straight distal section (Fig. 61L–M). Males of *A. robertsorum* can be distinguished from those of *A. calida*, *A. cassowariensis*, and *A. tropicana* by the presence of a longer embolus (embolus length/bulb length > 2) (Fig. 61L–M; cf. Figs 56, 59, 62). Males of *A. robertsorum* can be distinguished from those of *A. carina* by the presence of a more proximally-positioned tibial spur (distance to spur/tibia length < 0.6) (Fig. 61P; cf. Fig. 57). Males of *A. robertsorum* can be distinguished from *A. harmoniosa* by the presence of a shorter proximal excavation on metatarsus I (excavation length/metatarsus length ~ 0.44; cf. ~ 0.55 in *A. harmoniosa*), and a straighter embolus (Fig. 61L–Q; cf. Fig. 60).

Females of *A. robertsorum* are unknown.

Type material**Holotype**

AUSTRALIA – Queensland • ♂; Shiptons Flat; 15°48' S, 145°15' E; 16–21 Nov. 1975; R. Munroe and V.E. Davies leg.; pitfall trap, rainforest; QMB S1287.

Other material examined

AUSTRALIA – Queensland • 1 ♂; Windsor Tableland; 16°18' S, 145°05' E; 900 m a.s.l.; 25 Nov. 1997–9 Feb. 1998; G.B. Monteith and D.J. Cook leg.; pitfall trap, open forest; QMB S44717.

Description**Male** (holotype, QMB S1287)

GENERAL (Fig. 61A–Q). Body length 20.92, in moderate condition, colour faded significantly due to preservation.

DORSAL PROSOMA (Fig. 61A, E–F). Carapace length 7.70, width 6.22, length/width 1.24, clypeus to fovea length/carapace length 0.69, caput width/carapace width 0.66, carapace orange, caput slightly darker than thorax, reflective setae present, moderate on caput, moderate on thorax, fovea procurved, fovea width/carapace length 0.12 (Fig. 61A, F); chelicerae red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.53 (Fig. 61A); eye group rectangular, width/length 1.74, eye tubercle present (Fig. 61E).

ABDOMEN (Fig. 61B, D). Abdomen length 8.39, light grey-brown, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 61C, G–I). Labium cuspules absent (Fig. 61H); maxillae heel distinct, cuspules present, count = about 102, extending posteriorly onto heel, extending laterally about 30% of maxillae length (Fig. 61C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 61C, I); sternum length/width 1.15, central sternum with consistent covering of short setae, row of longer setae around posterior edges (Fig. 61G–H); posterior sigilla semi-elongate, central sternum to posterior sigilla length/sternum length 0.25, posterior sigilla length/sternum length 0.15 (Fig. 61G–H); other sigilla small, round and lateral (Fig. 61G–H).

LEG I (Fig. 61N–Q). Leg I orange-brown, lighter on patella, tibia, distal metatarsus and tarsus, femur length 6.07, patella length 4.10, tibia length 4.57, metatarsus length 4.75, tarsus length 2.82, total length 22.31, leg I length/carapace length 2.90 (Fig. 61N–O); scopulae on distal metatarsus and tarsus (Fig. 61N–O); spine count Fe D 0, Fe PL 1, Pa PL 2, Ti PL 0, Ti RL 0, Me PL 0, Me RL 0, Ta 0

(Fig. 61N–O); tibia length/width [TIL/TID] 3.59, even width along length, spur present, intermediate triangular/digitiform, knuckle absent, megaspine angled at 20 degrees, length to distal face of spur/tibia length [TIS/TIL] 0.53, spur height/tibia width [TISH/TID] 0.75, megaspine length/tibia length 0.22 (Fig. 61N–P); metatarsus slightly sinuous, proximal excavation present, excavation concave with inconspicuous heel, heel rounded, excavation length/metatarsus length [MIPEL/MIL] 0.44, metatarsus length/width [MIL/MID] 4.29 (Fig. 61N–O, Q).

PEDIPALP (Fig. 61J–M). Tibia length 3.15, width 1.20, length/width [PTL/PTD] 2.63, aetose depression present, depression length/palp tibia length [PDL/PTL] 0.60, retrolateral face with short, thorn-like setae along retrolateral edge of depression, getting denser proximally, ventral face with two elongate bristle-like setae below depression, prolateral face with two disto-ventral spines and a single medial spine, disto-medial spine absent (Fig. 61J–K); patella prolateral face with 2 (distal rubbed off) spines (Fig. 61J–K); cymbium with scopulae present distally (Fig. 61J–K); copulatory organ total length 1.69, length/palp tibia length 0.54 (Fig. 61L–M); bulb length/width 0.95 (Fig. 61L–M); embolus tapering from bulb, attenuate, very thin, protruding laterally with strong basal curve, one strong bend, at about 0.4 of length, slight bend before tip, width at base/bulb width 0.26, embolus length/bulb length 2.20 (Fig. 61L–M).

Distribution and natural history

Aname robertsororum occurs in northern Queensland, in the Wet Tropics bioregion. It is known from two locations, a northern location near Shiptons Flat, and a southern location in Mount Windsor National Park (Fig. 9). The form of burrows constructed by spiders of this species is unknown, but is likely to be similar to that of other *robertsororum*-complex species (Fig. 9).

Aname tropicana sp. nov.

[urn:lsid:zoobank.org:act:9163EAF3-80B3-4B9E-B548-2E2FAF8EB126](https://zoobank.org/urn:lsid:zoobank.org:act:9163EAF3-80B3-4B9E-B548-2E2FAF8EB126)

Figs 1, 9, 62–63

Diagnosis

Males of *A. tropicana* sp. nov. can be distinguished from all species for which males are known except *A. calida* sp. nov., *A. carina*, *A. cassowariensis* sp. nov., *A. harmoniosa* sp. nov., and *A. robertsororum* by a moderate to large body size (carapace length >4.0 mm), and the presence of a long embolus (embolus length/bulb length >1.5) that is thin, with a sharp bend near its base before a relatively straight distal section (Fig. 62L–M). Males of *A. tropicana* can be distinguished from those of *A. carina*, *A. harmoniosa*, and *A. robertsororum* by the presence of a shorter embolus (embolus length/bulb length <2) (Fig. 62L–M; cf. Figs 57, 60–61). Males of *A. tropicana* can be distinguished from those of *A. calida* and *A. cassowariensis* by the presence of thicker leg and pedipalp segments (e.g., metatarsus I length/width <4) (Fig. 62J–K, N–Q; cf. Figs 56, 59).

Females of *A. tropicana* sp. nov. can be distinguished from all species for which females are known except *A. carina* by the presence of bicoloured legs, with darker femurs and lighter distal segments, and spermathecae with two vesicles, with relatively long and straight lateral vesicles (lateral vesicle length/genitalia width >0.25) that are laterally angled, and medial vesicles that are shorter or about equal in length to the lateral vesicles, and curve gradually from a medial to a lateral angle (Fig. 63J–L). Females of *A. tropicana* can be distinguished from those of *A. carina* by the presence of spermathecae with shorter medial vesicles (medial vesicle length/lateral vesicle length ~0.7; cf. ~1 in *A. carina*) (Fig. 63L; cf. Fig. 58).

Etymology

The specific epithet '*tropicana*' is a Latin adjective meaning 'of the tropics', between the Tropics of Cancer and Capricorn, in reference to the distribution of this species near the coast of tropical Queensland.

Type material

Holotype

AUSTRALIA – Queensland • ♂; Mount Molloy; 16°44' S, 145°19' E; 400 m a.s.l.; Jan. 1992–Jan. 1993; Scott Barnett leg.; pitfall trap, riparian/woodland; QMB S59009.

Other material examined

AUSTRALIA – Queensland • 1 ♀; Mount Molloy, Wetherby Road, NE of Rifle Creek Rest Area; 16°40' S, 145°20' E; 396 m a.s.l.; 9 May 2023; J.D. Wilson and M.G. Rix leg.; excavated, wet sclerophyll forest; QMB S118312 • 1 ♂; Trinity Beach; 16°47' S, 145°42' E; 17 Oct. 1988; S. Wright leg.; AMS KS19694 • 1 ♀; SW of Trinity Beach, McGregor Road, Smithfield Regional Park; 16°49' S, 145°41' E; 44 m a.s.l.; 8 May 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground, rainforest; QMB S118310.

Description

Male (holotype, QMB S59009)

GENERAL (Fig. 62A–Q). Body length 15.02, in good condition, colour presumably faded due to preservation.

DORSAL PROSOMA (Fig. 62A, E–F). Carapace length 5.98, width 5.01, length/width 1.19, clypeus to fovea length/carapace length 0.72, caput width/carapace width 0.69, carapace red-brown, caput slightly darker than thorax, reflective setae present, moderate on caput, light on thorax, fovea procurved, fovea width/carapace length 0.15 (Fig. 62A, F); chelicerae dark red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.52 (Fig. 62A); eye group rectangular, width/length 2.18, eye tubercle present (Fig. 62E).

ABDOMEN (Fig. 62B, D). Abdomen length 5.85, brown, dorsal pattern absent, with reflective setae on anterior portion.

VENTRAL PROSOMA (Fig. 62C, G–I). Labium cuspules absent (Fig. 62H); maxillae heel distinct, cuspules present, count=about 162, extending posteriorly onto heel, extending laterally about 50% of maxillae length (Fig. 62C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 62C, I); sternum length/width 1.26, most setae from anterior half rubbed off, central sternum with consistent covering of short setae, row of longer setae around posterior edges (Fig. 62G–H); posterior sigilla ovoid, central sternum to posterior sigilla length/sternum length 0.32, posterior sigilla length/sternum length 0.11 (Fig. 62G–H); other sigilla small, round and lateral (Fig. 62G–H).

LEG I (Fig. 62N–Q). Leg I red-brown, lighter on patella, tibia, distal metatarsus and tarsus, reflective setae on dorsal femur, femur length 4.72, patella length 3.16, tibia length 3.49, metatarsus length 3.48, tarsus length 2.05, total length 16.90, leg I length/carapace length 2.83 (Fig. 62N–O); scopulae on distal metatarsus and tarsus (Fig. 62N–O); spine count Fe D 1, Fe PL 1, Pa PL 2 (distal rubbed off), Ti PL 0, Ti RL 0, Me PL 0, Me RL 0, Ta 0 (Fig. 62N–O); tibia length/width [TIL/TID] 2.83, widening from proximal end to spur before narrowing again towards distal end, spur present, intermediate triangular/digitiform, knuckle absent, megaspine angled at 33 degrees, length to distal face of spur/tibia length [TIS/TIL] 0.65, spur height/tibia width [TISH/TID] 0.70, megaspine length/tibia length 0.28 (Fig. 62N–P); metatarsus slightly sinuous, proximal excavation present, excavation concave with inconspicuous

heel, heel rounded, excavation length/metatarsus length [MIPEL/MIL] 0.46, metatarsus length/width [MIL/MID] 3.85 (Fig. 62N–O, Q).

PEDIPALP (Fig. 62J–M). Tibia length 2.57, width 1.17, length/width [PTL/PTD] 2.19, asetose depression present, depression length/palp tibia length [PDL/PTL] 0.55, retrolateral face with short, thorn-like setae along retrolateral edge of depression, getting denser proximally, ventral face with two elongate bristle-like setae below depression, prolateral face with two disto-ventral spines, disto-medial spine absent (Fig. 62J–K); patella prolateral face with 2 (distal rubbed off) spines (Fig. 62J–K); cymbium with scopulae present distally (Fig. 62J–K); copulatory organ total length 1.50, length/palp tibia length 0.58 (Fig. 62L–M); bulb length/width 0.92 (Fig. 62L–M); embolus slightly reflexed, attenuate, very thin, protruding laterally with strong basal curve, one strong bend, at about 0.2 of length, slight bend before tip, width at base/bulb width 0.21, embolus length/bulb length 1.91 (Fig. 62L–M).

Female (QMB S118310)

GENERAL (Fig. 63A–L). Body length 17.76, in good condition.

DORSAL PROSOMA (Fig. 63A, E–F). Carapace length 6.71, width 5.98, length/width 1.12, clypeus to fovea length/carapace length 0.71, caput width/carapace width 0.73, carapace dark red-brown, reflective setae present, moderate on caput, light on thorax, fovea procurved, fovea width/carapace length 0.14 (Fig. 63A, F); chelicerae dark red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.58 (Fig. 63A); eye group rectangular, width/length 1.87, eye tubercle present (Fig. 63E).

ABDOMEN (Fig. 63B, D). Abdomen length 7.21, dark grey-brown, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 63C, G–I). Labium cuspules absent (Fig. 63H); maxillae heel distinct, cuspules present, count=about 143, extending posteriorly onto heel, extending laterally about 45% of maxillae length (Fig. 63C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 63C, I); sternum length/width 1.17, central sternum with consistent covering of short setae, row of longer setae around posterior edges (Fig. 63G–H); posterior sigilla ovoid, central sternum to posterior sigilla length/sternum length 0.23, posterior sigilla length/sternum length 0.13 (Fig. 63G–H); other sigilla small, round and lateral (Fig. 63G–H).

LEG I (Fig. 63J–K). Leg I red-brown, darker on femur, femur length 5.11, patella length 3.35, tibia length 3.80, metatarsus length 3.35, tarsus length 1.98, total length 17.59, leg I length/carapace length 2.62; scopulae on distal metatarsus and tarsus; spine count Fe D 1, Fe PL 1, Pa PL 2, Ti PL 1, Ti RL 4 (proximal weak), Me PL 2, Me RL 3, Ta 0; tibia length/width [TIL/TID] 3.65.

GENITALIA (Fig. 63D, L). Epigastric furrow unmodified (Fig. 63D); spermathecae with two vesicles each (Fig. 63L); lateral vesicle relatively straight, length 0.55, lateral vesicle length/genitalia width 0.45, length/width at base 2.00, crown un-demarcated (Fig. 63L); medial vesicle long and curving evenly from medial to lateral angle, medial vesicle length/genitalia width 0.30, length/width 2.45, medial vesicle length/lateral vesicle length 0.68 (Fig. 63L).

Distribution and natural history

Aname tropicana sp. nov. occurs in northern Queensland, predominantly in the Wet Tropics bioregion. It is known from two localities, inland near Mount Molloy, and on the coast near Trinity Beach (Fig. 9). It constructs an open, silk-lined burrow with some silk outside of the entrance, and with a hidden secondary ‘wishbone’ entrance (Fig. 9).

Aname barrema-complex

Figs 1, 3E, 5E, 10, 64–70

Remarks

See the key to complexes and Figures 3–5 for diagnostic information. The few specimens of the *barrema*-complex that we have seen in life range in colour from tan to dark brown (Fig. 10). A female of *A. barrema* had striking bronze setation covering its dorsal carapace, chelicerae, abdomen and femora (see Fig. 10). The burrow of this same spider was an open, silk-lined burrow without silk outside of the entrance, with the entrance at an angle, and with a hidden secondary ‘wishbone’ entrance. The burrow was found on relatively flat ground with a leaf-litter layer and was embedded in the leaf litter (Fig. 10).

Distribution

The *barrema*-complex occurs from northern New South Wales, generally inland of the Great Dividing Range, as far north as Eidsvold in Queensland. This range includes the Brigalow Belt South, New England Tablelands, Nandewar, and Southeast Queensland bioregions (Fig. 10).

Composition

The *barrema*-complex includes four described species: *Aname barrema* Raven, 1985, *A. distincta* (Rainbow, 1914), *A. inimica* Raven, 1985, and *A. magnifica* sp. nov.

Key to species in the *Aname barrema*-complex

Note: males are unknown for *A. distincta*.

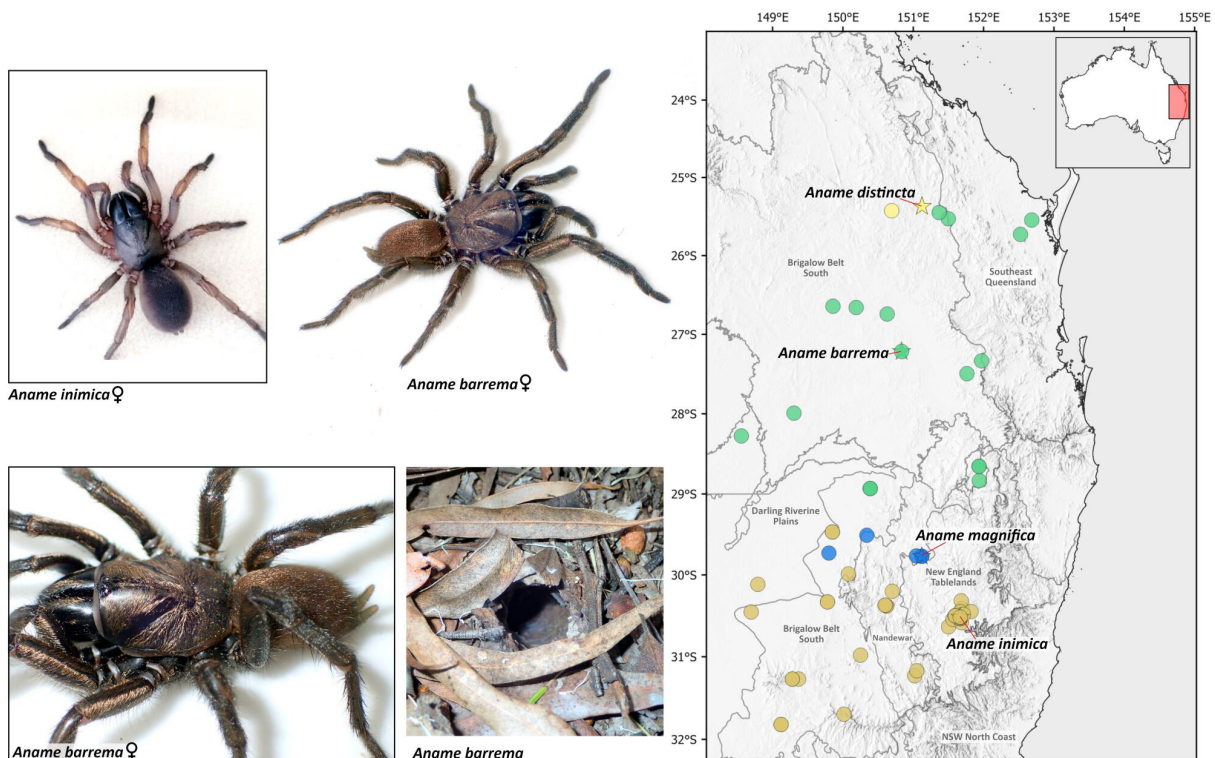


Fig. 10. *Aname barrema*-complex species habitus images, distribution map, and burrow architecture. Points on the map represented by a star are type localities. Note that intraspecific variation occurs in both physical appearance and burrow architecture, and images shown here should be treated only as examples, not used for species diagnosis.

1. Male 2
– Female 4

Males

2. Copulatory organ with a short embolus, only slightly longer than the bulb (Fig. 67).....
..... *A. inimica* Raven, 1985
– Copulatory organ with a longer embolus..... 3
3. Palp tibia with a long asetose depression (depression length/tibia length ~ 0.7); metatarsus I thin (metatarsus I length/width ~ 4.5) (Fig. 64) *A. barrema* Raven, 1985
– Palp tibia with a shorter asetose depression (depression length/tibia length ~ 0.6); metatarsus I thicker (metatarsus I length/width ~ 3.5) (Fig. 69) *A. magnifica* sp. nov.

Females

4. Spermathecae medial vesicle length $\sim 0.8 \times$ lateral vesicle length (Fig. 68) . *A. inimica* Raven, 1985
– Spermathecae medial vesicles shorter relative to lateral vesicles ($< 0.5 \times$ lateral vesicle length) 5
5. Posterior sternal sigilla length $\sim 0.18 \times$ sternum length; spermathecae with triangular lateral vesicles (Fig. 70) *A. magnifica* sp. nov.
– Posterior sternal sigilla shorter ($\sim 0.14 \times$ sternum length), spermathecae with more tubular, elongate lateral vesicles..... 6
6. Spermathecae lateral vesicle length $\sim 1.84 \times$ width (Fig. 65) *A. barrema* Raven, 1985
– Spermathecae with more elongate lateral vesicles (length $\sim 1.95 \times$ width) (Fig. 66)
..... *A. distincta* (Rainbow, 1914)

Aname barrema Raven, 1985
Figs 1, 10, 64–65

Aname barrema Raven, 1985: 382, figs 5, 26, 40, 47.

non *Aname barrema* – Raven 1985 (pars): figs 13, 33, 70–74 (illustrated female allotype QMB S1239 [Braemar State Forest], and female paratypes QMB S1243 [Girraween National Park], QMB S1244 [Moombah], QMB S1247 [Yuleba], and QMB S1245 [Stanthorpe], here identified as *A. platensis* sp. nov. [QMB S1243], and *A. eddieorum* sp. nov. [all others]).

Diagnosis

Males of *A. barrema* can be distinguished from all species for which males are known except *A. inimica* and *A. magnifica* sp. nov. by a moderate to large body size (carapace length > 4.0 mm), the presence of a copulatory organ with the bulb tapering into a long embolus (embolus length/bulb length > 1.5) with a slightly thicker basal section that narrows and curves sharply at about 0.6 of length, a patch of thicker setae proximally of asetose depression, and the absence of a pronounced, sharp heel on metatarsus I (as in *pallida*-complex species) (Fig. 64A–Q). Males of *A. barrema* can be distinguished from those of *A. inimica* by the presence of a longer embolus (embolus length/bulb length > 1.5 ; cf. ~ 1.2) (Fig. 64L–M; cf. Fig. 67). Males of *A. barrema* can be distinguished from those of *A. magnifica* by the presence of a longer asetose depression on the palp tibia (depression length/tibia length ~ 0.7 ; cf. ~ 0.6 in *A. magnifica*) and a thinner metatarsus I (metatarsus I length/width ~ 4.5 ; cf. ~ 3.5 in *A. magnifica*) (Fig. 64K, Q; cf. Fig. 69).

Females of *A. barrema* can be distinguished from all species for which females are known except *A. distincta* and *A. magnifica* sp. nov. by the presence of spermathecae with two vesicles, with relatively

long and straight lateral vesicles (lateral vesicle length/genitalia width >0.25) that don't curve medially at their ends, and very short, straight medial vesicles (medial vesicle length/lateral vesicle length <0.5) (Fig. 65D, L). Females of *A. barrema* can be distinguished from those of *A. magnifica* by the presence of smaller posterior sigilla on the sternum (posterior sigilla length/sternum length ~0.14; cf. ~0.18) and spermathecae with less triangular, more tubular lateral vesicles (Fig. 65G–H, L; cf. Fig. 70). Females of *A. barrema* can be distinguished from those of *A. distincta* by the presence of spermathecae with less elongate lateral vesicles (lateral vesicle length/width ~1.84; cf. ~1.95 in *A. distincta*), with slightly widened crowns (Fig. 65L; cf. Fig. 66).

Type material

Holotype

AUSTRALIA – Queensland • ♂; Braemar State Forest; 27°13' S, 150°50' E; 15 Oct. 1997–19 Oct. 1979; R.J. Raven leg.; QMB S1238.

Other material examined

AUSTRALIA – Queensland • 1 ♂; Gurgeena Plateau; 25°27' S, 151°22' E; 22 Aug.–10 Oct. 1998; G.B. Monteith leg.; pitfall trap, open forest; QMB S63025 • 1 ♀; Binjour, Swains Road; 25°32' S, 151°30' E; 373 m a.s.l.; 24 Apr. 2023; J.D. Wilson and M.G. Rix leg.; excavated, in leaf litter, wet sclerophyll forest; QMB S118308 • 1 ♂; Maryborough; 25°33' S, 152°41' E; QMB S26091 • 1 ♂; St Mary State Forest; 25°44' S, 152°31' E; R. Zellow leg.; QMB S26093 • 2 ♂♂; Miles, E of Waituna; 26°39' S, 149°51' E; 361 m a.s.l.; 26 Jun.–5 Sep. 2006; R.J. Raven, B. Baehr and A. Amey leg.; QMB S76033 • 1 ♂; Geham, N of Toowoomba; 27°20' S, 151°58' E; 4 Apr. 2004; R. Neilson leg.; open eucalypt woodland; QMB S61956 • 1 ♂; Kingsthorpe; 27°30' S, 151°46' E; 15 Sep. 2001; T. Harding leg.; QMB S57055. – New South Wales • 1 ♂; Northstar, “Edington”; 28°56' S, 150°23' E; 23 Sep. 1997; S. Hardcastle leg.; hand collected, found in house after rain; QMB S35483 • 1 ♂; Northstar; 28°56' S, 150°23' E; 14 Oct. 1997; S. Hardcastle leg.; QMB S35507 • 1 ♂; Northstar, “Edington”; 28°56' S, 150°23' E; 20 Aug. 2007; S. Hardcastle leg.; hand collected, found inside house during wet weather; QMB S79681.

Description

Male (holotype, QMB S1238)

GENERAL (Fig. 64A–Q). Body length 16.43, in moderate condition, colour faded significantly due to preservation.

DORSAL PROSOMA (Fig. 64A, E–F). Carapace length 7.01, width 6.02, length/width 1.16, clypeus to fovea length/carapace length 0.75, caput width/carapace width 0.66, carapace orange, caput slightly darker than thorax, reflective setae present, light on caput, light on thorax, fovea procurved, fovea width/carapace length 0.14 (Fig. 64A, F); chelicerae orange, rastellum absent or inconspicuous, chelicerae length/carapace length 0.42 (Fig. 64A); eye group rectangular, width/length 2.23, eye tubercle present (Fig. 64E).

ABDOMEN (Fig. 64B, D). Abdomen length 6.33, yellow-brown, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 64C, G–I). Labium cuspules absent (Fig. 64H); maxillae heel distinct, cuspules present, count=about 160, extending posteriorly onto heel, extending laterally about 40% of maxillae length (Fig. 64C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 64C, I); sternum length/width 1.15, some setae rubbed off, central sternum with consistent covering of short setae, row of longer setae around posterior edges (Fig. 64G–H); posterior sigilla ovoid, central sternum to posterior sigilla length/sternum length 0.27, posterior sigilla length/sternum length 0.16 (Fig. 64G–H); other sigilla small, round and lateral (Fig. 64G–H).

LEG I (Fig. 64N–Q). Leg I yellow, darker on femur, femur length 6.24, patella length 3.83, tibia length 4.45, metatarsus length 4.29, tarsus length 2.59, total length 21.40, leg I length/carapace length 3.05 (Fig. 64N–O); scopulae on distal metatarsus and tarsus (Fig. 64N–O); spine count Fe D 2, Fe PL 1, Pa PL 2, Ti PL 0, Ti RL 0, Me PL 0, Me RL 0, Ta 0 (Fig. 64N–O); tibia length/width [TIL/TID] 3.56, even width along length, spur present, intermediate triangular/digitiform, knuckle absent, megaspine angled at 25 degrees, length to distal face of spur/tibia length [TIS/TIL] 0.47, spur height/tibia width [TISH/TID] 0.65, megaspine length/tibia length 0.24 (Fig. 64N–P); metatarsus relatively straight, proximal excavation present, excavation concave with slight heel, heel rounded, excavation length/metatarsus length [MIPEL/MIL] 0.47, metatarsus length/width [MIL/MID] 4.50 (Fig. 64N–O, Q).

PEDIPALP (Fig. 64J–M). Tibia length 2.92, width 1.11, length/width [PTL/PTD] 2.62, aetose depression present, depression length/palp tibia length [PDL/PTL] 0.72, retrolateral face with patch of long setae proximally of aetose depression, ventral face with two elongate bristle-like setae below depression, prolateral face with patch of spines on distal half, disto-medial spine absent (Fig. 64J–K); patella prolateral face with 2 (proximal rubbed off) spines (Fig. 64J–K); cymbium with scopulae present distally (Fig. 64J–K); copulatory organ total length 1.74, length/palp tibia length 0.59 (Fig. 64L–M); bulb length/width 0.93 (Fig. 64L–M); embolus tapering from bulb, attenuate, swollen base tapering before strong curve to sinuous tip, one strong bend, at about 0.6 of length, width at base/bulb width 0.37, embolus length/bulb length 1.91 (Fig. 64L–M).

Female (QMB S118308)

GENERAL (Fig. 65A–L). Body length 22.54, in good condition.

DORSAL PROSOMA (Fig. 65A, E–F). Carapace length 8.89, width 7.04, length/width 1.26, clypeus to fovea length/carapace length 0.74, caput width/carapace width 0.79, carapace red-brown, reflective setae present, moderate on caput, moderate on thorax, fovea procurved, fovea width/carapace length 0.17 (Fig. 65A, F); chelicerae dark golden-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.52 (Fig. 65A); eye group rectangular, width/length 2.08, eye tubercle present (Fig. 65E).

ABDOMEN (Fig. 65B, D). Abdomen length 8.99, grey-brown, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 65C, G–I). Labium cuspules absent (Fig. 65H); maxillae heel distinct, cuspules present, count=about 135, extending posteriorly onto heel, extending laterally about 30% of maxillae length (Fig. 65C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 65C, I); sternum length/width 1.14, central sternum with consistent covering of short setae, row of longer setae around posterior edges (Fig. 65G–H); posterior sigilla ovoid, central sternum to posterior sigilla length/sternum length 0.24, posterior sigilla length/sternum length 0.14 (Fig. 65G–H); other sigilla small, round and lateral (Fig. 65G–H).

LEG I (Fig. 65J–K). Leg I coffee-brown, reflective setae on dorsal femur, femur length 6.60, patella length 4.28, tibia length 4.49, metatarsus length 3.77, tarsus length 2.37, total length 21.52, leg I length/carapace length 2.42; scopulae on distal metatarsus and tarsus; spine count Fe D 1, Fe PL 1, Pa PL 2, Ti PL 1, Ti RL 4 (weak), Me PL 2, Me RL 3, Ta 0; tibia length/width [TIL/TID] 3.34.

GENITALIA (Fig. 65D, L). Epigastric furrow unmodified (Fig. 65D); spermathecae with two vesicles each (Fig. 65L); lateral vesicle relatively straight, length 0.72, lateral vesicle length/genitalia width 0.52, length/width at base 1.84, crown slightly wider than stem (Fig. 65L); medial vesicle short, relatively straight and projecting ventrally, medial vesicle length/genitalia width 0.16, length/width 2.12, medial vesicle length/lateral vesicle length 0.31 (Fig. 65L).

Distribution and natural history

Aname barrema has a wide distribution in northern New South Wales and south-eastern Queensland, predominantly in the Brigalow Belt South bioregion. It extends from Northstar in northern New South Wales north to Eidsvold in Queensland, and from Miles east to Maryborough (Fig. 10). It constructs an open, silk-lined burrow without silk outside of the entrance, on an angle, and with a hidden secondary ‘wishbone’ entrance (Fig. 10).

Remarks

Specimens from near the town of Maryborough occur in a different bioregion to other specimens (and the type locality) of the species, and are smaller on average than those from further west. Future molecular work should seek to test whether these specimens are actually conspecific.

Aname distincta (Rainbow, 1914)

Figs 10, 66

Ixamatus distinctus Rainbow, 1914: 237, figs 48–49.

Aname distincta – Raven 1981: 338 (transfer of *Ixamatus distinctus* Rainbow, 1914 to *Aname* L. Koch, 1873); 1985: 393, fig. 66.

Aname “MYG460” – Harvey *et al.* 2018: fig. 4. — Rix *et al.* 2021: figs 3, 5, 7.

non *Aname distincta* – Raven 1985 (pars): figs 19, 36, 48, 67–69 (illustrated male QMB S1267 [Eidsvold region], and females QMB S1263 [Cooyar], QMB S1268 [Gailles], and EUQ [Bunya Mountains] assigned to *A. distincta* (Rainbow, 1914), here identified as *A. attenuata* (Rainbow & Pulleine, 1918)).

Diagnosis

Males of *A. distincta* are unknown.

Females of *A. distincta* can be distinguished from all species for which females are known except *A. barrema* and *A. magnifica* sp. nov. by the presence of spermathecae with two vesicles, with relatively long and straight lateral vesicles (lateral vesicle length/genitalia width >0.25) that don’t curve medially at their ends, and very short, straight medial vesicles (medial vesicle length/lateral vesicle length <0.5) (Fig. 66D, L). Females of *A. distincta* can be distinguished from those of *A. magnifica* by the presence of smaller posterior sigilla on the sternum (posterior sigilla length/sternum length ~0.14; cf. ~0.18) and spermathecae with less triangular, more tubular lateral vesicles (Fig. 66G–H, L; cf. Fig. 70). Females of *A. distincta* can be distinguished from those of *A. barrema* by the presence of spermathecae with more elongate lateral vesicles (lateral vesicle length/width ~1.95; cf. ~1.84 in *A. barrema*), with narrower crowns (Fig. 66L; cf. Fig. 65).

Type material

Syntypes

AUSTRALIA – Queensland • 1 ♀; Eidsvold; 25°22’ S, 151°07’ E; W.J. Rainbow leg.; AMS KS8188 (ex. AM K34490) • 1 ♀; Eidsvold; 25°22’ S, 151°07’ E; W.J. Rainbow leg.; AMS KS131254 (ex. AMS KS8188, AM K34490) • 1 ♀; Eidsvold; 25°22’ S, 151°07’ E; W.J. Rainbow leg.; AMS KS131255 (ex. AMS KS8188, AM K34490).

Other material examined

AUSTRALIA – Queensland • 1 ♀; Bancroft property, Oak Park-Quaggy Road, ~50 km W of Eidsvold; 25°26’ S, 150°42’ E; 419 m a.s.l.; 2 Jun. 2014; M.G. Rix and S.E. Harrison leg.; excavated, open burrow, vine scrub; WAM T133260.

Description

Female (syntype, AMS KS8188)

GENERAL (Fig. 66A–L). Body length 25.33, in moderate condition, significantly faded and tissue hardened due to long-term preservation.

DORSAL PROSOMA (Fig. 66A, E–F). Carapace length 9.70, width 7.81, length/width 1.24, clypeus to fovea length/carapace length 0.71, caput width/carapace width 0.78, carapace orange-brown, reflective setae present, light on caput, light on thorax, fovea procurved, fovea width/carapace length 0.21 (Fig. 66A, F); chelicerae red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.63 (Fig. 66A); eye group rectangular, width/length 1.9, eye tubercle present (Fig. 66E).

ABDOMEN (Fig. 66B, D). Abdomen length 9.17, tan-brown, dorsal pattern absent, with some evidence of reflective setae, and consistent cover of short setae.

VENTRAL PROSOMA (Fig. 66C, G–I). Labium cuspules absent (Fig. 66H); maxillae heel distinct, cuspules present, count=about 132, extending posteriorly onto heel, extending laterally about 30% of maxillae length (Fig. 66C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 66C, I); sternum length/width 1.18, some setae rubbed off, central sternum with consistent covering of short setae, row of longer setae around posterior edges (Fig. 66G–H); posterior sigilla ovoid, central sternum to posterior sigilla length/sternum length 0.23, posterior sigilla length/sternum length 0.14 (Fig. 66G–H); other sigilla small, round and lateral (Fig. 66G–H).

LEG I (Fig. 66J–K). Leg I orange-brown, reflective setae on dorsal femur, femur length 6.88, patella length 4.56, tibia length 4.42, metatarsus length 4.05, tarsus length 2.43, total length 22.33, leg I length/carapace length 2.30; scopulae on distal metatarsus and tarsus; spine count Fe D 2, Fe PL 1 (rubbed off), Pa PL 2 (both rubbed off), Ti PL 2, Ti RL 4, Me PL 0, Me RL 2, Ta 0; tibia length/width [TIL/TID] 2.83.

GENITALIA (Fig. 66D, L). Epigastric furrow unmodified (Fig. 66D); spermathecae with two vesicles each (Fig. 66L); lateral vesicle relatively straight, length 0.90, lateral vesicle length/genitalia width 0.57, length/width at base 1.95, crown un-demarcated (Fig. 66L); medial vesicle short, relatively straight and projecting ventrally, medial vesicle length/genitalia width 0.20, length/width 1.93, medial vesicle length/lateral vesicle length 0.34 (Fig. 66L).

Distribution and natural history

Aname distincta occurs in central Queensland, in the Brigalow Belt South bioregion, near the town of Eidsvold (Fig. 10). The form of burrows constructed by spiders of this species is unknown, but is likely to be similar to that of other *barrema*-complex species (Fig. 10).

Remarks

Most specimens previously identified as *A. distincta* in Raven (1985) actually represent *A. attenuata*, and consequently, true *A. distincta* is only known from four female specimens, all from near the town of Eidsvold.

Aname inimica Raven, 1985

Figs 10, 67–68

Aname inimica Raven, 1985: 399, figs 9, 11, 21, 29, 43, 53, 62.

Diagnosis

Males of *A. inimica* can be distinguished from all species for which males are known except *A. barrema* and *A. magnifica* sp. nov. by a moderate to large body size (carapace length >4.0 mm), the presence of

a copulatory organ with the bulb tapering into a long embolus (embolus length/bulb length > 1.5) with a slightly thicker basal section that narrows and curves sharply at about 0.6 of length, a patch of thicker setae proximally of a setose depression, and the absence of a pronounced, sharp heel on metatarsus I (as in *pallida*-complex species) (Fig. 67A–Q). Males of *A. inimica* can be distinguished from those of *A. barrema* and *A. magnifica* by the presence of a short embolus (embolus length/bulb length ~ 1.2; cf. > 1.5) (Fig. 67L–M; cf. Figs 64, 69).

Females of *A. inimica* can be distinguished from all species for which females are known by the presence of spermathecae with two short vesicles (lateral vesicle length/carapace length ~ 0.05) of roughly equal length, with both vesicles being relatively straight and angled laterally (Fig. 68L).

Type material

Holotype

AUSTRALIA – New South Wales • ♂; Armidale; 30°31' S, 151°40' E; 25 Oct. 1979; QMB S1276.

Paratypes

AUSTRALIA – New South Wales • 1 ♂; Rockvale Road, 10 km N of Armidale; 30°29' S, 151°43' E; 21 Oct. 1979; per. H.H. leg.; hand collected; QMB S1281 • 1 ♂; Armidale; 30°30' S, 151°36' E; 22 Oct. 1971; T. Frazier leg.; QMB S1278 • 1 ♂; Armidale; 30°30' S, 151°36' E; 5 Nov. 1972; C. Whitton leg.; hand collected; QMB S1279 • 1 ♂; Bundarra Road, 12 km W of Armidale; 30°30' S, 151°36' E; 22 Nov. 1978; W. Henniger leg.; under eucalypt, garden; QMB S1280 • 1 ♀; Armidale; 30°31' S, 151°40' E; 30 May 1979; QMB S1277 (allotype female).

Other material examined

AUSTRALIA – New South Wales • 1 ♂; Moree; 29°28' S, 149°51' E; Nov. 1989; J. Rohde leg.; hand collected, in woodchips; AMS KS22783 • 1 ♂; Moree; 29°28' S, 149°51' E; Nov. 1989; J. Rohde leg.; hand collected, in pool; AMS KS22784 • 1 ♂; Tenterden; 29°59' S, 150°05' E; 3 Nov. 1983; QMB S10049 • 1 juv.; Barraba; 30°07' S, 148°47' E; Feb. 2001; I. Oliver leg.; pitfall trap; AMS KS80708 • 1 ♂, 1 ♀; Barraba, Gulf Creek; 30°12' S, 150°42' E; 25 Aug. 1993; A.M. Alison leg.; AMS KS40715 • 1 ♂; Mount Mitchell, 12 km N of Armidale; 30°19' S, 151°41' E; 18 Oct. 1981; QMB S9395 • 1 ♂; Narrabri; 30°20' S, 149°47' E; 19 Sep. 1991; S. Hull leg.; AMS KS30686 • 1 ♂; Narrabri; 30°20' S, 149°47' E; Sep. 1976; AMS KS71075 • 1 ♀; Barraba; 30°22' S, 150°36' E; Jan. 1971; M. Ford leg.; AMS KS12467 • 2 ♂♂; Barraba; 30°22' S, 150°36' E; 12 Sep. 1985; D.C. Whyte leg.; AMS KS16030 • 1 ♀; Barraba; 30°23' S, 150°37' E; 14 Oct. 1985; D.C. Whyte leg.; AMS KS16029 • 1 ♀; Barraba; 30°23' S, 150°37' E; 14 Oct. 1987; D.C. Whyte leg.; AMS KS18265 • 1 ♂; 10 km NE of Armidale; 30°25' S, 151°41' E; 2004; New South Wales Government leg.; AMS KS90184 • 1 juv.; Pilliga, 'Yetta'; 30°27' S, 148°42' E; Feb. 2001; I. Oliver leg.; pitfall trap; AMS KS80710 • 1 ♂; Tilbuster, Blanch's Road; 30°27' S, 151°40' E; 9 Mar. 1985; R. Hobbs leg.; QMB S9458 • 1 ♂; Thalgarrah Field Studies Centre, 15 km NE of Armidale; 30°27' S, 151°49' E; Oct. 1986; University of New South Wales leg.; hand collected, under log, open eucalypt; QMB S6715 • 1 ♂; Armidale, University of New England; 30°29' S, 151°38' E; 14 Nov. 1986; University of New England leg.; QMB S6713 • 1 ♂; Armidale, Pine Forest Road; 30°29' S, 151°42' E; 7 Nov. 1985; R. Hobbs leg.; QMB S9456 • 1 ♂; Armidale; 30°30' S, 151°36' E; 20 Oct. 1983; QMB S10042 • 1 ♂; Armidale; 30°30' S, 151°36' E; 1981; QMB S9398 • 1 ♂; Armidale; 30°30' S, 151°36' E; 23 Nov. 1981; K. King leg.; QMB S9464 • 3 ♂♂; Armidale; 30°30' S, 151°36' E; Oct. 1980; R. Hobbs leg.; QMB S9733 • 1 ♂; Armidale; 30°30' S, 151°36' E; 26 Nov. 1980; R. Hobbs leg.; QMB S9735 • 1 ♂; 10 km W of Armidale; 30°30' S, 151°36' E; 16 Nov. 1980; R. Hobbs leg.; QMB S9746 • 1 ♂; Armidale; 30°30' S, 151°36' E; 31 Oct. 1980; R. Hobbs leg.; QMB S9749 • 1 ♂; Armidale; 30°30' S, 151°36' E; 4 Oct. 1980; R. Hobbs leg.; QMB S9751 • 1 ♂; Armidale; 30°30' S, 151°36' E; 10 Nov. 1982; QMB S9817 • 1 ♂; Armidale; 30°30' S, 151°36' E; 14 Oct. 1980; R. Hobbs leg.; QMB S9941 • 1 ♂; Armidale; 30°30' S, 151°40' E; 23 Oct. 1985; R. Hobbs leg.; QMB S9447 •

1 ♀; Armidale; 30°31' S, 151°40' E; Mar. 1972; D. Dye leg.; AMS KS12471 • 1 ♂; Armidale; 30°31' S, 151°40' E; 21 Oct. 1980; R. Mascord leg.; AMS KS8569 • 1 ♂; Armidale; 30°31' S, 151°40' E; Dec. 1983; R. Hobbs leg.; QMB S9449 • 1 ♂; Armidale; 30°31' S, 151°40' E; 19 Nov. 1985; R. Hobbs leg.; QMB S9453 • 1 ♂; Dangersleigh Road, 1 km S of Armidale; 30°32' S, 151°40' E; 1 Nov. 1985; R. Hobbs leg.; QMB S9806 • 1 ♂; Armidale; 30°32' S, 151°40' E; 11 Nov. 1985; R. Hobbs leg.; QMB S9448 • 1 ♂; Armidale, airport; 30°33' S, 151°34' E; 11 Nov. 1981; QMB S9392 • 1 ♂; Dangersleigh; 30°35' S, 151°41' E; 14 Nov. 1985; R. Hobbs leg.; QMB S9451 • 1 ♂; Uralla; 30°38' S, 151°30' E; 14 Nov. 1985; R. Hobbs leg.; QMB S9450 • 1 ♂; Gunnedah; 30°59' S, 150°15' E; 30 Oct. 1994; J. Lemon leg.; AMS KS42702 • 1 ♂; Tamworth, Piallamore district; 31°10' S, 151°03' E; 22 Oct. 1984; B. Murphy leg.; AMS KS16322 • 1 ♀; Loomberra, near Tamworth; 31°14' S, 151°01' E; 17 Oct. 1983; AMS KS13543 • 1 ♂; 19 km from Coobabarabran, on Newell Highway; 31°16' S, 149°22' E; 23 Nov. 1984; D. Stewart leg.; AMS KS16331 • 1 juv.; Coonabarabran; 31°16' S, 149°17' E; 7 Jan. 1991; B. Sulter leg.; AMS KS23640 • 1 ♂; Coonabarabran; 31°16' S, 149°17' E; 6 Nov. 1991; D. Duggan leg.; AMS KS30302 • 2 ♂♂; Coolah Tops National Park, Pinnacles Track; 31°42' S, 150°01' E; 20 Nov. 2018; S.V. Mahony leg.; hand collected; AMS KS129340 • 1 ♂; Mendooran 'Caigen'; 31°49' S, 149°07' E; 15 Oct. 1982; J. Poole leg.; AMS KS10433 • 1 ♂; Mendooran; 31°49' S, 149°07' E; 9 Nov. 1989; G. Burling leg.; hand collected, in pool; AMS KS22777.

Description

Male (holotype, QMB S1276)

GENERAL (Fig. 67A–Q). Body length 20.17, in good condition, colour faded significantly due to preservation.

DORSAL PROSOMA (Fig. 67A, E–F). Carapace length 8.42, width 7.22, length/width 1.17, clypeus to fovea length/carapace length 0.72, caput width/carapace width 0.66, carapace orange-brown, reflective setae present, light on caput, light on thorax, fovea procurved, fovea width/carapace length 0.12 (Fig. 67A, F); chelicerae red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.44 (Fig. 67A); eye group rectangular, width/length 1.91, eye tubercle present (Fig. 67E).

ABDOMEN (Fig. 67B, D). Abdomen length 8.01, tan-brown, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 67C, G–I). Labium cuspules absent (Fig. 67H); maxillae heel distinct, cuspules present, count=about 130, extending posteriorly onto heel, extending laterally about 40% of maxillae length (Fig. 67C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 67C, I); sternum length/width 1.19, central sternum with consistent covering of short setae, row of longer setae around posterior edges (Fig. 67G–H); posterior sigilla ovoid, central sternum to posterior sigilla length/sternum length 0.25, posterior sigilla length/sternum length 0.14 (Fig. 67G–H); other sigilla small, round and lateral (Fig. 67G–H).

LEG I (Fig. 67N–Q). Leg I orange-brown, lighter on distal metatarsus and tarsus, reflective setae on dorsal femur, femur length 6.46, patella length 4.07, tibia length 4.74, metatarsus length 4.87, tarsus length 2.69, total length 22.83, leg I length/carapace length 2.71 (Fig. 67N–O); scopulae on distal metatarsus and tarsus (Fig. 67N–O); spine count Fe D 4, Fe PL 1, Pa PL 2 (distal rubbed off), Ti PL 0, Ti RL 0, Me PL 0, Me RL 0, Ta 0 (Fig. 67N–O); tibia length/width [TIL/TID] 3.23, even width along length, spur present, triangular, knuckle absent, megaspine angled at 31 degrees, length to distal face of spur/tibia length [TIS/TIL] 0.47, spur height/tibia width [TISH/TID] 0.52, megaspine length/tibia length 0.28 (Fig. 67N–P); metatarsus relatively straight, proximal excavation present, excavation concave with slight heel, heel semi-sharp, excavation length/metatarsus length [MIPEL/MIL] 0.45, metatarsus length/width [MIL/MID] 4.13 (Fig. 67N–O, Q).

PEDIPALP (Fig. 67J–M). Tibia length 3.23, width 1.33, length/width [PTL/PTD] 2.42, aetose depression present, depression length/palp tibia length [PDL/PTL] 0.53, retrolateral face with patch of long setae proximally of aetose depression, ventral face with two elongate bristle-like setae below depression, prolateral face with two disto-ventral spines, disto-medial spine present (Fig. 67J–K); patella prolateral face with 2 spines (Fig. 67J–K); cymbium with scopulae present distally (Fig. 67J–K); copulatory organ total length 1.45, length/palp tibia length 0.45 (Fig. 67L–M); bulb length/width 0.95 (Fig. 67L–M); embolus tapering from bulb, attenuate, swollen base tapering before strong curve to sinuous tip, one strong bend, at about 0.6 of length, width at base/bulb width 0.34, embolus length/bulb length 1.18 (Fig. 67L–M).

Female (AMS KS40715)

GENERAL (Fig. 68A–L). Body length 29.24, in moderate condition, faded due to preservation and spinnerets have been dissected.

DORSAL PROSOMA (Fig. 68A, E–F). Carapace length 9.52, width 8.21, length/width 1.16, clypeus to fovea length/carapace length 0.74, caput width/carapace width 0.77, carapace orange-brown, reflective setae present, moderate on caput, moderate on thorax, fovea procurved, fovea width/carapace length 0.21 (Fig. 68A, F); chelicerae red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.57 (Fig. 68A); eye group rectangular, width/length 2.45, eye tubercle present (Fig. 68E).

ABDOMEN (Fig. 68B, D). Abdomen length 13.74, brown, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 68C, G–I). Labium cuspules absent (Fig. 68H); maxillae heel distinct, cuspules present, count=about 110, extending posteriorly onto heel, extending laterally about 20% of maxillae length (Fig. 68C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 68C, I); sternum length/width 1.09, central sternum with consistent covering of moderate setae, row of longer setae around posterior edges (Fig. 68G–H); posterior sigilla ovoid, central sternum to posterior sigilla length/sternum length 0.26, posterior sigilla length/sternum length 0.17 (Fig. 68G–H); other sigilla small, round and lateral (Fig. 68G–H).

LEG I (Fig. 68J–K). Leg I orange-brown, darker on distal metatarsus and tarsus, femur length 7.32, patella length 4.78, tibia length 5.04, metatarsus length 4.49, tarsus length 2.62, total length 24.25, leg I length/carapace length 2.55; scopulae on distal metatarsus and tarsus; spine count Fe D 1, Fe PL 1, Pa PL 2, Ti PL 3, Ti RL 4, Me PL 2, Me RL 3, Ta 0; tibia length/width [TIL/TID] 2.93.

GENITALIA (Fig. 68D, L). Epigastric furrow unmodified (Fig. 68D); spermathecae with two vesicles each (Fig. 68L); lateral vesicle relatively straight, length 0.50, lateral vesicle length/genitalia width 0.32, length/width at base 1.35, crown un-demarcated (Fig. 68L); medial vesicle short, relatively straight and projecting ventro-laterally, medial vesicle length/genitalia width 0.25, length/width 4.12, medial vesicle length/lateral vesicle length 0.79 (Fig. 68L).

Distribution and natural history

Aname inimica has a wide distribution in north-eastern New South Wales, predominantly in the Brigalow Belt South, Nandewar, and New England Tablelands bioregions. It extends from Mandooran north to Moree, and from The Pilliga east to Armidale (Fig. 10). The form of burrows constructed by spiders of this species is unknown, but is likely to be similar to that of other *barrema*-complex species (Fig. 10).

Aname magnifica sp. nov.

[urn:lsid:zoobank.org:act:A00657A1-A048-4FFE-938F-E694CDF15614](https://zoobank.org/urn:lsid:zoobank.org:act:A00657A1-A048-4FFE-938F-E694CDF15614)

Figs 10, 69–70

Diagnosis

Males of *A. magnifica* sp. nov. can be distinguished from all species for which males are known except *A. barrema* and *A. inimica* by a moderate to large body size (carapace length >4.0 mm), the presence of a copulatory organ with the bulb tapering into a long embolus (embolus length/bulb length >1.5) with a slightly thicker basal section that narrows and curves sharply at about 0.6 of length, a patch of thicker setae proximally of a setose depression, and the absence of a pronounced, sharp heel on metatarsus I (as in *pallida*-complex species) (Fig. 69A–Q). Males of *A. magnifica* can be distinguished from those of *A. inimica* by the presence of a longer embolus (embolus length/bulb length >1.5; cf. ~1.2) (Fig. 69L–M; cf. Fig. 67). Males of *A. magnifica* can be distinguished from those of *A. barrema* by the presence of a shorter aetose depression on the palp tibia (depression length/tibia length ~0.6; cf. ~0.7 in *A. barrema*) and a thicker metatarsus I (metatarsus I length/width ~3.5; cf. ~4.5 in *A. barrema*) (Fig. 69K, Q; cf. Fig. 64).

Females of *A. magnifica* sp. nov. can be distinguished from all species for which females are known except *A. barrema* and *A. distincta* by the presence of spermathecae with two vesicles, with relatively long and straight lateral vesicles (lateral vesicle length/genitalia width >0.25) that don't curve medially at their ends, and very short, straight medial vesicles (medial vesicle length/lateral vesicle length <0.5) (Fig. 70D, L). Females of *A. magnifica* can be distinguished from those of *A. barrema* and *A. distincta* by the presence of larger posterior sigilla on the sternum (posterior sigilla length/sternum length ~0.18; cf. ~0.14) and spermathecae with triangular lateral vesicles with wide bases tapering to narrow ends (Fig. 70G–H, L; cf. Figs 65–66).

Etymology

The specific epithet '*magnifica*' is an adjective derived from the Latin '*magnificus*', meaning 'great, grand', or 'magnificent', in reference to the large and relatively robust nature of this species.

Type material

Holotype

AUSTRALIA – New South Wales • ♂; Inverell; 29°46' S, 151°07' E; 10 Oct. 1996; L. Abra leg.; AMS KS49693.

Paratypes

AUSTRALIA – New South Wales • 1 ♀; Inverell; 29°46' S, 151°07' E; Sep. 1986; R. Gunning leg.; AMS KS16758 • 1 ♀; Inverell; 29°46' S, 151°07' E; 10 Aug. 1953; R.F. Cook leg.; AMS KS69998 • 1 ♂; Inverell; 29°46' S, 151°03' E; 10 Oct. 1986; University of New South Wales leg.; QMB S6712.

Other material examined

AUSTRALIA – New South Wales • 1 ♂; Graman; 29°31' S, 150°20' E; 6 Sep. 1979; under eucalypt, in garden; QMB S1282 (paratype of *Aname inimica* Raven, 1985) • 1 ♀; Gurley; 29°44' S, 149°48' E; 5 Oct. 2005; AMS KS92856.

Description

Male (holotype, AMS KS49693)

GENERAL (Fig. 69A–Q). Body length 22.17, in good condition, colour presumably faded due to preservation.

DORSAL PROSOMA (Fig. 69A, E–F). Carapace length 8.92, width 7.47, length/width 1.19, clypeus to fovea length/carapace length 0.72, caput width/carapace width 0.67, carapace dark red-brown, reflective setae present, moderate on caput, moderate on thorax, fovea procurved, fovea width/carapace length 0.16 (Fig. 69A, F); chelicerae dark red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.47 (Fig. 69A); eye group rectangular, width/length 1.91, eye tubercle present (Fig. 69E).

ABDOMEN (Fig. 69B, D). Abdomen length 8.79, light grey, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 69C, G–I). Labium cuspules present, count=1 (Fig. 69H); maxillae heel distinct, cuspules present, count=about 130, extending posteriorly onto heel, extending laterally about 35% of maxillae length (Fig. 69C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 69C, I); sternum length/width 1.16, central sternum with consistent covering of short setae, row of longer setae around posterior edges (Fig. 69G–H); posterior sigilla circular, central sternum to posterior sigilla length/sternum length 0.25, posterior sigilla length/sternum length 0.16 (Fig. 69G–H); other sigilla small, round and lateral (Fig. 69G–H).

LEG I (Fig. 69N–Q). Leg I red-brown, lighter on distal metatarsus and tarsus, reflective setae on dorsal femur, femur length 6.69, patella length 4.25, tibia length 4.70, metatarsus length 4.62, tarsus length 2.94, total length 23.19, leg I length/carapace length 2.60 (Fig. 69N–O); scopulae on distal metatarsus and tarsus (Fig. 69N–O); spine count Fe D 2, Fe PL 1, Pa PL 2, Ti PL 0, Ti RL 0, Me PL 0, Me RL 0, Ta 0 (Fig. 69N–O); tibia length/width [TIL/TID] 3.09, even width along length, spur present, intermediate triangular/digitiform, knuckle absent, megaspine angled at 30 degrees, length to distal face of spur/tibia length [TIS/TIL] 0.48, spur height/tibia width [TISH/TID] 0.61, megaspine length/tibia length 0.22 (Fig. 69N–P); metatarsus relatively straight, proximal excavation present, excavation concave with slight heel, heel semi-sharp, excavation length/metatarsus length [MIPEL/MIL] 0.48, metatarsus length/width [MIL/MID] 3.46 (Fig. 69N–O, Q).

PEDIPALP (Fig. 69J–M). Tibia length 3.50, width 1.50, length/width [PTL/PTD] 2.34, aetose depression present, depression length/palp tibia length [PDL/PTL] 0.60, retrolateral face with patch of long setae proximally of aetose depression, ventral face with two elongate bristle-like setae below depression, prolateral face with patch of spines on distal half, disto-medial spine absent (Fig. 69J–K); patella prolateral face with 2 (both rubbed off) spines (Fig. 69J–K); cymbium with scopulae present distally (Fig. 69J–K); copulatory organ total length 2.05, length/palp tibia length 0.59 (Fig. 69L–M); bulb length/width 1.00 (Fig. 69L–M); embolus tapering from bulb, attenuate, swollen base tapering before strong curve to sinuous tip, one strong bend, at about 0.6 of length, width at base/bulb width 0.33, embolus length/bulb length 1.75 (Fig. 69L–M).

Female (paratype, AMS KS16758)

GENERAL (Fig. 70A–L). Body length 24.90, in good condition, colour presumably faded due to preservation.

DORSAL PROSOMA (Fig. 70A, E–F). Carapace length 9.52, width 8.20, length/width 1.16, clypeus to fovea length/carapace length 0.73, caput width/carapace width 0.78, carapace orange-brown, reflective setae present, light on caput, light on thorax, fovea procurved, fovea width/carapace length 0.16 (Fig. 70A, F); chelicerae red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.57 (Fig. 70A); eye group rectangular, width/length 1.83, eye tubercle present (Fig. 70E).

ABDOMEN (Fig. 70B, D). Abdomen length 9.78, dark brown, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 70C, G–I). Labium cuspules absent (Fig. 70H); maxillae heel distinct, cuspules present, count=about 165, extending posteriorly onto heel, extending laterally about 30% of maxillae length (Fig. 70C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 70C, I); sternum length/width 1.21, central sternum with consistent covering of moderate setae, row of longer setae around posterior edges (Fig. 70G–H); posterior sigilla ovoid, central sternum to posterior sigilla length/sternum length 0.20, posterior sigilla length/sternum length 0.18 (Fig. 70G–H); other sigilla small, round and lateral (Fig. 70G–H).

LEG I (Fig. 70J–K). Leg I orange-brown, femur length 7.04, patella length 5.00, tibia length 4.66, metatarsus length 4.25, tarsus length 2.80, total length 23.75, leg I length/carapace length 2.50; scopulae on distal metatarsus and tarsus; spine count Fe D 1, Fe PL 1, Pa PL 2, Ti PL 2, Ti RL 4, Me PL 1, Me RL 1, Ta 0; tibia length/width [TIL/TID] 2.63.

GENITALIA (Fig. 70D, L). Epigastric furrow unmodified (Fig. 70D); spermathecae with two vesicles each (Fig. 70L); lateral vesicle relatively straight, length 0.74, lateral vesicle length/genitalia width 0.43, length/width at base 1.64, crown un-demarcated (Fig. 70L); medial vesicle short, relatively straight and projecting ventrally, medial vesicle length/genitalia width 0.14, length/width 1.53, medial vesicle length/lateral vesicle length 0.32 (Fig. 70L).

Distribution and natural history

Aname magnifica sp. nov. occurs in north-eastern New South Wales, in the Nandewar and New England Tablelands bioregions, where it is known from four locations extending from Gurley in the east to Inverell in the west (Fig. 10). The form of burrows constructed by spiders of this species is unknown, but is likely to be similar to that of other *barrema*-complex species (Fig. 10).

Aname warialda-complex

Figs 1, 3F, 5F, 11, 71–82

Remarks

See the key to complexes and Figures 3–5 for diagnostic information. In life, *warialda*-complex species range in colour from a light tan ‘coffee’ colour, to almost black. They tend to grow quite large, and their carapace has only inconspicuous setation, compared to the conspicuous reflective setation present in species of many of the other complexes present in eastern Australia (Fig. 11; cf. Figs 6–10). They construct an open, silk-lined burrow with silk extending out from the entrance, with a short hidden ‘wishbone’ entrance with a thick, white sheath of silk near the top (see Fig. 11, image of *A. scutitheca* sp. nov. burrow) although this is covered with soil and can only be seen when the burrow is excavated. The burrow entrance is often quite conspicuous, sometimes with a soil mound around the entrance, or with the entrance embedded in low vegetation (Fig. 11).

Distribution

The *warialda*-complex occurs from the New South Wales north coast, in the New England Tablelands, Nandewar, and Brigalow Belt South bioregions, to as far north as the Einasleigh Uplands and Wet Tropics bioregions of northern Queensland. They are typically found inland of the Great Dividing Range (Fig. 11).

Composition

The *warialda*-complex includes six described species: *Aname bifaceta* sp. nov., *A. boreovillosa* sp. nov., *A. occivillosa* sp. nov., *A. scutitheca* sp. nov., *A. villosa* (Rainbow & Pulleine, 1918), and *A. warialda* Raven, 1985. Another potentially distinct species, *A.* sp. “maraboon”, is shown in the phylogeny (Fig. 1)

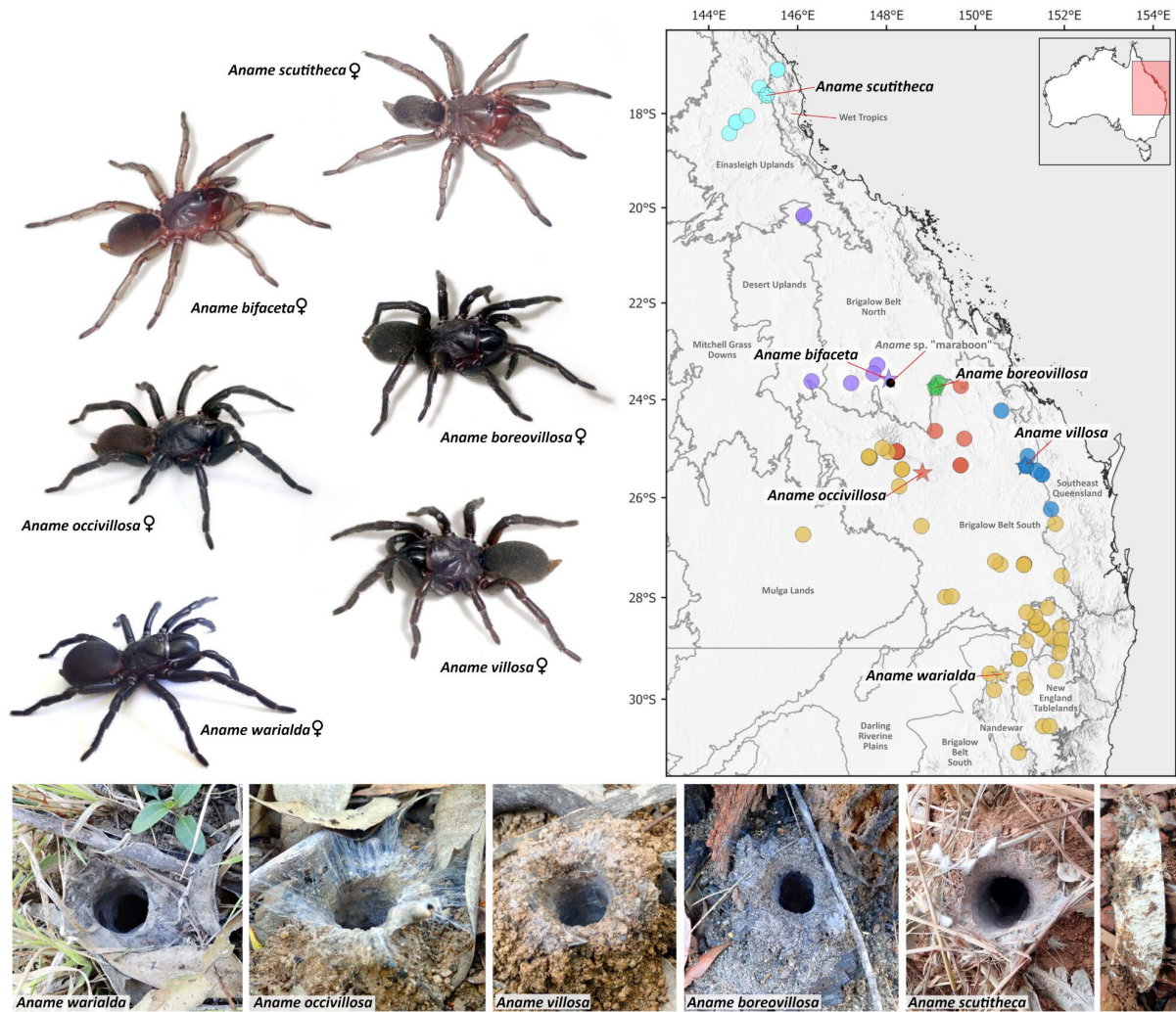


Fig. 11. *Aname warialda*-complex species habitus images, distribution map, and burrow architecture. Points on the map represented by a star are type localities. Note that intraspecific variation occurs in both physical appearance and burrow architecture, and images shown here should be treated only as examples, not used for species diagnosis.

and on the map for this complex (Fig. 11); however, because only a single specimen of this species is known, and it is morphologically so similar to *A. bifaceta*, further evidence is required to confirm that these species are distinct.

Key to species in the *Aname warialda*-complex

Note: males are unknown for *A. boreovillosa* sp. nov.

- 1. Male 2
- Female 6

Males

- 2. Embolus length <math>< 2 \times \text{bulb length}</math>; palp tibia asetose depression length <math>< 0.6 \times \text{palp tibia length}</math> (Figs 74, 78) 3

- Embolus longer ($>2 \times$ bulb length), asetose depression longer ($>0.6 \times$ palp tibia length) (Figs 71, 76, 81)..... 4
- 3. Metatarsus I with a relatively sharp heel; embolus gradually curving (Fig. 74).....
..... *A. occivillosa* sp. nov.
- Metatarsus I with a more rounded heel, embolus straighter (Fig. 78).....
..... *A. villosa* Rainbow & Pulleine, 1918
- 4. Tibia I widening from the proximal end to the base of the tibial spur when in lateral view; palp tibia relatively spiny (Fig. 76).....*A. scutitheca* sp. nov.
- Tibia I staying about the same width from the proximal end to the base of the tibial spur when in lateral view; palp tibia less spiny..... 5
- 5. Palp tibia asetose depression length $\sim 0.71 \times$ palp tibia length; tibia I with a knuckle at the base of the tibial spur (Fig. 81)*A. warialda* Raven, 1985
- Palp tibia asetose depression shorter $\sim 0.61 \times$ palp tibia length; tibia I without a knuckle at the base of the tibial spur (Fig. 71)..... *A. bifaceta* sp. nov.

Females

- 6. Spermathecae with a single vesicle (medial vesicle absent) (Figs 72, 77, 82)..... 7
- Spermathecae with medial vesicles present (Figs 73, 75, 80) 9
- 7. Ventral abdomen with a rounded extension of the posterior genital plate covering the epigastric furrow (Fig. 77)*A. scutitheca* sp. nov.
- Ventral abdomen without an unmodified epigastric furrow 8
- 8. Spermathecae vesicle length $\sim 0.8 \times$ genitalia width (Fig. 82).....*A. warialda* Raven, 1985
- Spermathecae with shorter vesicles (length $\sim 0.5 \times$ genitalia width) (Fig. 72)..... *A. bifaceta* sp. nov.
- 9. Spermathecae lateral vesicle length $<2.5 \times$ width, with round crowns (Fig. 73).....
..... *A. boreovillosa* sp. nov.
- Spermathecae with more elongate lateral vesicles and less rounded crowns (Figs 75, 80) 10
- 10. Spermathecae lateral vesicles with wide bases and asymmetrical crowns projecting laterally from the ends (Fig. 75).....*A. occivillosa* sp. nov.
- Spermathecae lateral vesicles with narrower bases and more symmetrical, flattened crowns (Figs 79–80)..... *A. villosa* Rainbow & Pulleine, 1918

Aname bifaceta sp. nov.

[urn:lsid:zoobank.org:act:BEE8A10C-EA96-402D-A993-86743C2BC8F8](https://zoobank.org/urn:lsid:zoobank.org:act:BEE8A10C-EA96-402D-A993-86743C2BC8F8)

Figs 1, 11, 71–72

Diagnosis

Males of *A. bifaceta* sp. nov. can be distinguished from all species for which males are known except *A. occivillosa* sp. nov., *A. scutitheca* sp. nov., *A. villosa*, and *A. warialda* by a moderate to large body size (carapace length >4.0 mm), the presence of a long embolus (embolus length/bulb length >1.5) that is relatively straight, a short tibial megaspine (megaspine length/tibia length <0.2), and three or more spines on the prolateral patellae of the pedipalp and leg I (Fig. 71A–Q). Males of *A. bifaceta* can be distinguished from those of *A. occivillosa* and *A. villosa* by the presence of a longer embolus (embolus length/bulb length >2.5) and a longer asetose depression on the palp tibia (depression length/palp tibia length >0.6) (Fig. 71J–M; cf. Figs 74, 78). Males of *A. bifaceta* can be distinguished from those of

A. scutitheca by the presence of a tibia I that stays about the same width from the proximal end to the base of the tibial spur when in lateral view and a less spiny palp tibia (Fig. 71J–K, N–P; cf. Fig. 76). Males of *A. bifaceta* can be distinguished from those of *A. warialda* by the presence of a shorter asetose depression on the palp tibia (depression length/palp tibia length ~ 0.61), and the absence of a knuckle at the base of the tibial spur (Fig. 71J–K, N–P; cf. Fig. 81).

Females of *A. bifaceta* sp. nov. can be distinguished from all species for which females are known except *A. scutitheca* sp. nov. and *A. warialda* by the presence of spermathecae with a single elongate, undulating vesicle (lateral vesicle length/genitalia width > 0.5) (Fig. 72L). Females of *A. bifaceta* can be distinguished from those of *A. scutitheca* by the absence of a large rounded extension of the posterior genital plate (“scute”) over the epigastric furrow (Fig. 72D, L; cf. Fig. 77). Females of *A. bifaceta* can be distinguished from those of *A. warialda* by the presence of smaller, shorter spermathecae (lateral vesicle length/genitalia width ~ 0.5 ; cf. ~ 0.8 in *A. warialda*) (Fig. 72L; cf. Fig. 82).

Etymology

The specific epithet ‘*bifaceta*’ combines the Latin ‘*faceta*’, meaning ‘facet’, with the prefix ‘*bi-*’, meaning ‘two’, in reference to the bicoloured nature of the species, which has a red carapace and darker legs, and also has lighter red radial stripes along the edge of the caput which contrast to the darker red colour on the rest of the carapace. The name also alludes to gemstones, referencing the distribution of the species near the ‘Gemfields’ region of central Queensland.

Type material

Holotype

AUSTRALIA – Queensland • ♂; Emerald; 23°35′ S, 148°03′ E; 14 May 1999; E.P.A. Emerald leg.; QMB S49920.

Paratype

AUSTRALIA – Queensland • 1 ♂; Sapphire; 23°28′ S, 147°43′ E; 2 Feb. 1991; L. Kempson leg.; QMB S18798.

Other material examined

AUSTRALIA – Queensland • 1 juv.; Jesmond Road, SW of Charters Towers; 20°10′ S, 146°08′ E; 368 m a.s.l.; 16 May 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground; QMB S118354 • 1 juv.; Jesmond Road, SW of Charters Towers; 20°10′ S, 146°09′ E; 348 m a.s.l.; 16 May 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground; QMB S118348 • 1 ♀; Carbine Creek, Capella-Rubyvale Road, near corner of Pine Creek Road; 23°17′ S, 147°48′ E; 261 m a.s.l.; 18 Apr. 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground; QMB S118282 • 1 ♀; Capricorn Highway, E of Jericho; 23°37′ S, 146°19′ E; 431 m a.s.l.; 19 Apr. 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground; QMB S118286 • 1 ♀; Drummond Range, Lookout off Capricorn Highway; 23°39′ S, 147°12′ E; 543 m a.s.l.; 19 Apr. 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground; QMB S118283.

Description

Male (holotype, QMB S49920)

GENERAL (Fig. 71A–Q). Body length 20.70, in good condition, colour presumably faded due to preservation.

DORSAL PROSOMA (Fig. 71A, E–F). Carapace length 8.75, width 7.51, length/width 1.17, clypeus to fovea length/carapace length 0.69, caput width/carapace width 0.63, carapace red-brown, caput slightly darker than thorax, reflective setae present, heavy on caput, light on thorax, fovea procurved, fovea

width/carapace length 0.16 (Fig. 71A, F); chelicerae red, rastellum absent or inconspicuous, chelicerae length/carapace length 0.40 (Fig. 71A); eye group rectangular, width/length 1.94, eye tubercle present (Fig. 71E).

ABDOMEN (Fig. 71B, D). Abdomen length 8.46, grey, dorsal pattern absent, with full covering of reflective setae.

VENTRAL PROSOMA (Fig. 71C, G–I). Labium cuspules absent (Fig. 71H); maxillae heel distinct, cuspules present, count=about 110, extending posteriorly onto heel, extending laterally about 40% of maxillae length (Fig. 71C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 71C, I); sternum length/width 1.11, central sternum with consistent covering of short setae, row of longer setae around posterior edges (Fig. 71G–H); posterior sigilla semi-elongate, central sternum to posterior sigilla length/sternum length 0.24, posterior sigilla length/sternum length 0.16 (Fig. 71G–H); other sigilla small and lateral, medial sigilla semi-elongate, anterior sigilla round (Fig. 71G–H).

LEG I (Fig. 71N–Q). Leg I orange-brown, femur length 6.73, patella length 4.26, tibia length 5.01, metatarsus length 4.64, tarsus length 2.92, total length 23.56, leg I length/carapace length 2.69 (Fig. 71N–O); scopulae on distal metatarsus and tarsus (Fig. 71N–O); spine count Fe D 5, Fe PL 2, Pa PL 3, Ti PL 0, Ti RL 0, Me PL 0, Me RL 0, Ta 0 (Fig. 71N–O); tibia length/width [TIL/TID] 3.31, even width along length, spur present, intermediate triangular/digitiform, knuckle absent, megaspine angled at 20 degrees, length to distal face of spur/tibia length [TIS/TIL] 0.52, spur height/tibia width [TISH/TID] 0.58, megaspine length/tibia length 0.16 (Fig. 71N–P); metatarsus slightly sinuous, proximal excavation present, excavation concave with pronounced heel, heel rounded, excavation length/metatarsus length [MIPEL/MIL] 0.46, metatarsus length/width [MIL/MID] 3.83 (Fig. 71N–O, Q).

PEDIPALP (Fig. 71J–M). Tibia length 3.38, width 1.33, length/width [PTL/PTD] 2.54, asetose depression present, depression length/palp tibia length [PDL/PTL] 0.61, retrolateral face with consistent covering of light setae, ventral face with two elongate bristle-like setae below depression, prolateral face with patch of spines on distal half, disto-medial spine present (Fig. 71J–K); patella prolateral face with 3 spines (Fig. 71J–K); cymbium with scopulae present distally (Fig. 71J–K); copulatory organ total length 2.38, length/palp tibia length 0.70 (Fig. 71L–M); bulb length/width 0.82 (Fig. 71L–M); embolus demarcated and roughly perpendicular to bulb, attenuate, long and straight with slightly swollen base, width at base/bulb width 0.25, embolus length/bulb length 2.84 (Fig. 71L–M).

Female (QMB S118282)

GENERAL (Fig. 72A–L). Body length 21.32, in good condition.

DORSAL PROSOMA (Fig. 72A, E–F). Carapace length 7.63, width 6.71, length/width 1.14, clypeus to fovea length/carapace length 0.71, caput width/carapace width 0.73, carapace orange-brown, with distinct lighter bands radiating from fovea along sides of caput, reflective setae absent or inconspicuous, fovea procurved, fovea width/carapace length 0.17 (Fig. 72A, F); chelicerae orange, rastellum absent or inconspicuous, chelicerae length/carapace length 0.58 (Fig. 72A); eye group rectangular, width/length 1.8, eye tubercle present (Fig. 72E).

ABDOMEN (Fig. 72B, D). Abdomen length 9.00, dark brown, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 72C, G–I). Labium cuspules absent (Fig. 72H); maxillae heel distinct, cuspules present, count=about 148, extending posteriorly onto heel, extending laterally about 40% of maxillae length (Fig. 72C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 72C, I); sternum length/width 1.06, central sternum with consistent covering of short setae, row of longer setae

around posterior edges, setae at higher density around anterior edges (Fig. 72G–H); posterior sigilla semi-elongate, central sternum to posterior sigilla length/sternum length 0.27, posterior sigilla length/sternum length 0.17 (Fig. 72G–H); other sigilla small, round and lateral (Fig. 72G–H).

LEG I (Fig. 72J–K). Leg I pallid, darker on patella and tibia, femur length 5.59, patella length 3.64, tibia length 3.73, metatarsus length 3.40, tarsus length 2.20, total length 18.56, leg I length/carapace length 2.43; scopulae on distal metatarsus and tarsus; spine count Fe D 0, Fe PL 1, Pa PL 3 (proximal two rubbed off), Ti PL 2 (weak), Ti RL 4 (weak), Me PL 3, Me RL 3, Ta 0; tibia length/width [TIL/TID] 2.85.

GENITALIA (Fig. 72D, L). Epigastric furrow unmodified (Fig. 72D); spermathecae with one vesicle each (Fig. 72L); lateral vesicle undulating, with several distinct bends, length 0.74, lateral vesicle length/genitalia width 0.51, length/width at base 4.88, crown slightly wider than stem (Fig. 72L).

Distribution and natural history

Aname bifaceta sp. nov. has a wide distribution in central Queensland, in the Brigalow Belt North bioregion, from the town of Emerald west at least to Alpha. Juvenile specimens collected much further north from near Charters Towers have been tentatively linked to this species based on morphology and molecular data, presumably representing the northern limit of its distribution (Fig. 11). It constructs an open, silk-lined burrow with silk spilling out from the entrance, sometimes with a built-up mound of soil around the entrance. The burrow has a short, hidden ‘wishbone’ entrance, which, when excavated, is revealed to terminate in a distinctly thick, white sheath of silk (Fig. 11).

Aname boreovillosa sp. nov.

[urn:lsid:zoobank.org:act:DFE829AD-D451-4067-ABF3-42E1DA80E31F](https://doi.org/10.21203/rs.3.rs-2211111/v1)

Figs 1, 11, 73

Diagnosis

Males of *A. boreovillosa* sp. nov. are unknown.

Females of *A. boreovillosa* sp. nov. can be distinguished from all species for which females are known except *A. occivillosa* sp. nov. and *A. villosa* by the presence of spermathecae with two vesicles, with relatively long, undulating lateral vesicle (lateral vesicle length/genitalia width >0.25) and tightly undulating medial vesicles (Fig. 73L). Females of *A. boreovillosa* can be distinguished from those of *A. occivillosa* and *A. villosa* by the presence of spermathecae with less elongate lateral vesicles with wide, rounded crowns (lateral vesicle length/width <2.5) (Fig. 73L; cf. Figs 75, 79–80).

Etymology

The specific epithet ‘*boreovillosa*’ combines the Latin adjective ‘*villosa*’, meaning ‘hairy’ or ‘shaggy’ (and is the species epithet of a closely related and previously described species), with the prefix ‘*boreo-*’, meaning ‘northern’, in reference to this species’ close relatedness to *Aname villosa*, and its northern distribution relative to that species.

Type material

Holotype

AUSTRALIA – Queensland • ♀; Blackdown Tableland National Park, off Charlevue Road; 23°45′ S, 149°06′ E; 839 m a.s.l.; 20 Apr. 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground; QMB S118291.

Other material examined

AUSTRALIA – Queensland • 1 ♀; Charlevue Road, W of Dingo; 23°39' S, 149°10' E; 168 m a.s.l.; 20 Apr. 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground; QMB S118296 • 1 juv.; Blackdown Tableland National Park, off Charlevue Road; 23°45' S, 149°06' E; 832 m a.s.l.; 20 Apr. 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground; QMB S118289.

Description

Female (holotype, QMB S118291)

GENERAL (Fig. 73A–L). Body length 26.01, in good condition.

DORSAL PROSOMA (Fig. 73A, E–F). Carapace length 9.51, width 8.27, length/width 1.15, clypeus to fovea length/carapace length 0.72, caput width/carapace width 0.80, carapace orange-brown, reflective setae present, light on caput, light on thorax, fovea procurved, fovea width/carapace length 0.16 (Fig. 73A, F); chelicerae red, rastellum absent or inconspicuous, chelicerae length/carapace length 0.54 (Fig. 73A); eye group rectangular, width/length 1.76, eye tubercle present (Fig. 73E).

ABDOMEN (Fig. 73B, D). Abdomen length 11.34, dark brown, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 73C, G–I). Labium cuspules present, count = 1 (Fig. 73H); maxillae heel distinct, cuspules present, count = about 200, extending posteriorly onto heel, extending laterally about 50% of maxillae length (Fig. 73C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 73C, I); sternum length/width 1.05, most setae from right-posterior part of sternum are rubbed off, central sternum with consistent covering of short setae, row of longer setae around posterior edges, setae at higher density around anterior edges (Fig. 73G–H); posterior sigilla elongate, central sternum to posterior sigilla length/sternum length 0.23, posterior sigilla length/sternum length 0.22 (Fig. 73G–H); other sigilla small and lateral, medial sigilla semi-elongate, anterior sigilla round (Fig. 73G–H).

LEG I (Fig. 73J–K). Leg I orange-brown, femur length 7.18, patella length 4.70, tibia length 4.86, metatarsus length 4.44, tarsus length 2.56, total length 23.74, leg I length/carapace length 2.50; scopulae on distal metatarsus and tarsus; spine count Fe D 1, Fe PL 2, Pa PL 3, Ti PL 2, Ti RL 4, Me PL 2, Me RL 3, Ta 0; tibia length/width [TIL/TID] 2.97.

GENITALIA (Fig. 73D, L). Epigastric furrow extending slightly, posterior edge with rounded shape (Fig. 73D); spermathecae with two vesicles each (Fig. 73L); lateral vesicle undulating, with several distinct bends, length 0.78, lateral vesicle length/genitalia width 0.38, length/width at base 2.41, crown slightly wider than stem (Fig. 73L); medial vesicle short, undulating, and projecting postero-ventrally, medial vesicle length/genitalia width 0.29, length/width 6.72, medial vesicle length/lateral vesicle length 0.76 (Fig. 73L).

Distribution and natural history

Aname boreovillosa sp. nov. occurs on the Blackdown Tableland in central-eastern Queensland, in the Brigalow Belt South bioregion, located between Emerald and Rockhampton (Fig. 11). It constructs an open, silk-lined burrow with silk spilling out from the entrance, sometimes with a built-up mound of soil around the entrance. The burrow has a short, hidden ‘wishbone’ entrance, which, when excavated, is revealed to terminate in a distinctly thick, white sheath of silk (Fig. 11).

Aname occivillosa sp. nov.

urn:lsid:zoobank.org:act:DC68DCB6-46C0-4751-A344-88BE6F7EAEEC

Figs 1, 11, 74–75

Diagnosis

Males of *A. occivillosa* sp. nov. can be distinguished from all species for which males are known except *A. bifaceta* sp. nov., *A. scutitheca* sp. nov., *A. villosa*, and *A. warialda* by a moderate to large body size (carapace length >4 mm), the presence of a long embolus (embolus length/bulb length >1.5) that is relatively straight, a short tibial megaspine (megaspine length/tibia length <0.2), and three or more spines on the prolateral patellae of the pedipalp and leg I (Fig. 74A–Q). Males of *A. occivillosa* can be distinguished from those of *A. bifaceta*, *A. scutitheca*, and *A. warialda* by the presence of a shorter embolus (embolus length/bulb length <2) and a shorter asetose depression on the pedipalp tibia (depression length/pedipalp tibia length <0.6) (Fig. 74J–M; cf. Figs 71, 76, 81). Males of *A. occivillosa* can be distinguished from those of *A. villosa* by the presence of a sharper heel on metatarsus I and a more curved embolus (Fig. 74L, Q; cf. Fig. 78).

Females of *A. occivillosa* sp. nov. can be distinguished from all species for which females are known except *A. boreovillosa* sp. nov. and *A. villosa* by the presence of spermathecae with two vesicles, with relatively long, undulating lateral vesicle (lateral vesicle length/genitalia width >0.25) and tightly undulating medial vesicles (Fig. 75L). Females of *A. occivillosa* can be distinguished from those of *A. boreovillosa* by the presence of spermathecae with longer lateral vesicles with narrower or less-rounded crowns (lateral vesicle length/width >2.9) (Fig. 75L; cf. Fig. 73). Females of *A. occivillosa* can be distinguished from those of *A. villosa* by the presence of spermathecae with lateral vesicles with wide bases and asymmetrical crowns projecting laterally from the ends (Fig. 75L; cf. Fig. 79–80).

Etymology

The specific epithet ‘*occivillosa*’ combines the Latin adjective ‘*villosa*’, meaning ‘hairy’ or ‘shaggy’ (the species epithet of a closely related and previously described species), with the prefix ‘*occi-*’, meaning ‘western’, in reference to this species’ close relatedness to *Aname villosa*, and its western distribution relative to that species.

Type material

Holotype

AUSTRALIA – **Queensland** • ♂; Lonesome National Park, near lookout; 25°30′ S, 148°49′ E; 26 Nov.–11 Jan. 2011; D. Beard and B. Sigley leg.; pitfall trap, closed eucalypt woodland on rocky ridge; QMB S96935.

Paratypes

AUSTRALIA – **Queensland** • 1 ♀; Carnarvon National Park, Carnarvon Gorge trail; 25°03′ S, 148°13′ E; 402 m a.s.l.; 16 Apr. 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground; QMB S118269 • 1 ♀; Carnarvon National Park, off Mickey Creek trail; 25°04′ S, 148°15′ E; 418 m a.s.l.; 16 Apr. 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground; QMB S118271 • 1 ♀; Carnarvon National Park, off Mickey Creek trail; 25°04′ S, 148°14′ E; 456 m a.s.l.; 16 Apr. 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground; QMB S118264 • 1 ♀; Carnarvon National Park, Carnarvon Gorge trail; 25°04′ S, 148°14′ E; 413 m a.s.l.; 16 Apr. 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground; QMB S118270.

Other material examined

AUSTRALIA – **Queensland** • 1 ♂; Duaringa; 23°43′ S, 149°40′ E; 15 Nov. 1967; L. Strachen leg.; QMB S96484 • 1 ♀; Expedition Range, off Dawson Highway; 24°39′ S, 149°06′ E; 316 m a.s.l.; 15

Apr. 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground; QMB S118261 • 1 ♂; Brigalow Reserve Station, site 5; 24°48' S, 149°45' E; 160 m a.s.l.; 29 Oct.–16 Dec. 2000; D.J. Cook and G.B. Monteith leg.; pitfall trap, vine scrub; QMB S57747 • 1 juv.; Carnarvon National Park, off Mickey Creek trail; 25°04' S, 148°14' E; 446 m a.s.l.; 16 Apr. 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground; QMB S118265 • 1 juv.; Carnarvon National Park, off Mickey Creek trail; 25°04' S, 148°14' E; 459 m a.s.l.; 16 Apr. 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground; QMB S118266 • 1 juv.; Carnarvon National Park, near Rock Pool Picnic Area carpark; 25°04' S, 148°15' E; 407 m a.s.l.; 16 Apr. 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground; QMB S118267 • 1 ♀; Gwambegwine, NW on Taroom-Bauhinia Downs Road; 25°20' S, 149°40' E; 279 m a.s.l.; 15 Apr. 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground; QMB S118257 • 1 ♀; Gwambegwine, NW on Taroom-Bauhinia Downs Road; 25°20' S, 149°40' E; 258 m a.s.l.; 15 Apr. 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground; QMB S118259.

Description

Male (holotype, QMB S96935)

GENERAL (Fig. 74A–Q). Body length 24.89, in good condition, colour presumably faded due to preservation.

DORSAL PROSOMA (Fig. 74A, E–F). Carapace length 9.63, width 8.42, length/width 1.14, clypeus to fovea length/carapace length 0.70, caput width/carapace width 0.65, carapace red-brown, caput slightly darker than thorax, reflective setae present, heavy on caput, moderate on thorax, fovea procurved, fovea width/carapace length 0.13 (Fig. 74A, F); chelicerae dark red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.47 (Fig. 74A); eye group rectangular, width/length 1.96, eye tubercle present (Fig. 74E).

ABDOMEN (Fig. 74B, D). Abdomen length 10.08, light grey, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 74C, G–I). Labium cuspules absent (Fig. 74H); maxillae heel distinct, cuspules present, count=about 131, extending posteriorly onto heel, extending laterally about 45% of maxillae length (Fig. 74C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 74C, I); sternum length/width 1.08, central sternum with consistent covering of short setae, row of longer setae around posterior edges, some shorter thorn-like setae around anterior edges (Fig. 74G–H); posterior sigilla elongate, central sternum to posterior sigilla length/sternum length 0.20, posterior sigilla length/sternum length 0.18 (Fig. 74G–H); other sigilla small and lateral, medial sigilla semi-elongate, anterior sigilla round (Fig. 74G–H).

LEG I (Fig. 74N–Q). Leg I red-brown, lighter on distal metatarsus and tarsus, femur length 7.66, patella length 4.69, tibia length 5.46, metatarsus length 5.32, tarsus length 3.35, total length 26.49, leg I length/carapace length 2.75 (Fig. 74N–O); scopulae on distal metatarsus and tarsus (Fig. 74N–O); spine count Fe D 4, Fe PL 1, Pa PL 3, Ti PL 0, Ti RL 0, Me PL 0, Me RL 0, Ta 0 (Fig. 74N–O); tibia length/width [TIL/TID] 3.26, even width along length, spur present, digitiform, knuckle present, megaspine angled at 0 degrees, length to distal face of spur/tibia length [TIS/TIL] 0.52, spur height/tibia width [TISH/TID] 0.58, megaspine length/tibia length 0.16 (Fig. 74N–P); metatarsus slightly sinuous, proximal excavation present, excavation concave with pronounced heel, heel sharp, excavation length/metatarsus length [MIPEL/MIL] 0.47, metatarsus length/width [MIL/MID] 4.14 (Fig. 74N–O, Q).

PEDIPALP (Fig. 74J–M). Tibia length 3.71, width 1.53, length/width [PTL/PTD] 2.42, asetose depression present, depression length/palp tibia length [PDL/PTL] 0.57, retrolateral face with consistent covering

of light setae, ventral face with two elongate bristle-like setae below depression, prolateral face with patch of spines on distal half, disto-medial spine absent (Fig. 74J–K); patella prolateral face with 3 (proximal rubbed off) spines (Fig. 74J–K); cymbium with scopulae present distally (Fig. 74J–K); copulatory organ total length 2.01, length/palp tibia length 0.54 (Fig. 74L–M); bulb length/width 0.84 (Fig. 74L–M); embolus demarcated and roughly perpendicular to bulb, attenuate, tapering and curving relatively evenly to point, width at base/bulb width 0.24, embolus length/bulb length 1.97 (Fig. 74L–M).

Female (QMB S118269)

GENERAL (Fig. 75A–L). Body length 29.70, in good condition.

DORSAL PROSOMA (Fig. 75A, E–F). Carapace length 10.69, width 9.90, length/width 1.08, clypeus to fovea length/carapace length 0.73, caput width/carapace width 0.78, carapace dark red-brown, with distinct lighter bands radiating from fovea along sides of caput, reflective setae present, light on caput, light on thorax, fovea procurved, fovea width/carapace length 0.19 (Fig. 75A, F); chelicerae dark red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.55 (Fig. 75A); eye group rectangular, width/length 2.05, eye tubercle present (Fig. 75E).

ABDOMEN (Fig. 75B, D). Abdomen length 13.11, dark brown, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 75C, G–I). Labium cuspules absent (Fig. 75H); maxillae heel distinct, cuspules present, count=about 175, extending posteriorly onto heel, extending laterally about 40% of maxillae length (Fig. 75C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 75C, I); sternum length/width 1.01, most setae from right-posterior part of sternum are rubbed off, central sternum with consistent covering of short setae, row of longer setae around posterior edges, setae at higher density around anterior edges (Fig. 75G–H); posterior sigilla elongate, central sternum to posterior sigilla length/sternum length 0.22, posterior sigilla length/sternum length 0.23 (Fig. 75G–H); other sigilla small and lateral, medial sigilla semi-elongate, anterior sigilla round (Fig. 75G–H).

LEG I (Fig. 75J–K). Leg I red-brown, darker on patella and tibia, femur length 8.19, patella length 5.39, tibia length 5.63, metatarsus length 5.29, tarsus length 3.48, total length 27.97, leg I length/carapace length 2.62; scopulae on distal metatarsus and tarsus; spine count Fe D 0, Fe PL 1, Pa PL 2, Ti PL 2 (weak), Ti RL 4 (weak), Me PL 1, Me RL 3, Ta 0; tibia length/width [TIL/TID] 3.20.

GENITALIA (Fig. 75D, L). Epigastric furrow unmodified (Fig. 75D); spermathecae with two vesicles each (Fig. 75L); lateral vesicle undulating, with several distinct bends, length 1.26, lateral vesicle length/genitalia width 0.60, length/width at base 3.13, crown bending laterally (Fig. 75L); medial vesicle short, undulating, and projecting postero-ventrally, medial vesicle length/genitalia width 0.20, length/width 3.85, medial vesicle length/lateral vesicle length 0.33 (Fig. 75L).

Distribution and natural history

Aname occivillosa sp. nov. has a wide distribution in central Queensland, in the Brigalow Belt South bioregion. Its known range extends from Gwambegwine in the south-east to Carnarvon Gorge in the north-west and near Blackdown Tableland in the north-east (Fig. 11). It constructs an open, silk-lined burrow with silk spilling out from the entrance, sometimes with a built-up mound of soil around the entrance. The burrow has a short, hidden ‘wishbone’ entrance, which, when excavated, is revealed to terminate in a distinctly thick, white sheath of silk (Fig. 11).

Aname scutitheca sp. nov.

[urn:lsid:zoobank.org:act:15DFB331-1E69-48D5-8943-A0AB14FEEFBB](https://urn.lsid:zoobank.org:act:15DFB331-1E69-48D5-8943-A0AB14FEEFBB)

Figs 1, 11, 76–77

Aname collinsorum Raven, 1985 – Raven 1985 (pars): figs 12, 31, 55, 57 (illustrated female allotype QMB S1260 [100 Mile Swamp, Rosella Plains], and two females QMB S1284 [Mount Mulligan] assigned to *A. collinsorum* Raven, 1985, here identified as *A. scutitheca* sp. nov.).

Diagnosis

Males of *A. scutitheca* sp. nov. can be distinguished from all species for which males are known except *A. bifaceta* sp. nov., *A. occivillosa* sp. nov., *A. villosa*, and *A. warialda* by a moderate to large body size (carapace length >4.0 mm), a short tibial megaspine (megaspine length/tibia length <0.2), and three or more spines on the prolateral patellae of the pedipalp and leg I (Fig. 76A–P). Males of *A. scutitheca* can be distinguished from those of *A. occivillosa* and *A. villosa* by the presence of a longer asetose depression on the palp tibia (depression length/palp tibia length >0.6) (Fig. 76J–K; cf. Figs 74, 78). Males of *A. scutitheca* can be distinguished from those of *A. bifaceta* and *A. warialda* by the presence of a tibia I that widens from the proximal end to the base of the tibial spur when in lateral view and a relatively spiny palp tibia (Fig. 76N, P; cf. Figs 71, 81).

Females of *A. scutitheca* sp. nov. can be distinguished from all species for which females are known by the presence of a large rounded extension of the posterior genital plate (“scute”) over the epigastric furrow (Fig. 77D, L).

Etymology

The specific epithet ‘*scutitheca*’ is an adjective formed from the Latin ‘*scutum*’, meaning ‘shield’, and ‘*theca*’, meaning ‘cover’ or ‘case’ and alluding to the spermathecae. Combined, the epithet references the posterior extension of the epigynal plate that covers the epigastric furrow in adult females of this species.

Type material

Holotype

AUSTRALIA – Queensland • ♀; Silver Valley Road, off Kennedy Highway, W of Ravenshoe; 17°37' S, 145°18' E; 690 m a.s.l.; 12 May 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground; QMB S118327.

Paratypes

AUSTRALIA – Queensland • 1 ♀; Silver Valley Road, off Kennedy Highway, W of Ravenshoe; 17°36' S, 145°18' E; 708 m a.s.l.; 12 May 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground; QMB S118328 • 1 ♀; Silver Valley Road, off Kennedy Highway, W of Ravenshoe; 17°36' S, 145°18' E; 713 m a.s.l.; 12 May 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground; QMB S118332.

Other material examined

AUSTRALIA – Queensland • 1 juv.; Emerald Creek Falls, lookout track, Dinden West Forest Reserve, SE of Mareeba; 17°03' S, 145°33' E; 555 m a.s.l.; 1 May 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground; QMB S118320 • 1 juv.; Emerald Creek Falls, lookout track, Dinden West Forest Reserve, SE of Mareeba; 17°03' S, 145°33' E; 530 m a.s.l.; 1 May 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground; QMB S118321 • 1 ♂; Irvinebank; 17°27' S, 145°09' E; Feb. 2022; J. Meade leg.; QMB S72248 • 1 juv.; Forty Mile Scrub National Park, off Kennedy Highway; 18°03' S,

144°52' E; 780 m a.s.l.; 13 May 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground; QMB S118338 • 1 ♀; Undara Road, N of Undara Volcanic National Park; 18°11' S, 144°37' E; 754 m a.s.l.; 14 May 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground; QMB S118340 • 1 ♀; Undara Road, N of Undara Volcanic National Park; 18°11' S, 144°37' E; 754 m a.s.l.; 14 May 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground; QMB S118341 • 1 ♀; Rosella Plains, 100 Mile Swamp; 18°25' S, 144°28' E; 4–7 Nov. 1979; K. McDonald leg.; grassy open forest; QMB S1260 (allotype of *Aname collinsorum* Raven, 1985).

Description

Male (QMB S722248)

GENERAL (Fig. 76A–P). Body length 23.05, in poor condition, cuticle and tissue quite damaged and fragmented, colour probably faded significantly.

DORSAL PROSOMA (Fig. 76A, E–F). Carapace length 9.33, width 8.58, length/width 1.09, clypeus to fovea length/carapace length 0.71, caput width/carapace width 0.67, carapace red, caput slightly darker than thorax, reflective setae present, heavy on caput, light on thorax, fovea procurved, fovea width/carapace length 0.15 (Fig. 76A, F); chelicerae dark red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.53 (Fig. 76A); eye group rectangular, width/length 1.94, eye tubercle present (Fig. 76E).

ABDOMEN (Fig. 76B, D). Abdomen length 9.11, grey-brown, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 76C, G–I). Labium cuspules absent (Fig. 76H); maxillae heel distinct, cuspules present, count=about 130, extending posteriorly onto heel, extending laterally about 45% of maxillae length (Fig. 76C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 76C, I); sternum length/width 1.15, central sternum with consistent covering of short setae, row of longer setae around posterior edges (Fig. 76G–H); posterior sigilla elongate, central sternum to posterior sigilla length/sternum length 0.21, posterior sigilla length/sternum length 0.22 (Fig. 76G–H); other sigilla small and lateral, medial sigilla semi-elongate, anterior sigilla round (Fig. 76G–H).

LEG I (Fig. 76N, P). Leg I red, femur length 7.20, patella length 4.85, tibia length 5.29 (Fig. 76N, P); scopulae on distal metatarsus and tarsus (Fig. 76N, P); spine count Fe D 5, Fe PL 1, Pa PL 4, Ti PL 0, Ti RL 0, Ta 0 (Fig. 76N, P); tibia length/width [TIL/TID] 2.95, even width along length, spur present, digitiform, knuckle absent, megaspine angled at 3 degrees, length to distal face of spur/tibia length [TIS/TIL] 0.48, spur height/tibia width [TISH/TID] 0.63, megaspine length/tibia length 0.18 (Fig. 76N, P); metatarsus slightly sinuous (Fig. 76N, P).

PEDIPALP (Fig. 76J–K). Tibia length 4.20, width 1.60, length/width [PTL/PTD] 2.62, asetose depression present, depression length/palp tibia length [PDL/PTL] 0.65, retrolateral face with consistent covering of light setae, ventral face with one spine below depression, prolateral face with patch of spines on distal half, disto-medial spine present; patella prolateral face with 3 (proximal rubbed off) spines.

Female (holotype, QMB S118327)

GENERAL (Fig. 77A–L). Body length 30.52, in good condition.

DORSAL PROSOMA (Fig. 77A, E–F). Carapace length 9.43, width 8.00, length/width 1.18, clypeus to fovea length/carapace length 0.71, caput width/carapace width 0.71, carapace pallid, reflective setae absent or inconspicuous, fovea procurved, fovea width/carapace length 0.15 (Fig. 77A, F); chelicerae orange, rastellum absent or inconspicuous, chelicerae length/carapace length 0.59 (Fig. 77A); eye group rectangular, width/length 1.83, eye tubercle present (Fig. 77E).

ABDOMEN (Fig. 77B, D). Abdomen length 15.05, dark brown, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 77C, G–I). Labium cuspules absent (Fig. 77H); maxillae heel distinct, cuspules present, count=about 175, extending posteriorly onto heel, extending laterally about 40% of maxillae length (Fig. 77C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 77C, I); sternum length/width 1.18, central sternum with consistent covering of short setae, row of longer setae around posterior edges (Fig. 77G–H); posterior sigilla elongate, central sternum to posterior sigilla length/sternum length 0.19, posterior sigilla length/sternum length 0.20 (Fig. 77G–H); other sigilla small and lateral, medial sigilla semi-elongate, anterior sigilla round (Fig. 77G–H).

LEG I (Fig. 77J–K). Leg I pallid, darker on distal tarsus, femur length 7.26, patella length 4.96, tibia length 4.90, metatarsus length 4.58, tarsus length 2.86, total length 24.56, leg I length/carapace length 2.60; scopulae on distal metatarsus and tarsus; spine count Fe D 0, Fe PL 2, Pa PL 3, Ti PL 2, Ti RL 4 (weak), Me PL 2, Me RL 1, Ta 0; tibia length/width [TIL/TID] 3.09.

GENITALIA (Fig. 77D, L). Epigastric furrow extending significantly, posterior edge with rounded shape (Fig. 77D); spermathecae with one vesicle each (Fig. 77L); lateral vesicle undulating, with several distinct bends, length 1.19, lateral vesicle length/genitalia width 0.64, length/width at base 4.13, crown slightly wider than stem (Fig. 77L).

Distribution and natural history

Aname scutitheca sp. nov. has a wide distribution in northern Queensland, in the Einasleigh Uplands bioregion, from Irvinebank and Silver Valley, west to the Forty Mile Scrub and Undara Volcanic National Parks, and north to near Mareeba (Fig. 11). It constructs an open, silk-lined burrow with silk spilling out from the entrance, sometimes with a built-up mound of soil around the entrance. The burrow has a short, hidden ‘wishbone’ entrance, which, when excavated, is revealed to terminate in a distinctly thick, white sheath of silk (Fig. 11).

Aname villosa Rainbow & Pulleine, 1918 stat. rev.
Figs 1, 11, 78–80

Aname villosa Rainbow & Pulleine, 1918: 141, pl. 23 fig. 88.

Aname distincta (Rainbow, 1914) – Raven 1981: 338 (synonymy of *A. villosa* Rainbow & Pulleine, 1918 with *A. distincta* Rainbow, 1914 **here rejected**).

Diagnosis

Males of *A. villosa* can be distinguished from all species for which males are known except *A. bifaceta* sp. nov., *A. occivillosa* sp. nov., *A. scutitheca* sp. nov., and *A. warialda* by a moderate to large body size (carapace length >4 mm), the presence of a long embolus (embolus length/bulb length >1.5) that is relatively straight, a short tibial megaspine (megaspine length/tibia length <0.2), and three or more spines on the prolateral patellae of the pedipalp and leg I (Fig. 78A–Q). Males of *A. villosa* can be distinguished from those of *A. bifaceta*, *A. scutitheca*, and *A. warialda* by the presence of a shorter embolus (embolus length/bulb length <2) and a shorter asetose depression on the pedipalp tibia (depression length/pedipalp tibia length <0.6) (Fig. 78J–M; cf. Figs 71, 76, 81). Males of *A. villosa* can be distinguished from those of *A. occivillosa* by the presence of a more rounded heel on metatarsus I and a straighter embolus (Fig. 78L, Q; cf. Fig. 74).

Females of *A. villosa* can be distinguished from all species for which females are known except *A. boreovillosa* sp. nov. and *A. occivillosa* sp. nov. by the presence of spermathecae with two vesicles, with relatively long, undulating lateral vesicle (lateral vesicle length/genitalia width >0.25) and tightly undulating medial vesicles (Fig. 79L, 80L). Females of *A. villosa* can be distinguished from those of *A. boreovillosa* by the presence of spermathecae with longer lateral vesicles with narrower or less-rounded crowns (lateral vesicle length/width >2.9) (Figs 79L, 80L; cf. Fig. 73). Females of *A. villosa* can be distinguished from those of *A. occivillosa* by the presence of spermathecae with lateral vesicles with narrower bases and relatively symmetrical, distally-flattened crowns (Figs 79L, 80L; cf. Fig. 75).

Type material

Syntypes

AUSTRALIA – Queensland • 1 ♀; Eidsvold; 25°22' S, 151°07' E; AMS KS131260 (ex. AMS K40935) • 1 ♀; Eidsvold; 25°22' S, 151°07' E; AMS KS1395 (ex. AMS K40935).

Other material examined

AUSTRALIA – Queensland • 1 ♀; Biloela, on Dawson Highway, near Callide Timber Reserve; 24°14' S, 150°35' E; 372 m a.s.l.; 22 Apr. 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground; QMB S118302 • 1 ♀; Burnett Highway, SE of Cynthia State Forest; 25°09' S, 151°11' E; 196 m a.s.l.; 24 Apr. 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground; QMB S118305 • 1 juv.; Eidsvold, Hollywell Road; 25°21' S, 151°09' E; 220 m a.s.l.; 23 Apr. 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground; QMB S118303 • 1 juv.; Eidsvold, Hollywell Road; 25°21' S, 151°09' E; 222 m a.s.l.; 23 Apr. 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground; QMB S118304 • 1 ♂; Gurgeena Plateau; 25°27' S, 151°23' E; 350 m a.s.l.; 29 Dec. 2012–6 Feb. 2013; G.B. Monteith leg.; gutter trap, open forest; QMB S102922 • 1 ♀; Binjour, Swains Road; 25°32' S, 151°30' E; 373 m a.s.l.; 24 Apr. 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground; QMB S118307 • 1 juv.; Binjour, Swains Road; 25°32' S, 151°30' E; 380 m a.s.l.; 24 Apr. 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground; QMB S118306 • 1 ♂; The Bluff (Keysland); 26°14' S, 151°42' E; 500 m a.s.l.; 24 Nov. 1994–3 Feb. 1996; G.B. Monteith leg.; intercept trap, open forest; QMB S37633.

Description

Male (QMB S102922)

GENERAL (Fig. 78A–Q). Body length 20.79, in good condition, colour presumably faded due to preservation.

DORSAL PROSOMA (Fig. 78A, E–F). Carapace length 7.86, width 7.13, length/width 1.10, clypeus to fovea length/carapace length 0.70, caput width/carapace width 0.75, carapace red-brown, reflective setae present, heavy on caput, light on thorax, fovea procurved, fovea width/carapace length 0.14 (Fig. 78A, F); chelicerae red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.53 (Fig. 78A); eye group rectangular, width/length 1.88, eye tubercle present (Fig. 78E).

ABDOMEN (Fig. 78B, D). Abdomen length 8.70, grey-brown, dorsal pattern absent, with covering of reflective setae, and consistent cover of short setae.

VENTRAL PROSOMA (Fig. 78C, G–I). Labium cuspules absent (Fig. 78H); maxillae heel distinct, cuspules present, count=about 133, extending posteriorly onto heel, extending laterally about 35% of maxillae length (Fig. 78C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 78C, I); sternum length/width 1.10, central sternum with consistent covering of short setae, row of longer setae around posterior edges (Fig. 78G–H); posterior sigilla elongate, central sternum to posterior sigilla length/sternum length 0.23, posterior sigilla length/sternum length 0.19 (Fig. 78G–H); other sigilla small and lateral, medial sigilla semi-elongate, anterior sigilla round (Fig. 78G–H).

LEG I (Fig. 78N–Q). Leg I red-brown, femur length 6.59, patella length 4.31, tibia length 4.93, metatarsus length 4.61, tarsus length 3.09, total length 23.53, leg I length/carapace length 3.00 (Fig. 78N–O); scopulae on distal metatarsus and tarsus (Fig. 78N–O); spine count Fe D 6, Fe PL 1, Pa PL 3, Ti PL 0, Ti RL 0, Me PL 0, Me RL 0, Ta 0 (Fig. 78N–O); tibia length/width [TIL/TID] 3.56, even width along length, spur present, digitiform, knuckle present, megaspine angled at 13 degrees, length to distal face of spur/tibia length [TIS/TIL] 0.57, spur height/tibia width [TISH/TID] 0.63, megaspine length/tibia length 0.14 (Fig. 78N–P); metatarsus slightly sinuous, proximal excavation present, excavation concave with pronounced heel, heel rounded, excavation length/metatarsus length [MIPEL/MIL] 0.36, metatarsus length/width [MIL/MID] 3.94 (Fig. 78N–O, Q).

PEDIPALP (Fig. 78J–M). Tibia length 3.21, width 1.26, length/width [PTL/PTD] 2.55, asetose depression present, depression length/palp tibia length [PDL/PTL] 0.56, retrolateral face with consistent covering of light setae, ventral face with two elongate bristle-like setae below depression, prolateral face with patch of spines on distal half, disto-medial spine absent (Fig. 78J–K); patella prolateral face with 3 (proximal rubbed off) spines (Fig. 78J–K); cymbium with scopulae present distally (Fig. 78J–K); copulatory organ total length 1.83, length/palp tibia length 0.57 (Fig. 78L–M); bulb length/width 0.81 (Fig. 78L–M); embolus demarcated and roughly perpendicular to bulb, attenuate, tapering and curving relatively evenly to point, width at base/bulb width 0.21, embolus length/bulb length 1.64 (Fig. 78L–M).

Female (syntype, AMS KS131260 [ex. AMS K40935])

GENERAL (Fig. 79A–L). Body length 25.22, in moderate condition, colour faded significantly due to preservation.

DORSAL PROSOMA (Fig. 79A, E–F). Carapace length 9.88, width 8.88, length/width 1.11, clypeus to fovea length/carapace length 0.72, caput width/carapace width 0.72, carapace orange-brown, reflective setae present, light on caput, light on thorax, fovea procurved, fovea width/carapace length 0.19 (Fig. 79A, F); chelicerae red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.52 (Fig. 79A); eye group rectangular, width/length 1.74, eye tubercle present (Fig. 79E).

ABDOMEN (Fig. 79B, D). Abdomen length 10.24, brown, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 79C, G–I). Labium cuspules absent (Fig. 79H); maxillae heel distinct, cuspules present, count=about 230, extending posteriorly onto heel, extending laterally about 50% of maxillae length (Fig. 79C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 79C, I); sternum length/width 1.06, setae of right sternum rubbed off, central sternum with consistent covering of short setae, row of longer setae around posterior edges (Fig. 79G–H); posterior sigilla elongate, central sternum to posterior sigilla length/sternum length 0.22, posterior sigilla length/sternum length 0.18 (Fig. 79G–H); other sigilla small and lateral, medial sigilla semi-elongate, anterior sigilla round (Fig. 79G–H).

LEG I (Fig. 79J–K). Leg I orange-brown, femur length 7.35, patella length 4.91, tibia length 5.53, metatarsus length 4.62, tarsus length 3.06, total length 25.47, leg I length/carapace length 2.58; scopulae on distal metatarsus and tarsus; spine count Fe D 0, Fe PL 1 (rubbed off), Pa PL 3 (medial rubbed off), Ti PL 3, Ti RL 4, Me PL 2, Me RL 2, Ta 0; tibia length/width [TIL/TID] 3.46.

GENITALIA (Fig. 79D, L). Epigastric furrow extending slightly, posterior edge with rounded shape (Fig. 79D); spermathecae with two vesicles each (Fig. 79L); lateral vesicle undulating, with several distinct bends, length 0.67, lateral vesicle length/genitalia width 0.31, length/width at base 4.05, crown

slightly wider than stem (Fig. 79L); medial vesicle short, undulating, and projecting postero-ventrally, medial vesicle length/genitalia width 0.32, length/width 1.2, medial vesicle length/lateral vesicle length 1.05 (Fig. 79L).

Female (QMB S118302)

GENERAL (Fig. 80A–L). Body length 23.19, in good condition.

DORSAL PROSOMA (Fig. 80A, E–F). Carapace length 8.53, width 7.49, length/width 1.14, clypeus to fovea length/carapace length 0.72, caput width/carapace width 0.78, carapace dark red-brown, reflective setae present, heavy on caput, moderate on thorax, fovea procurved, fovea width/carapace length 0.16 (Fig. 80A, F); chelicerae dark red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.51 (Fig. 80A); eye group rectangular, width/length 1.71, eye tubercle present (Fig. 80E).

ABDOMEN (Fig. 80B, D). Abdomen length 10.22, dark grey, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 80C, G–I). Labium cuspules absent (Fig. 80H); maxillae heel distinct, cuspules present, count=about 250, extending posteriorly onto heel, extending laterally about 50% of maxillae length (Fig. 80C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 80C, I); sternum length/width 1.08, central sternum with consistent covering of short setae, row of longer setae around posterior edges, setae at higher density around anterior edges (Fig. 80G–H); posterior sigilla elongate, central sternum to posterior sigilla length/sternum length 0.21, posterior sigilla length/sternum length 0.20 (Fig. 80G–H); other sigilla small and lateral, medial sigilla semi-elongate, anterior sigilla round (Fig. 80G–H).

LEG I (Fig. 80J–K). Leg I orange-brown, darker on patella and tibia, femur length 7.33, patella length 4.87, tibia length 5.11, metatarsus length 4.64, tarsus length 2.94, total length 24.89, leg I length/carapace length 2.92; scopulae on distal metatarsus and tarsus; spine count Fe D 0, Fe PL 1, Pa PL 3, Ti PL 2, Ti RL 4, Me PL 0, Me RL 2, Ta 0; tibia length/width [TIL/TID] 3.30.

GENITALIA (Fig. 80D, L). Epigastric furrow extending slightly, posterior edge with rounded shape (Fig. 80D); spermathecae with two vesicles each (Fig. 80L); lateral vesicle undulating, with several distinct bends, length 1.00, lateral vesicle length/genitalia width 0.51, length/width at base 2.93, crown slightly wider than stem (Fig. 80L); medial vesicle short, undulating, and projecting postero-ventrally, medial vesicle length/genitalia width 0.52, length/width 1.58, medial vesicle length/lateral vesicle length 1.02 (Fig. 80L).

Distribution and natural history

Aname villosa occurs in central Queensland, in the north-eastern part of the Brigalow Belt South bioregion. It extends from near Wondai, north to near Biloela (Fig. 11). It constructs an open, silk-lined burrow with silk spilling out from the entrance, sometimes with a built-up mound of soil around the entrance. The burrow has a short, hidden ‘wishbone’ entrance, which, when excavated, is revealed to terminate in a distinctly thick, white sheath of silk (Fig. 11).

Remarks

This species was previously synonymised with *A. distincta* by Raven (1985); however, morphological examination of the syntypes and newly collected material has confirmed that it is a distinct species.

Aname warialda Raven, 1985
Figs 1, 11, 81–82

Aname warialda Raven, 1985: 407, figs 7, 18, 22, 35, 46, 56, 58.

Aname “MYG687” – Rix *et al.* 2021: figs 3, 6–7.

Diagnosis

Males of *A. warialda* can be distinguished from all species for which males are known except *A. bifaceta* sp. nov., *A. occivillosa* sp. nov., *A. scutitheca* sp. nov., and *A. villosa* by a moderate to large body size (carapace length >4.0 mm), the presence of a long embolus (embolus length/bulb length >1.5) that is relatively straight, a short tibial megaspine (megaspine length/tibia length <0.2), and three or more spines on the prolateral patellae of the pedipalp and leg I (Fig. 81A–Q). Males of *A. warialda* can be distinguished from those of *A. occivillosa* and *A. villosa* by the presence of a longer embolus (embolus length/bulb length >2.5) and a longer asetose depression on the palp tibia (depression length/palp tibia length >0.6) (Fig. 81J–M; cf. Figs 74, 78). Males of *A. warialda* can be distinguished from those of *A. scutitheca* by the presence of a tibia I that stays about the same width from the proximal end to the base of the tibial spur when in lateral view and a less spiny palp tibia (Fig. 81J–K, N–P; cf. Fig. 76). Males of *A. warialda* can be distinguished from those of *A. bifaceta* by the presence of a longer asetose depression on palp tibia (depression length/palp tibia length ~0.71), and a knuckle at the base of the tibial spur (Fig. 81J–K, N–P; cf. Fig. 71).

Females of *A. warialda* can be distinguished from all species for which females are known except *A. bifaceta* sp. nov. and *A. scutitheca* sp. nov. by the presence of spermathecae with a single elongate, undulating vesicle (lateral vesicle length/genitalia width >0.5) (Fig. 82L). Females of *A. warialda* can be distinguished from those of *A. scutitheca* by the absence of a large rounded extension of the posterior genital plate (“scute”) over the epigastric furrow (Fig. 82D, L; cf. Fig. 77). Females of *A. warialda* can be distinguished from those of *A. bifaceta* by the presence of larger, longer spermathecae (lateral vesicle length/genitalia width ~0.8; cf. ~0.5 in *A. bifaceta*) (Fig. 82L; cf. Fig. 72).

Type material

Holotype

AUSTRALIA – New South Wales • ♂; Warialda; 29°32' S, 150°35' E; 7 Jan. 1980; R. Hobbs leg.; QMB S1291.

Paratypes

AUSTRALIA – Queensland • 1 ♂; Girraween National Park; 28°50' S, 151°56' E; 5 Feb. 1979; H. Todd leg.; QMB S1296. – New South Wales • 1 ♀; Toowoomba; 27°34' S, 151°57' E; 10 Feb. 1965; T. Passlow leg.; QMB S1299 • 2 ♂♂; Tenterfield; 29°06' S, 151°54' E; Apr. 1983; G. Colvin leg.; QMB S1294 • 1 ♂; Texas Caves [Ashford Caves]; 29°12' S, 150°59' E; 4 Apr. 1979; L.R. Jeffrey leg.; QMB S1298 • 1 ♀; Inverell; 29°46' S, 151°07' E; May 1979; QMB S1314 • 1 ♂; Bingara; 29°49' S, 150°25' E; Jan. 1980; R. Hobbs leg.; QMB S1292.

Other material examined

AUSTRALIA – Queensland • 1 ♂; Carnarvon National Park, Mount Moffatt Section, near Marlong Arch; 24°59' S, 147°54' E; 760 m a.s.l.; 12 Dec. 2012–16 Jan. 2013; G.B. Monteith and G. Keith leg.; gutter trap, eucalypt forest; QMB S52397 • 2 ♂♂; Carnarvon National Park, Mount Moffatt Section; 25°04' S, 148°02' E; 13–15 Dec. 1987; G.B. Monteith, J. Thompson and D. Yeates leg.; QMB S11261 • 1 ♀; Mount Tabor Station, ca 147.2 km NNE of Morven; 25°10' S, 147°36' E; 8 Dec. 2020; C. Eddie and E. Amsters leg.; excavated, eucalypt forest; QMB S118236 • 1 ♀; Mount Tabor Station, ca 145.4

km NNE of Morven; 25°11' S, 147°37' E; 22 Oct. 2021; E. Amsters and R. Aisthorpe leg.; excavated, eucalypt forest, near watercourse; QMB S118245 • 1 ♀; Mount Tabor Station, ca 145.0 km NNE of Morven; 25°11' S, 147°36' E; 21 Oct. 2021; E. Amsters and R. Aisthorpe leg.; excavated, eucalypt forest; QMB S118242 • 1 ♀; 51.5 km NNW of Injune; 25°25' S, 148°21' E; 21 Sep. 2021; E. Amsters leg.; excavated, *Callitris* forest; QMB S118241 • 1 ♀; 51.3 km NNW of Injune; 25°26' S, 148°21' E; 21 Sep. 2021; E. Amsters leg.; excavated, *Callitris* forest; QMB S118239 • 1 ♀; 51.3 km NNW of Injune; 25°26' S, 148°21' E; 21 Sep. 2021; E. Amsters leg.; excavated, *Callitris* forest; QMB S118240 • 1 ♂; Hutton Creek, “Oak Wells”; 25°46' S, 148°17' E; 600 m a.s.l.; 15 Dec. 2001–7 Mar. 2002; G.B. Monteith and D.J. Cook leg.; pitfall trap, vine scrub; QMB S59308 • 1 ♂; Kingaroy; 26°31' S, 151°48' E; 1 Dec. 1995; D. Kamholtz leg.; QMB S29591 • 1 ♂; Roma; 26°34' S, 148°47' E; 24 Feb. 1986; R. Kunde leg.; QMB S100534 • 1 ♂; 40 km S of Charleville, “Wallal”; 26°44' S, 146°07' E; 23 Jan. 1996; P. McRae leg.; QMB S29635 • 1 ♂; Tara; 27°16' S, 150°27' E; 20 Nov. 2001; Queensland Department of Primary Industries leg.; QMB S118360 • 1 juv.; Lake Broadwater Conservation Park, N of lake; 27°20' S, 150°33' E; 335 m a.s.l.; 7 Dec. 2019; M.G. Rix and M.S. Harvey leg.; excavated, open burrow on ground, open woodland; QMB S111487 • 1 ♀; Lake Broadwater Conservation Park, Wilga Bush Camping Area; 27°20' S, 151°06' E; 345 m a.s.l.; 28 Oct. 2022; J.D. Wilson, E. Briggs, M.G. Rix and A.G. Rix leg.; excavated; QMB S118219 • 1 ♀; Lake Broadwater Conservation Park, Wilga Bush Camping Area; 27°20' S, 151°06' E; 345 m a.s.l.; 28 Oct. 2022; J.D. Wilson, E. Briggs, M.G. Rix and A.G. Rix leg.; excavated; QMB S118220 • 1 ♂; Lake Broadwater Conservation Park; 27°21' S, 151°05' E; 3 Jan.–25 Feb. 1986; Queensland Museum Party leg.; pitfall trap; QMB S3153 • 1 ♀; Moonbah, campsite [Alton National Park]; 27°59' S, 149°19' E; 9–11 Jan. 1979; R.J. Raven leg.; QMB S1295 • 1 ♂; Ula Ula National Park; 27°59' S, 149°28' E; 11 Nov. 2016; R.C. Santana leg.; QMB S110191 • 1 ♀; Durikai State Forest, Durikai Road; 28°12' S, 151°37' E; 531 m a.s.l.; 19 Feb. 2023; M.G. Rix, J.D. Wilson and M.S. Harvey leg.; excavated, open burrow on ground; QMB S118230 • 1 ♂; 18 km N of Inglewood, Robert Wicks Research Centre; 28°18' S, 151°09' E; 10 Jan. 1999; G. Rettke leg.; hand collected, on path at night, *Callitris* forest; QMB S42819 • 1 juv.; Oman Ama, E of Inglewood, Donovans Road; 28°23' S, 151°20' E; 342 m a.s.l.; 19 Feb. 2023; M.G. Rix, J.D. Wilson and M.S. Harvey leg.; excavated, open burrow on ground next to road; QMB S118229 • 1 juv.; Warroo, SE of Inglewood, Cement Mills Road; 28°31' S, 151°23' E; 409 m a.s.l.; 14 Aug. 2022; E.J. Briggs and M. S. Woolley leg.; excavated, y-shaped burrow, *Callitris* forest; QMB S118218 • 1 ♀; Warroo, SE of Inglewood, Cement Mills Road; 28°32' S, 151°21' E; 374 m a.s.l.; 19 Feb. 2023; M.G. Rix, J.D. Wilson and M.S. Harvey leg.; excavated, open burrow on ground next to road; QMB S118219 • 1 juv.; Warroo, SE of Inglewood, Cement Mills Road; 28°32' S, 151°21' E; 374 m a.s.l.; 19 Feb. 2023; M.G. Rix, J.D. Wilson and M.S. Harvey leg.; excavated, open burrow on ground next to road; QMB S118228 • 1 ♂; The Summit; 28°34' S, 151°57' E; 16 Jan. 1984; Queensland Department of Primary Industries leg.; QMB S100536 • 1 ♂; Stanthorpe; 28°37' S, 151°30' E; 21 Dec. 1994; Mr and Mrs Kuenstner leg.; QMB S26087 • 1 ♂; Stanthorpe; 28°37' S, 151°30' E; Apr. 2016; M. Hodgetts leg.; QMB S118359 • 1 ♀; Nundubbermere Falls, 25 km SW of Stanthorpe; 28°47' S, 151°41' E; 1–4 Apr. 1988; G.B. Monteith leg.; QMB S4192 • 1 ♂; Tenterfield, Wallangarra; 28°55' S, 151°56' E; Apr. 1983; M. Wanstall leg.; QMB S10000. – **New South Wales** • 1 ♂; Texas; 28°51' S, 151°09' E; 4 Feb. 1992; E.J. Greentree leg.; QMB S19135 • 1 ♂; Texas Caves [Ashford Caves]; 29°12' S, 150°59' E; 1–2 Feb. 1975; G.V. Czechura leg.; QMB S1297 • 1 ♂; Deepwater; 29°27' S, 151°49' E; 10 Dec. 1985; R. Hobbs leg.; QMB S9804 • 1 ♂; Emmaville; 29°30' S, 150°19' E; 13 Jun. 1996; F. Ginns leg.; QMB S34590 • 1 ♂; The Brigalows, 25 km N of Inverell; 29°37' S, 151°06' E; 1 Jan. 1991; F. Ginns leg.; QMB S34586 • 1 ♂; 15 km W of Armidale; 30°31' S, 151°31' E; 7 Dec. 1980; R. Hobbs leg.; QMB S9747 • 1 ♀; Armidale, near cemetery; 30°31' S, 151°40' E; AMS KS31709 • 1 ♂; Moore Creek, 8–10 km N of Tamworth; 31°02' S, 150°58' E; Jan. 1984; D. McCalee leg.; AMS KS13803.

Description

Male (holotype, QMB S1291)

GENERAL (Fig. 81A–Q). Body length 22.77, in good condition, colour presumably faded due to preservation.

DORSAL PROSOMA (Fig. 81A, E–F). Carapace length 8.81, width 7.71, length/width 1.14, clypeus to fovea length/carapace length 0.71, caput width/carapace width 0.66, carapace red, caput slightly darker than thorax, reflective setae present, heavy on caput, moderate on thorax, fovea procurved, fovea width/carapace length 0.16 (Fig. 81A, F); chelicerae dark red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.46 (Fig. 81A); eye group rectangular, width/length 1.84, eye tubercle present (Fig. 81E).

ABDOMEN (Fig. 81B, D). Abdomen length 9.63, brown, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 81C, G–I). Labium cuspules absent (Fig. 81H); maxillae heel distinct, cuspules present, count=about 150, extending posteriorly onto heel, extending laterally about 40% of maxillae length (Fig. 81C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 81C, I); sternum length/width 1.09, central sternum with consistent covering of short setae, row of longer setae around posterior edges (Fig. 81G–H); posterior sigilla elongate, central sternum to posterior sigilla length/sternum length 0.25, posterior sigilla length/sternum length 0.18 (Fig. 81G–H); other sigilla small and lateral, medial sigilla semi-elongate, anterior sigilla round (Fig. 81G–H).

LEG I (Fig. 81N–Q). Leg I orange-brown, femur length 6.88, patella length 4.41, tibia length 4.86, metatarsus length 4.63, tarsus length 3.24, total length 24.02, leg I length/carapace length 2.73 (Fig. 81N–O); scopulae on distal metatarsus and tarsus (Fig. 81N–O); spine count Fe D 4, Fe PL 1, Pa PL 3, Ti PL 0, Ti RL 0, Me PL 0, Me RL 0, Ta 0 (Fig. 81N–O); tibia length/width [TIL/TID] 3.21, even width along length, spur present, digitiform, knuckle present, megaspine angled at 3 degrees, length to distal face of spur/tibia length [TIS/TIL] 0.51, spur height/tibia width [TISH/TID] 0.61, megaspine length/tibia length 0.18 (Fig. 81N–P); metatarsus slightly sinuous, proximal excavation present, excavation concave with pronounced heel, heel rounded, excavation length/metatarsus length [MIPEL/MIL] 0.39, metatarsus length/width [MIL/MID] 3.78 (Fig. 81N–O, Q).

PEDIPALP (Fig. 81J–M). Tibia length 3.62, width 1.48, length/width [PTL/PTD] 2.45, aetose depression present, depression length/palp tibia length [PDL/PTL] 0.71, retrolateral face with consistent covering of light setae, ventral face with two elongate bristle-like setae below depression, prolateral face with patch of spines on distal half, disto-medial spine present (Fig. 81J–K); patella prolateral face with 3 spines (Fig. 81J–K); cymbium with scopulae present distally (Fig. 81J–K); copulatory organ total length 2.78, length/palp tibia length 0.77 (Fig. 81L–M); bulb length/width 0.94 (Fig. 81L–M); embolus demarcated and roughly perpendicular to bulb, attenuate, long and straight with slightly swollen base, width at base/bulb width 0.24, embolus length/bulb length 2.56 (Fig. 81L–M).

Female (QMB S118220)

GENERAL (Fig. 82A–L). Body length 25.16, in good condition.

DORSAL PROSOMA (Fig. 82A, E–F). Carapace length 8.96, width 8.65, length/width 1.04, clypeus to fovea length/carapace length 0.78, caput width/carapace width 0.74, carapace red-brown, reflective setae present, light on caput, light on thorax, fovea procurved, fovea width/carapace length 0.21 (Fig. 82A, F); chelicerae dark red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.62 (Fig. 82A); eye group rectangular, width/length 1.82, eye tubercle present (Fig. 82E).

ABDOMEN (Fig. 82B, D). Abdomen length 10.77, dark brown, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 82C, G–I). Labium cuspules absent (Fig. 82H); maxillae heel distinct, cuspules present, count=about 216, extending posteriorly onto heel, extending laterally about 40% of maxillae length (Fig. 82C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 82C, I); sternum length/width 1.06, central sternum with consistent covering of short setae, row of longer setae around posterior edges, setae at higher density around anterior edges (Fig. 82G–H); posterior sigilla elongate, central sternum to posterior sigilla length/sternum length 0.23, posterior sigilla length/sternum length 0.20 (Fig. 82G–H); other sigilla small, round and lateral (Fig. 82G–H).

LEG I (Fig. 82J–K). Leg I dark coffee-brown, darker on patella and tibia, femur length 6.85, patella length 4.64, tibia length 4.58, metatarsus length 4.29, tarsus length 2.76, total length 23.12, leg I length/carapace length 2.58; scopulae on distal metatarsus and tarsus; spine count Fe D 0, Fe PL 1, Pa PL 1, Ti PL 0, Ti RL 4, Me PL 1, Me RL 4, Ta 0; tibia length/width [TIL/TID] 3.01.

GENITALIA (Fig. 82D, L). Epigastric furrow extending slightly, posterior edge with rounded shape (Fig. 82D); spermathecae with one vesicle each (Fig. 82L); lateral vesicle undulating, with several distinct bends, length 1.47, lateral vesicle length/genitalia width 0.81, length/width at base 4.04, crown slightly wider than stem (Fig. 82L).

Distribution and natural history

Aname warialda has a wide distribution in northern New South Wales and south-eastern Queensland, in the Brigalow Belt South, Nandewar and New England Tablelands bioregions, from Tamworth north to Carnarvon National Park, and east to Toowoomba (Fig. 11). It constructs an open, silk-lined burrow with silk spilling out from the entrance, sometimes with a built-up mound of soil around the entrance. The burrow has a short, hidden ‘wishbone’ entrance, which, when excavated, is revealed to terminate in a distinctly thick, white sheath of silk (Fig. 11).

Aname rubrochelicera-complex

Figs 1, 3G, 4I, 5G, 12, 83–93

Remarks

See the key to complexes and Figures 3–5 for diagnostic information. In life, *rubrochelicera*-complex species are quite light in colour, ranging from pallid to tan-brown, although their chelicerae can be much darker in colour, depending on the species (Fig. 12). Their burrow is particularly unusual in its absence of a conspicuous silk lining, and usually also the absence of a secondary wishbone entrance (Fig. 12). However, some specimens have been collected with a secondary entrance, and when present, this consists of a secondary burrow shaft that runs directly adjacent to the main burrow.

Distribution

The *rubrochelicera*-complex occurs from northern New South Wales, in the Darling Riverine Plains and Brigalow Belt South Bioregions, as far north as the Cape York Peninsula in far north Queensland. They are typically found inland of the Great Dividing Range (Fig. 12).

Composition

The *rubrochelicera*-complex includes seven described species: *Aname fossoria* sp. nov., *A. fuscochelicera* sp. nov., *A. inglewood* sp. nov., *A. nigrochelicera* sp. nov., *A. nigrotarsa* sp. nov., *A. rubrochelicera* sp. nov., and *A. savannensis* sp. nov.

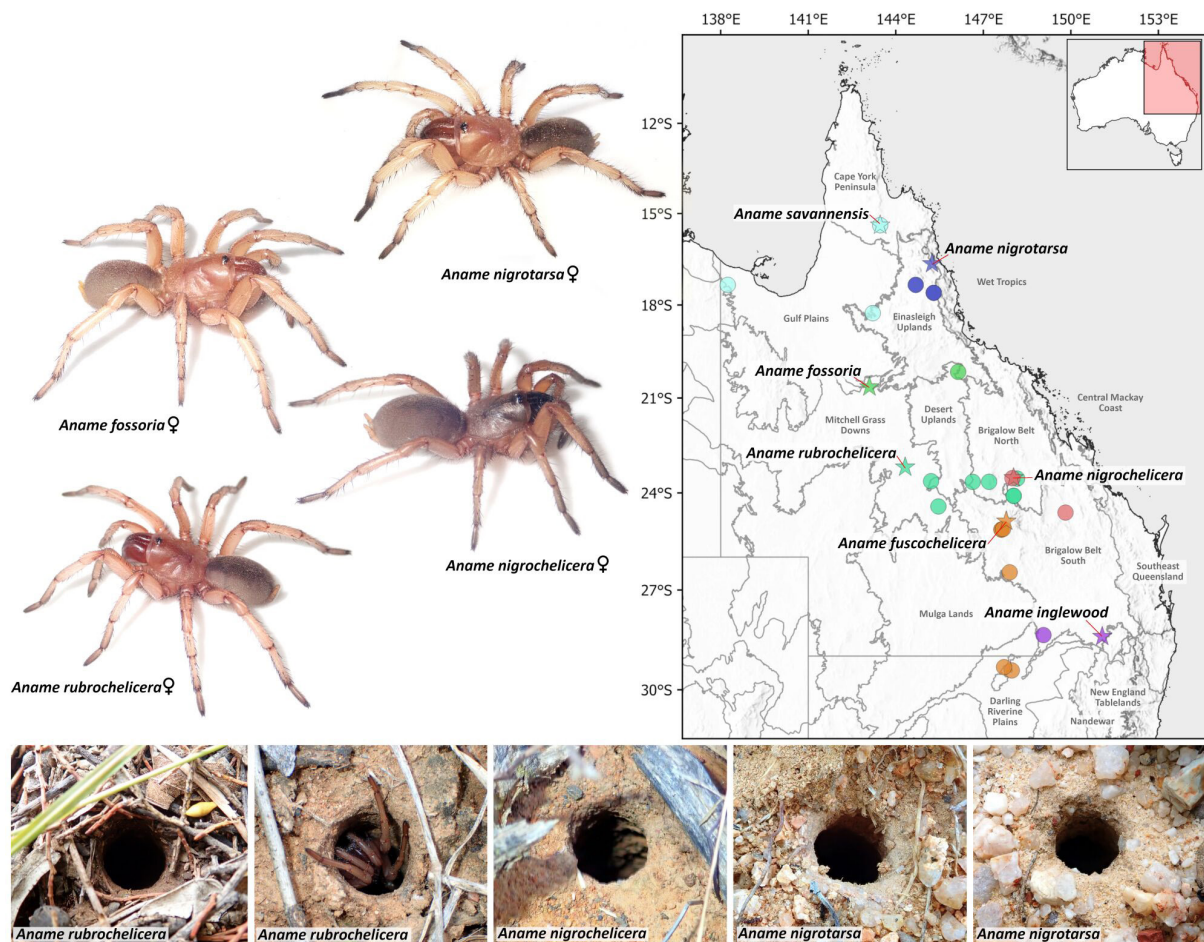


Fig. 12. *Aname rubrochelicera*-complex species habitus images, distribution map, and burrow architecture. Points on the map represented by a star are type localities. Note that intraspecific variation occurs in both physical appearance and burrow architecture, and images shown here should be treated only as examples, not used for species diagnosis.

Key to species in the *Aname rubrochelicera*-complex

Note: males are unknown for *A. fossoria* sp. nov. and *A. nigrotarsa* sp. nov., and females are unknown for *A. inglewood* sp. nov.

1. Male 2
- Female 6

Males

2. Tibial spur digitiform; embolus gently tapering and curving to tip (Fig. 92) *A. savannensis* sp. nov.
- Tibial spur triangular; embolus thicker and straighter, with bend before tip (e.g., Figs 84, 86–87) . 3
3. Embolus length $\sim 1.4 \times$ bulb length (Fig. 86) *A. inglewood* sp. nov.
- Embolus shorter than bulb (length $< 1 \times$ bulb length) (Figs 84, 87, 90) 4

4. Embolus length $\sim 0.94 \times$ bulb length (Fig. 84)..... *A. fuscochelicera* sp. nov.
 – Embolus shorter (length $< 0.8 \times$ bulb length) (Figs 87, 90)..... 5
5. Metatarsus I proximal excavation length $\sim 0.43 \times$ metatarsus I length (Fig. 87)
 *A. nigrochelicera* sp. nov.
 – Metatarsus I proximal excavation longer (length $\sim 0.53 \times$ metatarsus I length) (Fig. 90)
 *A. rubrochelicera* sp. nov.
- Females**
6. Medial vesicle undulating (Figs 83, 85, 89) 7
 – Medial vesicles straight (Figs 88, 91, 93)..... 9
7. Chelicerae dark brown (Fig. 85)..... *A. fuscochelicera* sp. nov.
 – Chelicerae lighter coloured..... 8
8. Spermathecae medial vesicle length $< 5 \times$ width; anterior legs without dark tarsi and distal metatarsi
 (Fig. 83) *A. fossoria* sp. nov.
 – Spermathecae with longer medial vesicles (length $> 5 \times$ width); anterior legs with dark tarsi and
 distal metatarsi (Fig. 89)..... *A. nigrotarsa* sp. nov.
9. Spermathecae lateral vesicles with narrow, rounded crowns; chelicerae dark brown
 (Fig. 88) *A. nigrochelicera* sp. nov.
 – Spermathecae lateral vesicles without narrow, rounded crowns; chelicerae lighter in colour (Figs 91,
 93)..... 10
10. Spermathecae medial vesicles with distally-flattened crowns (Fig. 91)..... *A. rubrochelicera* sp. nov.
 – Spermathecae medial vesicles with distally-rounded crowns (Fig. 93) *A. savannensis* sp. nov.

Aname fossoria sp. nov.

[urn:lsid:zoobank.org:act:D2C300AB-2A63-426B-8047-D0FFCBE21985](https://zoobank.org/act:D2C300AB-2A63-426B-8047-D0FFCBE21985)

Figs 1, 12, 83

Diagnosis

Males of *A. fossoria* sp. nov. are unknown.

Females of *A. fossoria* sp. nov. can be distinguished from all species for which females are known except *A. fuscochelicera* sp. nov., *A. nigrochelicera* sp. nov., *A. nigrotarsa* sp. nov., *A. rubrochelicera* sp. nov., and *A. savannensis* sp. nov. by the presence of spermathecae with two vesicles, with very short, wide lateral vesicles (lateral vesicle length/genitalia width < 0.25) and thinner medial vesicles projecting from the ventral face of the lateral vesicles (Fig. 83A–L). Females of *A. fossoria* can be distinguished from those of *A. nigrochelicera*, *A. rubrochelicera*, and *A. savannensis* by the presence of spermathecae with tightly undulating medial vesicles (Fig. 83L; cf. Figs 88, 91, 93). Females of *A. fossoria* can be distinguished from those of *A. fuscochelicera* by the presence of lighter red chelicerae (Fig. 83A, C; cf. Fig. 85). Females of *A. fossoria* can be distinguished from those of *A. nigrotarsa* by the presence of spermathecae with less elongate medial vesicles (medial vesicle length/width < 5) and anterior legs without dark tarsi and distal metatarsi (Fig. 83J–L; cf. Fig. 89).

Etymology

The specific epithet '*fossoria*' is a Latin adjective meaning 'digger' or 'burrower', in reference to both the collection locality of the holotype female, at the Richmond Fossil Site, and to the fossorial nature of the spider.

Type material

Holotype

AUSTRALIA – Queensland • ♀; Richmond fossil site; 20°39' S, 143°06' E; 199 m a.s.l.; 9 Apr. 2021; E.J. Briggs and V.O. Garcia leg.; excavated, open burrow on ground; QMB S118213.

Other material examined

AUSTRALIA – Queensland • 1 ♀; Jesmond Road, SW of Charters Towers; 20°10' S, 146°09' E; 365 m a.s.l.; 16 May 2023; J.D. Wilson and M.G. Rix leg.; open burrow with little silk and no wishbone; QMB S118351.

Description

Female (holotype, QMB S118213)

GENERAL (Fig. 83A–L). Body length 21.86, in good condition.

DORSAL PROSOMA (Fig. 83A, E–F). Carapace length 8.43, width 7.19, length/width 1.17, clypeus to fovea length/carapace length 0.71, caput width/carapace width 0.75, carapace pallid-orange, reflective setae absent or inconspicuous, fovea procurved, fovea width/carapace length 0.15 (Fig. 83A, F); chelicerae orange, rastellum absent or inconspicuous, chelicerae length/carapace length 0.45 (Fig. 83A); eye group rectangular, width/length 1.92, eye tubercle present (Fig. 83E).

ABDOMEN (Fig. 83B, D). Abdomen length 9.60, tan-brown, darker dorsally and lighter laterally, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 83C, G–I). Labium cuspules absent (Fig. 83H); maxillae heel distinct, cuspules present, count=about 80, extending posteriorly onto heel, extending laterally about 30% of maxillae length (Fig. 83C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 83C, I); sternum length/width 1.26, central sternum with consistent covering of short setae, row of longer setae around posterior edges, setae at higher density around anterior edges (Fig. 83G–H); posterior sigilla elongate, central sternum to posterior sigilla length/sternum length 0.26, posterior sigilla length/sternum length 0.15 (Fig. 83G–H); other sigilla small, round and lateral (Fig. 83G–H).

LEG I (Fig. 83J–K). Leg I pallid, reflective setae on dorsal femur, femur length 6.40, patella length 4.11, tibia length 4.64, metatarsus length 4.55, tarsus length 2.53, total length 22.23, leg I length/carapace length 2.64; scopulae on distal metatarsus and tarsus; spine count Fe D 3, Fe PL 1, Pa PL 4 (proximal weak, medial rubbed off), Ti PL 5, Ti RL 5, Me PL 4, Me RL 5, Ta 0; tibia length/width [TIL/TID] 3.22.

GENITALIA (Fig. 83D, L). Epigastric furrow unmodified (Fig. 83D); spermathecae with two vesicles each (Fig. 83L); lateral vesicle very wide, short and roughly triangular, length 0.21, lateral vesicle length/genitalia width 0.12, length/width at base 0.34, crown distinct and narrow (Fig. 83L); medial vesicle short, undulating, and projecting postero-ventrally, medial vesicle length/genitalia width 0.25, length/width 4.93, medial vesicle length/lateral vesicle length 2.14 (Fig. 83L).

Distribution and natural history

Aname fossoria sp. nov. occurs in central-northern Queensland, near the border of the Mitchell Grass Downs and Gulf Plains bioregions, and further east in the Desert Uplands bioregion. It is known from

two locations: the type location near the Richmond Fossil Site, and much further east, just west of Charters Towers, where a female has been tentatively linked to this species (Fig. 12). The form of burrows constructed by spiders of this species is unknown, but is likely to be similar to that of other *rubrochelicera*-complex species (Fig. 12).

Aname fuscochelicera sp. nov.

[urn:lsid:zoobank.org:act:CAFD1275-4A9D-4EBE-AEAF-9D327B0E8A82](https://zoobank.org/CAFD1275-4A9D-4EBE-AEAF-9D327B0E8A82)

Figs 1, 12, 84–85

Diagnosis

Males of *A. fuscochelicera* sp. nov. can be distinguished from all species for which males are known except *A. inglewood* sp. nov., *A. nigrochelicera* sp. nov., and *A. rubrochelicera* sp. nov. by a moderate to large body size (carapace length >4.0 mm), the presence of a short embolus (embolus length/bulb length <1.5) that is short, thick, and relatively straight, and a small, triangular tibial spur (Fig. 84L–Q). Males of *A. fuscochelicera* can be distinguished from those of *A. nigrochelicera* and *A. rubrochelicera* by the presence of a longer embolus (embolus length/bulb length >0.9) (Fig. 84L–M; cf. Figs 87, 90). Males of *A. fuscochelicera* can be distinguished from those of *A. inglewood* by the presence of a shorter, less curved embolus (embolus length/bulb length <1) (Fig. 84L–M; cf. Fig. 86).

Females of *A. fuscochelicera* sp. nov. can be distinguished from all species for which females are known except *A. fossoria* sp. nov., *A. nigrochelicera* sp. nov., *A. nigrotarsa* sp. nov., *A. rubrochelicera* sp. nov., and *A. savannensis* sp. nov. by the presence of spermathecae with two vesicles, with very short, wide lateral vesicles (lateral vesicle length/genitalia width <0.25) and thinner medial vesicles projecting from the ventral face of the lateral vesicles (Fig. 85A–L). Females of *A. fuscochelicera* can be distinguished from those of *A. nigrochelicera*, *A. rubrochelicera*, and *A. savannensis* by the presence of spermathecae with tightly undulating medial vesicles (Fig. 85L; cf. Figs 88, 91, 93). Females of *A. fuscochelicera* can be distinguished from those of *A. fossoria* and *A. nigrotarsa* by the presence of dark red-brown chelicerae (Fig. 85A, C; cf. Figs 83, 89).

Etymology

The specific epithet '*fuscochelicera*' is an adjective formed from the Latin '*fuscus*', meaning 'dark' or 'dusky', and '*chelicera*', referring to the mouthparts of arachnids. Combined, the epithet references the dark chelicerae of this species.

Type material

Holotype

AUSTRALIA – Queensland • ♂; Dooloogarah Station, via Mitchell; 24°53' S, 147°47' E; Mr Rhodes leg.; QMB S9752.

Paratypes

AUSTRALIA – Queensland • 1 ♀; Mount Tabor Station, ca 153.6 km NNE of Morven; 25°08' S, 147°41' E; 14 Dec. 2020; E. Amsters leg.; excavated, brown silty loam with surface rocks, sclerophyll forest; QMB S118237 • 1 ♀; Mount Tabor Station, ca 149.7 km NNE of Morven; 25°09' S, 147°37' E; 8 Dec. 2020; C. Eddie and E. Amsters leg.; excavated, sandy soil bank at base of large sandstone boulder, sclerophyll forest amongst sandstone ridges; QMB S118234 • 1 ♀; Mount Tabor Station, ca 149.7 km NNE of Morven; 25°09' S, 147°37' E; 15 Dec. 2020; E. Amsters and A. Hoffmann leg.; excavated, sandy soil bank at base of large sandstone boulder, sclerophyll forest; QMB S118235.

Other material examined

AUSTRALIA – **Queensland** • 1 ♂; Mitchell; 26°28' S, 147°54' E; 26 Feb. 2017; C. Silvester leg.; QMB S107402. – **New South Wales** • 1 ♂; Lightning Ridge; 29°20' S, 147°43' E; 6 Feb. 1991; L. Abra leg.; QMB S34606 • 1 ♂; Lightning Ridge; 29°26' S, 147°59' E; 6 Feb. 1997; L. Abra leg.; AMS KS50814.

Description

Male (holotype, QMB S9752)

GENERAL (Fig. 84A–Q). Body length 17.64, in good condition, colour presumably faded due to preservation.

DORSAL PROSOMA (Fig. 84A, E–F). Carapace length 7.06, width 5.96, length/width 1.18, clypeus to fovea length/carapace length 0.67, caput width/carapace width 0.73, carapace red-brown, reflective setae present, light on caput, light on thorax, fovea procurved, fovea width/carapace length 0.11 (Fig. 84A, F); chelicerae dark red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.50 (Fig. 84A); eye group rectangular, width/length 1.84, eye tubercle present (Fig. 84E).

ABDOMEN (Fig. 84B, D). Abdomen length 7.15, grey-brown, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 84C, G–I). Labium cuspules absent (Fig. 84H); maxillae heel distinct, cuspules present, count=about 77, extending posteriorly onto heel, extending laterally about 35% of maxillae length (Fig. 84C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 84C, I); sternum length/width 1.13, central sternum with consistent covering of short setae, row of longer setae around posterior edges, setae at higher density around anterior edges (Fig. 84G–H); posterior sigilla semi-elongate, central sternum to posterior sigilla length/sternum length 0.25, posterior sigilla length/sternum length 0.17 (Fig. 84G–H); other sigilla small, round and lateral (Fig. 84G–H).

LEG I (Fig. 84N–Q). Leg I orange-brown, reflective setae on dorsal femur, femur length 6.30, patella length 3.55, tibia length 4.57, metatarsus length 4.88, tarsus length 3.15, total length 22.46, leg I length/carapace length 3.18 (Fig. 84N–O); scopulae on distal metatarsus and tarsus (Fig. 84N–O); spine count Fe D 3, Fe PL 2, Pa PL 2, Ti PL 0, Ti RL 0, Me PL 0, Me RL 0, Ta 0 (Fig. 84N–O); tibia length/width [TIL/TID] 3.70, even width along length, spur present, triangular, knuckle absent, megaspine angled at 30 degrees, length to distal face of spur/tibia length [TIS/TIL] 0.52, spur height/tibia width [TISH/TID] 0.67, megaspine length/tibia length 0.26 (Fig. 84N–P); metatarsus relatively straight, proximal excavation present, excavation concave with slight heel, heel semi-sharp, excavation length/metatarsus length [MIPEL/MIL] 0.42, metatarsus length/width [MIL/MID] 5.42 (Fig. 84N–O, Q).

PEDIPALP (Fig. 84J–M). Tibia length 2.69, width 1.17, length/width [PTL/PTD] 2.31, asetose depression present, depression length/palp tibia length [PDL/PTL] 0.61, retrolateral face with consistent covering of light setae, ventral face with two elongate bristle-like setae below depression, prolateral face with patch of spines on distal half, disto-medial spine present (Fig. 84J–K); patella prolateral face with 2 spines (Fig. 84J–K); cymbium with scopulae present distally (Fig. 84J–K); copulatory organ total length 1.52, length/palp tibia length 0.56 (Fig. 84L–M); bulb length/width 1.06 (Fig. 84L–M); embolus tapering from bulb, short and thick, flanged with hooked tip, angled, pointed tip, width at base/bulb width 0.29, embolus length/bulb length 0.94 (Fig. 84L–M).

Female (paratype, QMB S118235)

GENERAL (Fig. 85A–L). Body length 22.26, in good condition.

DORSAL PROSOMA (Fig. 85A, E–F). Carapace length 7.56, width 6.34, length/width 1.19, clypeus to fovea length/carapace length 0.68, caput width/carapace width 0.75, carapace pallid-orange, reflective setae

absent or inconspicuous, fovea procurved, fovea width/carapace length 0.15 (Fig. 85A, F); chelicerae dark red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.54 (Fig. 85A); eye group rectangular, width/length 2.1, eye tubercle present (Fig. 85E).

ABDOMEN (Fig. 85B, D). Abdomen length 10.71, tan-brown, darker dorsally and lighter laterally, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 85C, G–I). Labium cuspules absent (Fig. 85H); maxillae heel distinct, cuspules present, count=about 65, extending posteriorly onto heel, extending laterally about 30% of maxillae length (Fig. 85C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 85C, I); sternum length/width 1.17, central sternum with consistent covering of short setae, row of longer setae around posterior edges, symmetrical pattern of distinct elongate setae on central sternum (Fig. 85G–H); posterior sigilla semi-elongate, central sternum to posterior sigilla length/sternum length 0.24, posterior sigilla length/sternum length 0.16 (Fig. 85G–H); other sigilla small, round and lateral (Fig. 85G–H).

LEG I (Fig. 85J–K). Leg I pallid-orange, darker on metatarsus and tarsus, femur length 6.05, patella length 3.89, tibia length 4.42, metatarsus length 3.77, tarsus length 2.60, total length 20.74, leg I length/carapace length 2.74; scopulae on distal metatarsus and tarsus; spine count Fe D 1, Fe PL 1, Pa PL 2, Ti PL 4, Ti RL 4, Me PL 2, Me RL 3, Ta 0; tibia length/width [TIL/TID] 3.20.

GENITALIA (Fig. 85D, L). Epigastric furrow unmodified (Fig. 85D); spermathecae with two vesicles each (Fig. 85L); lateral vesicle very wide, short and roughly triangular, length 0.19, lateral vesicle length/genitalia width 0.14, length/width at base 0.35, crown distinct and narrow (Fig. 85L); medial vesicle short, undulating, and projecting postero-ventrally, medial vesicle length/genitalia width 0.19, length/width 2.62, medial vesicle length/lateral vesicle length 1.39 (Fig. 85L).

Distribution and natural history

Aname fuscochelicera sp. nov. occurs in northern New South Wales and central/southern Queensland, in the Brigalow Belt South and Darling Riverine Plains bioregions. Its distribution extends from Lightning Ridge north to Carnarvon National Park (Fig. 12). The form of burrows constructed by spiders of this species is unknown, but is likely to be similar to that of other *rubrochelicera*-complex species (Fig. 12).

Aname inglewood sp. nov.

[urn:lsid:zoobank.org:act:22073EDA-F5D1-40D4-A755-EFF6FABCDD28](https://zoobank.org/act:22073EDA-F5D1-40D4-A755-EFF6FABCDD28)

Figs 12, 86

Diagnosis

Males of *A. inglewood* sp. nov. can be distinguished from all species for which males are known except *A. fuscochelicera* sp. nov., *A. nigrochelicera* sp. nov., and *A. rubrochelicera* sp. nov. by a moderate to large body size (carapace length >4.0 mm), the presence of a short embolus (embolus length/bulb length <1.5) that is short, thick, and relatively straight, and a small, triangular tibial spur (Fig. 86L–Q). Males of *A. inglewood* can be distinguished from those of *A. fuscochelicera*, *A. nigrochelicera*, and *A. rubrochelicera*. by the presence of a longer, more curved embolus (embolus length/bulb length > 1) (Fig. 86L–M; cf. Figs 84, 87, 90).

Females of *A. inglewood* sp. nov. are unknown.

Etymology

The specific epithet ‘*inglewood*’ is a noun in apposition, referencing the type locality of this species.

Type material

Holotype

AUSTRALIA – Queensland • ♂; Inglewood; 28°25' S, 151°05' E; 20 Jan. 1997; Queensland Ambulance Service leg.; QMB S34554.

Other material examined

AUSTRALIA – Queensland • 1 ♂; Weengallon; 28°22' S, 149°04' E; 2 Jan. 1979; R.J. Raven, V.E. Davies and T. Adams leg.; QMB S1286.

Description

Male (holotype, QMB S34554)

GENERAL (Fig. 86A–Q). Body length 18.97, in good condition, colour presumably faded due to preservation.

DORSAL PROSOMA (Fig. 86A, E–F). Carapace length 7.94, width 7.41, length/width 1.07, clypeus to fovea length/carapace length 0.69, caput width/carapace width 0.67, carapace red-brown, caput slightly darker than thorax, reflective setae present, light on caput, light on thorax, fovea straight, fovea width/carapace length 0.12 (Fig. 86A, F); chelicerae red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.49 (Fig. 86A); eye group rectangular, width/length 1.73, eye tubercle present (Fig. 86E).

ABDOMEN (Fig. 86B, D). Abdomen length 7.27, tan-brown, darker dorsally and lighter laterally, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 86C, G–I). Labium cuspules absent (Fig. 86H); maxillae heel distinct, cuspules present, count=about 90, extending posteriorly onto heel, extending laterally about 20% of maxillae length (Fig. 86C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 86C, I); sternum length/width 1.24, central sternum with consistent covering of short setae, row of longer setae around posterior edges (Fig. 86G–H); posterior sigilla ovoid, central sternum to posterior sigilla length/sternum length 0.25, posterior sigilla length/sternum length 0.14 (Fig. 86G–H); other sigilla small, round and lateral (Fig. 86G–H).

LEG I (Fig. 86N–Q). Leg I orange-tan, reflective setae on dorsal femur, femur length 7.00, patella length 4.22, tibia length 5.44, metatarsus length 5.20, tarsus length 3.23, total length 25.09, leg I length/carapace length 3.16 (Fig. 86N–O); scopulae on distal metatarsus and tarsus (Fig. 86N–O); spine count Fe D 0, Fe PL 1, Pa PL 2, Ti PL 0, Ti RL 0, Me PL 0, Me RL 0, Ta 0 (Fig. 86N–O); tibia length/width [TIL/TID] 3.60, even width along length, spur present, triangular, knuckle absent, megaspine angled at 28 degrees, length to distal face of spur/tibia length [TIS/TIL] 0.54, spur height/tibia width [TISH/TID] 0.52, megaspine length/tibia length 0.22 (Fig. 86N–P); metatarsus relatively straight, proximal excavation present, excavation concave with slight heel, heel semi-sharp, excavation length/metatarsus length [MIPEL/MIL] 0.51, metatarsus length/width [MIL/MID] 4.14 (Fig. 86N–O, Q).

PEDIPALP (Fig. 86J–M). Tibia length 3.34, width 1.26, length/width [PTL/PTD] 2.64, aetose depression present, depression length/palp tibia length [PDL/PTL] 0.59, retrolateral face with consistent covering of light setae, ventral face with two elongate bristle-like setae below depression, prolateral face with one disto-ventral spine, disto-medial spine absent (Fig. 86J–K); patella prolateral face with 2 spines (Fig. 86J–K); cymbium with scopulae present distally (Fig. 86J–K); copulatory organ total length 1.74, length/palp tibia length 0.52 (Fig. 86L–M); bulb length/width 0.98 (Fig. 86L–M); embolus tapering from bulb, short and thick, tapering and curving relatively evenly to point, width at base/bulb width 0.35, embolus length/bulb length 1.38 (Fig. 86L–M).

Distribution and natural history

Aname inglewood sp. nov. occurs in southern Queensland, in the Brigalow Belt South bioregion, where it is known from two locations, one near Inglewood and another further west near Weengallon (Fig. 12). The form of burrows constructed by spiders of this species is unknown, but is likely to be similar to that of other *rubrochelicera*-complex species (Fig. 12).

Aname nigrochelicera sp. nov.

[urn:lsid:zoobank.org:act:574949AA-6F83-4A52-9DD0-FC29BAF4A147](https://zoobank.org/act:574949AA-6F83-4A52-9DD0-FC29BAF4A147)

Figs 1, 12, 87–88

Diagnosis

Males of *A. nigrochelicera* sp. nov. can be distinguished from all species for which males are known except *A. fuscochelicera* sp. nov., *A. inglewood* sp. nov., and *A. rubrochelicera* sp. nov. by a moderate to large body size (carapace length >4.0 mm), the presence of a short embolus (embolus length/bulb length <1.5) that is short, thick, and relatively straight, and a small, triangular tibial spur (Fig. 87L–P). Males of *A. nigrochelicera* can be distinguished from those of *A. inglewood* by the presence of a shorter, less curved embolus (embolus length/bulb length <1) (Fig. 87L–M; cf. Fig. 86). Males of *A. nigrochelicera* can be distinguished from those of *A. fuscochelicera* by the presence of a shorter embolus (embolus length/bulb length <0.8) (Fig. 87L–M; cf. Fig. 84). Males of *A. nigrochelicera* can be distinguished from those of *A. rubrochelicera* by the presence of a shorter proximal excavation and longer distal pad on metatarsus I (excavation length/metatarsus length ~0.43; cf. ~0.53 in *A. rubrochelicera*) (Fig. 87L, Q; cf. Fig. 90).

Females of *A. nigrochelicera* sp. nov. can be distinguished from all species for which females are known except *A. fossoria* sp. nov., *A. fuscochelicera* sp. nov., *A. nigrotarsa* sp. nov., *A. rubrochelicera* sp. nov., and *A. savannensis* sp. nov. by the presence of spermathecae with two vesicles, with very short, wide lateral vesicles (lateral vesicle length/genitalia width <0.25) and thinner medial vesicles projecting from the ventral face of the lateral vesicles (Fig. 88A–L). Females of *A. nigrochelicera* can be distinguished from those of *A. fossoria*, *A. fuscochelicera*, and *A. nigrotarsa* by the presence of spermathecae with straight medial vesicles (Fig. 88L; cf. Figs 83, 85, 89). Females of *A. nigrochelicera* can be distinguished from those of *A. rubrochelicera* and *A. savannensis* by the presence of spermathecae with lateral vesicles with narrow, round crowns (Fig. 88L; cf. Figs 91, 93).

Etymology

The specific epithet ‘*nigrochelicera*’ is an adjective formed from the Latin ‘*niger*’, meaning ‘black’ or ‘dark’, and ‘*chelicera*’, referring to the mouthparts of arachnids. Combined, the epithet references the black chelicerae of this species.

Type material

Holotype

AUSTRALIA – Queensland • ♂; Emerald, Weewah camp; 23°32' S, 148°02' E; 3 Jan. 1973; R. Wicks leg.; QMB S96459.

Other material examined

AUSTRALIA – Queensland • 1 juv.; Emerald, W on Capricorn Highway, near Fairbairn State Forest; 23°32' S, 148°00' E; 254 m a.s.l.; 18 Apr. 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground (no silk, with parallel wishbone re-connecting to main shaft); QMB S118279 • 1 ♀; Roundstone, E on Dawson Highway; 24°37' S, 149°49' E; 202 m a.s.l.; 22 Apr. 2023; J.D. Wilson and

M.G. Rix leg.; excavated, open burrow on ground (no silk, with parallel wishbone re-connecting to main shaft); QMB S118300.

Description

Male (holotype, QMB S96459)

GENERAL (Fig. 87A–Q). Body length 19.50, in good condition, colour presumably faded due to preservation.

DORSAL PROSOMA (Fig. 87A, E–F). Carapace length 7.86, width 7.14, length/width 1.10, clypeus to fovea length/carapace length 0.68, caput width/carapace width 0.73, carapace red-orange, caput slightly darker than thorax, reflective setae present, moderate on caput, moderate on thorax, fovea procurved, fovea width/carapace length 0.12 (Fig. 87A, F); chelicerae red, rastellum absent or inconspicuous, chelicerae length/carapace length 0.53 (Fig. 87A); eye group rectangular, width/length 2.14, eye tubercle present (Fig. 87E).

ABDOMEN (Fig. 87B, D). Abdomen length 7.46, tan-brown, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 87C, G–I). Labium cuspules absent (Fig. 87H); maxillae heel distinct, cuspules present, count=about 100, extending posteriorly onto heel, extending laterally about 25% of maxillae length (Fig. 87C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 87C, I); sternum length/width 1.11, central sternum with consistent covering of short setae, row of longer setae around posterior edges, setae at higher density around anterior edges (Fig. 87G–H); posterior sigilla semi-elongate, central sternum to posterior sigilla length/sternum length 0.22, posterior sigilla length/sternum length 0.19 (Fig. 87G–H); other sigilla small, round and lateral (Fig. 87G–H).

LEG I (Fig. 87N–Q). Leg I orange-brown, reflective setae on dorsal femur, femur length 6.61, patella length 3.93, tibia length 5.05, metatarsus length 5.03, tarsus length 3.32, total length 23.94, leg I length/carapace length 3.05 (Fig. 87N–O); scopulae on distal metatarsus and tarsus (Fig. 87N–O); spine count Fe D 2, Fe PL 1, Pa PL 2, Ti PL 0, Ti RL 0, Me PL 0, Me RL 0, Ta 0 (Fig. 87N–O); tibia length/width [TIL/TID] 3.43, even width along length, spur present, triangular, knuckle absent, megaspine angled at 20 degrees, length to distal face of spur/tibia length [TIS/TIL] 0.57, spur height/tibia width [TISH/TID] 0.54, megaspine length/tibia length 0.25 (Fig. 87N–P); metatarsus relatively straight, proximal excavation present, excavation concave with slight heel, heel semi-sharp, excavation length/metatarsus length [MIPEL/MIL] 0.43, metatarsus length/width [MIL/MID] 4.36 (Fig. 87N–O, Q).

PEDIPALP (Fig. 87J–M). Tibia length 3.06, width 1.34, length/width [PTL/PTD] 2.28, asetose depression present, depression length/palp tibia length [PDL/PTL] 0.53, retrolateral face with consistent covering of light setae, ventral face with two spines below depression (1 rubbed off), prolateral face with two disto-ventral spines, disto-medial spine present (Fig. 87J–K); patella prolateral face with 2 spines (Fig. 87J–K); cymbium with scopulae present distally (Fig. 87J–K); copulatory organ total length 1.31, length/palp tibia length 0.43 (Fig. 87L–M); bulb length/width 0.95 (Fig. 87L–M); embolus tapering from bulb, short and thick, flanged with hooked tip, angled, pointed tip, width at base/bulb width 0.26, embolus length/bulb length 0.78 (Fig. 87L–M).

Female (QMB S118300)

GENERAL (Fig. 88A–L). Body length 22.05, in good condition.

DORSAL PROSOMA (Fig. 88A, E–F). Carapace length 8.00, width 6.58, length/width 1.22, clypeus to fovea length/carapace length 0.68, caput width/carapace width 0.77, carapace tan-yellow, reflective setae absent or inconspicuous, fovea procurved, fovea width/carapace length 0.16 (Fig. 88A, F); chelicerae

dark brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.51 (Fig. 88A); eye group rectangular, width/length 2.15, eye tubercle present (Fig. 88E).

ABDOMEN (Fig. 88B, D). Abdomen length 9.42, brown, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 88C, G–I). Labium cuspules absent (Fig. 88H); maxillae heel distinct, cuspules present, count=about 125, extending posteriorly onto heel, extending laterally about 50% of maxillae length (Fig. 88C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 88C, I); sternum length/width 1.14, central sternum with consistent covering of short setae, row of longer setae around posterior edges, setae at higher density around anterior edges, symmetrical pattern of distinct elongate setae on central sternum (Fig. 88G–H); posterior sigilla semi-elongate, central sternum to posterior sigilla length/sternum length 0.22, posterior sigilla length/sternum length 0.20 (Fig. 88G–H); other sigilla small, round and lateral (Fig. 88G–H).

LEG I (Fig. 88J–K). Leg I femur length 5.88, patella length 3.70, tibia length 4.43, metatarsus length 3.75, tarsus length 2.53, total length 20.28, leg I length/carapace length 2.54; scopulae on distal metatarsus and tarsus; spine count Fe D 1, Fe PL 1, Pa PL 2, Ti PL 4, Ti RL 4, Me PL 2, Me RL 3, Ta 0; tibia length/width [TIL/TID] 3.34.

GENITALIA (Fig. 88D, L). Epigastric furrow unmodified (Fig. 88D); spermathecae with two vesicles each (Fig. 88L); lateral vesicle very wide, short and roughly triangular, length 0.18, lateral vesicle length/genitalia width 0.14, length/width at base 0.41, crown distinct and narrow (Fig. 88L); medial vesicle short, undulating, and projecting postero-ventrally, medial vesicle length/genitalia width 0.16, length/width 3, medial vesicle length/lateral vesicle length 1.1 (Fig. 88L).

Distribution and natural history

Aname nigrochelicera sp. nov. occurs in central Queensland, in the Brigalow Belt North bioregion, where it is known from two localities, west near Emerald, and further east near Biloela (Fig. 12). It constructs an open burrow with very inconspicuous (or absent) silk-lining and often without a secondary ‘wishbone’ entrance, or if a wishbone is present, the tunnels of the two entrances run parallel and adjacent to one another (Fig. 12).

Aname nigrotarsa sp. nov.

[urn:lsid:zoobank.org:act:2A5BCF12-59FC-4B31-858E-E0F9995F2507](https://doi.org/10.21203/rs.3.rs-1259555/v1)

Figs 12, 89

Diagnosis

Males of *A. nigrotarsa* sp. nov. are unknown.

Females of *A. nigrotarsa* sp. nov. can be distinguished from all species for which females are known except *A. fossoria* sp. nov., *A. fuscochelicera* sp. nov., *A. nigrochelicera* sp. nov., *A. rubrochelicera* sp. nov., and *A. savannensis* sp. nov. by the presence of spermathecae with two vesicles, with very short, wide lateral vesicles (lateral vesicle length/genitalia width <0.25) and thinner medial vesicles projecting from the ventral face of the lateral vesicles (Fig. 89A–L). Females of *A. nigrotarsa* can be distinguished from those of *A. nigrochelicera*, *A. rubrochelicera*, and *A. savannensis* by the presence of spermathecae with tightly undulating medial vesicles (Fig. 89L; cf. Figs 88, 91, 93). Females of *A. nigrotarsa* can be distinguished from those of *A. fuscochelicera* by the presence of lighter red chelicerae (Fig. 89A, C; cf. Fig. 85). Females of *A. nigrotarsa* can be distinguished from those of *A. fossoria* by the presence of

spermathecae with more elongate medial vesicles (medial vesicle length/width >5) and anterior legs usually with dark tarsi and distal metatarsi (Fig. 89J–L; cf. Fig. 83).

Etymology

The specific epithet '*nigrotarsa*' is an adjective formed from the Latin '*niger*' meaning 'black' or 'dark', and '*tarsus*' meaning 'foot'. Combined, the epithet references the conspicuous black tarsi of live females.

Type material

Holotype

AUSTRALIA – Queensland • ♀; Mulligan Highway, NW of Mount Molloy; 16°39' S, 145°15' E; 395 m a.s.l.; 9 May 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground (no silk, no wishbone); QMB S118311.

Paratypes

AUSTRALIA – Queensland • 1 ♀; Burke Development Road, SE of Almaden; 17°21' S, 144°41' E; 486 m a.s.l.; 11 May 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground (no silk, no wishbone); QMB S118318 • 1 ♀; Silver Valley Road, off Kennedy Highway, W of Ravenshoe; 17°36' S, 145°18' E; 718 m a.s.l.; 12 May 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground (no silk, no wishbone); QMB SS118330 • 1 ♀; Silver Valley Road, off Kennedy Highway, W of Ravenshoe; 17°36' S, 145°18' E; 718 m a.s.l.; 12 May 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground (no silk, no wishbone); QMB S118331.

Other material examined

AUSTRALIA – Queensland • 1 juv.; Burke Development Road, SE of Almaden; 17°21' S, 144°41' E; 476 m a.s.l.; 11 May 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground (no silk, with parallel wishbone re-connecting to main shaft); QMB S118319 • 1 juv.; Silver Valley Road, off Kennedy Highway, W of Ravenshoe; 17°36' S, 145°18' E; 708 m a.s.l.; 12 May 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground (no silk, with parallel wishbone re-connecting to main shaft); QMB S118329.

Description

Female (holotype, QMB S118311)

GENERAL (Fig. 89A–L). Body length 22.79, in good condition.

DORSAL PROSOMA (Fig. 89A, E–F). Carapace length 8.33, width 7.10, length/width 1.17, clypeus to fovea length/carapace length 0.71, caput width/carapace width 0.77, carapace pallid-orange, reflective setae absent or inconspicuous, fovea procurved, fovea width/carapace length 0.16 (Fig. 89A, F); chelicerae orange, rastellum absent or inconspicuous, chelicerae length/carapace length 0.60 (Fig. 89A); eye group rectangular, width/length 2.1, eye tubercle present (Fig. 89E).

ABDOMEN (Fig. 89B, D). Abdomen length 9.11, brown, darker dorsally and lighter laterally, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 89C, G–I). Labium cuspules absent (Fig. 89H); maxillae heel distinct, cuspules present, count=about 162, extending posteriorly onto heel, extending laterally about 55% of maxillae length (Fig. 89C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 89C, I); sternum length/width 1.08, central sternum with consistent covering of short setae, row of longer setae around posterior edges, setae at higher density around anterior edges (Fig. 89G–H); posterior sigilla semi-elongate, central sternum to posterior sigilla length/sternum length 0.26, posterior sigilla length/sternum length 0.18 (Fig. 89G–H); other sigilla small, round and lateral (Fig. 89G–H).

LEG I (Fig. 89J–K). Leg I pallid, darker on distal metatarsus and tarsus, femur length 6.60, patella length 4.19, tibia length 4.66, metatarsus length 4.43, tarsus length 2.83, total length 22.70, leg I length/carapace length 2.73; scopulae on distal metatarsus and tarsus; spine count Fe D 2, Fe PL 1, Pa PL 2, Ti PL 4, Ti RL 4, Me PL 4, Me RL 3, Ta 0; tibia length/width [TIL/TID] 3.40.

GENITALIA (Fig. 89D, L). Epigastric furrow unmodified (Fig. 89D); spermathecae with two vesicles each (Fig. 89L); lateral vesicle very wide, short and roughly triangular, length 0.31, lateral vesicle length/genitalia width 0.21, length/width at base 0.52, crown distinct and narrow (Fig. 89L); medial vesicle short, undulating, and projecting postero-ventrally, medial vesicle length/genitalia width 0.32, length/width 5.46, medial vesicle length/lateral vesicle length 1.53 (Fig. 89L).

Distribution and natural history

Aname nigrotarsa sp. nov. occurs in northern Queensland, in the Einasleigh Uplands bioregion, where it is known from three locations west of the wet tropics, roughly from Mount Garnet north to Mount Carbine (Fig. 12). It constructs an open burrow with very inconspicuous (or absent) silk-lining and often without a secondary ‘wishbone’ entrance, or if a wishbone is present, the tunnels of the two entrances run parallel and adjacent to one another (Fig. 12).

Aname rubrochelicera sp. nov.

[urn:lsid:zoobank.org:act:A6251250-5C8F-400C-B43F-15C4DAB67C48](https://doi.org/10.21203/rs.3.rs-1000000/v1)

Figs 1, 12, 90–91

Diagnosis

Males of *A. rubrochelicera* sp. nov. can be distinguished from all species for which males are known except *A. fuscochelicera* sp. nov., *A. inglewood* sp. nov., and *A. nigrochelicera* sp. nov. by a moderate to large body size (carapace length >4.0 mm), the presence of a short embolus (embolus length/bulb length <1.5) that is short, thick, and relatively straight, and a small, triangular tibial spur (Fig. 90L–Q). Males of *A. rubrochelicera* can be distinguished from those of *A. inglewood* by the presence of a shorter, less curved embolus (embolus length/bulb length <1) (Fig. 90L–M; cf. Fig. 86). Males of *A. rubrochelicera* can be distinguished from those of *A. fuscochelicera* by the presence of a shorter embolus (embolus length/bulb length <0.8) (Fig. 90L–M; cf. Fig. 84). Males of *A. rubrochelicera* can be distinguished from those of *A. nigrochelicera* by the presence of a longer proximal excavation and shorter distal pad on metatarsus I (excavation length/metatarsus length ~0.53; cf. ~0.43 in *A. nigrochelicera*) (Fig. 90Q; cf. Fig. 87).

Females of *A. rubrochelicera* sp. nov. can be distinguished from all species for which females are known except *A. fossoria* sp. nov., *A. fuscochelicera* sp. nov., *A. nigrochelicera* sp. nov., *A. nigrotarsa* sp. nov., and *A. savannensis* sp. nov. by the presence of spermathecae with two vesicles, with very short, wide lateral vesicles (lateral vesicle length/genitalia width <0.25) and thinner medial vesicles projecting from the ventral face of the lateral vesicles (Fig. 91A–L). Females of *A. rubrochelicera* can be distinguished from those of *A. fossoria*, *A. fuscochelicera*, and *A. nigrotarsa* by the presence of spermathecae with straight medial vesicles (Fig. 91L; cf. Figs 83, 85, 89). Females of *A. rubrochelicera* can be distinguished from those of *A. nigrochelicera* by the presence of spermathecae with lateral vesicles without narrow, round crowns (Fig. 91L; cf. Fig. 88). Females of *A. rubrochelicera* can be distinguished from those of *A. savannensis* by the presence of spermathecae with medial vesicles with distally-flattened crowns (Fig. 91L; cf. Fig. 93).

Etymology

The specific epithet '*rubrochelicera*' is an adjective formed from the Latin '*rubro*', meaning 'red', and '*chelicera*', referring to the mouthparts of arachnids. Combined, the epithet references the red chelicerae of this species.

Type material

Holotype

AUSTRALIA – Queensland • ♂; Longreach, “Bexley” property; 23°12' S, 144°19' E; 200–250 m a.s.l.; 1987; A. Emmott leg.; hand collected, wandering, sandy soil; QMB S25637.

Other material examined

AUSTRALIA – Queensland • 1 ♀; Emerald, near Mayfair Drive; 23°33' S, 148°10' E; 10 Aug. 2020; E.J. Briggs and B.R. Briggs leg.; excavated; QMB S118210 • 1 ♀; Barcaldine, 780 Barcaldine-Isisford Road, “River Drive”; 23°38' S, 145°13' E; 25 Aug. 2010; L. Coward and R. Coward leg.; excavated, found in yard while gardening; QMB S29059 • 1 ♀; Alpha, off Star Downs Road, near junction of Tambo Road; 23°39' S, 146°39' E; 351 m a.s.l.; 19 Apr. 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground (no silk, no wishbone); QMB S118285 • 1 juv.; Drummond Range, Lookout off Capricorn Highway; 23°39' S, 147°12' E; 544 m a.s.l.; 19 Apr. 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground (no silk, no wishbone); QMB S118287 • 1 juv.; Minerva Hills National Park, off Dendle Scenic Drive; 24°06' S, 148°03' E; 422 m a.s.l.; 17 Apr. 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground (no silk, no wishbone); QMB S118275 • 1 juv.; Minerva Hills National Park, off Dendle Scenic Drive; 24°06' S, 148°03' E; 416 m a.s.l.; 17 Apr. 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground (no silk, no wishbone); QMB S118274 • 1 ♂; Blackall; 24°26' S, 145°28' E; 5 Feb. 1979; P.R. Wilson leg.; QMB S96435.

Description

Male (holotype, QMB S25637)

GENERAL (Fig. 90A–Q). Body length 20.17, in good condition, colour presumably faded due to preservation.

DORSAL PROSOMA (Fig. 90A, E–F). Carapace length 8.07, width 6.97, length/width 1.16, clypeus to fovea length/carapace length 0.68, caput width/carapace width 0.63, carapace orange, caput slightly darker than thorax, reflective setae present, light on caput, light on thorax, fovea procurved, fovea width/carapace length 0.12 (Fig. 90A, F); chelicerae orange, rastellum absent or inconspicuous, chelicerae length/carapace length 0.44 (Fig. 90A); eye group rectangular, width/length 2.09, eye tubercle present (Fig. 90E).

ABDOMEN (Fig. 90B, D). Abdomen length 8.54, tan-brown, darker dorsally and lighter laterally, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 90C, G–I). Labium cuspules absent (Fig. 90H); maxillae heel distinct, cuspules present, count=about 57, extending posteriorly onto heel, extending laterally about 25% of maxillae length (Fig. 90C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 90C, I); sternum length/width 1.11, central sternum with consistent covering of short setae, row of longer setae around posterior edges (Fig. 90G–H); posterior sigilla elongate, central sternum to posterior sigilla length/sternum length 0.23, posterior sigilla length/sternum length 0.18 (Fig. 90G–H); other sigilla small, round and lateral (Fig. 90G–H).

LEG I (Fig. 90N–Q). Leg I pallid, femur length 6.73, patella length 4.15, tibia length 5.01, metatarsus length 4.75, tarsus length 2.98, total length 23.62, leg I length/carapace length 2.93 (Fig. 90N–O); scopulae on distal metatarsus and tarsus (Fig. 90N–O); spine count Fe D 1, Fe PL 2, Pa PL 2, Ti PL 2, Ti RL 0, Me PL 1, Me RL 0, Ta 0 (Fig. 90N–O); tibia length/width [TIL/TID] 3.23, even width along length, spur present, triangular, knuckle absent, megaspine angled at 33 degrees, length to distal face of spur/tibia length [TIS/TIL] 0.51, spur height/tibia width [TISH/TID] 0.51, megaspine length/tibia length 0.20 (Fig. 90N–P); metatarsus slightly sinuous, proximal excavation present, excavation concave with slight heel, heel semi-sharp, excavation length/metatarsus length [MIPEL/MIL] 0.53, metatarsus length/width [MIL/MID] 3.69 (Fig. 90N–O, Q).

PEDIPALP (Fig. 90J–M). Tibia length 3.03, width 1.31, length/width [PTL/PTD] 2.32, asetose depression present, depression length/palp tibia length [PDL/PTL] 0.47, retrolateral face with consistent covering of light setae, ventral face with two elongate bristle-like setae below depression, prolateral face with patch of spines on distal half, disto-medial spine present (Fig. 90J–K); patella prolateral face with 5 spines (Fig. 90J–K); cymbium with scopulae present distally (Fig. 90J–K); copulatory organ total length 1.49, length/palp tibia length 0.49 (Fig. 90L–M); bulb length/width 1.12 (Fig. 90L–M); embolus tapering from bulb, short and thick, flanged with hooked tip, angled, pointed tip, width at base/bulb width 0.31, embolus length/bulb length 0.70 (Fig. 90L–M).

Female (QMB S118285)

GENERAL (Fig. 91A–L). Body length 23.15, in good condition.

DORSAL PROSOMA (Fig. 91A, E–F). Carapace length 9.28, width 7.53, length/width 1.23, clypeus to fovea length/carapace length 0.70, caput width/carapace width 0.77, carapace pallid-orange, reflective setae absent or inconspicuous, fovea procurved, fovea width/carapace length 0.12 (Fig. 91A, F); chelicerae orange, rastellum absent or inconspicuous, chelicerae length/carapace length 0.48 (Fig. 91A); eye group rectangular, width/length 2.08, eye tubercle present (Fig. 91E).

ABDOMEN (Fig. 91B, D). Abdomen length 9.60, tan-brown, darker dorsally and lighter laterally, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 91C, G–I). Labium cuspules absent (Fig. 91H); maxillae heel distinct, cuspules present, count=about 151, extending posteriorly onto heel, extending laterally about 45% of maxillae length (Fig. 91C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 91C, I); sternum length/width 1.24, central sternum with consistent covering of short setae, row of longer setae around posterior edges, setae at higher density around anterior edges, symmetrical pattern of distinct elongate setae on central sternum (Fig. 91G–H); posterior sigilla elongate, central sternum to posterior sigilla length/sternum length 0.21, posterior sigilla length/sternum length 0.16 (Fig. 91G–H); other sigilla small and lateral, medial sigilla semi-elongate, anterior sigilla round (Fig. 91G–H).

LEG I (Fig. 91J–K). Leg I pallid, femur length 7.26, patella length 4.47, tibia length 5.26, metatarsus length 5.10, tarsus length 2.57, total length 24.65, leg I length/carapace length 2.66; scopulae on distal metatarsus and tarsus; spine count Fe D 1, Fe PL 2, Pa PL 3 (proximal rubbed off), Ti PL 4, Ti RL 4, Me PL 4, Me RL 4, Ta 0; tibia length/width [TIL/TID] 3.33.

GENITALIA (Fig. 91D, L). Epigastric furrow unmodified (Fig. 91D); spermathecae with two vesicles each (Fig. 91L); lateral vesicle very wide, short and roughly triangular, length 0.42, lateral vesicle length/genitalia width 0.22, length/width at base 0.48, crown un-demarcated (Fig. 91L); medial vesicle short, undulating, and projecting postero-ventrally, medial vesicle length/genitalia width 0.19, length/width 2.65, medial vesicle length/lateral vesicle length 0.86 (Fig. 91L).

Distribution and natural history

Aname rubrochelicera sp. nov. occurs in central Queensland, in the Brigalow Belt North, Desert Uplands, and Mitchell Grass Downs bioregions; it is known from Longreach east to Emerald, and as far south as Blackall and Springsure (Fig. 12). It constructs an open burrow with very inconspicuous (or absent) silk-lining and often without a secondary ‘wishbone’ entrance, or if a wishbone is present, the tunnels of the two entrances run parallel and adjacent to one another (Fig. 12).

Aname savannensis sp. nov.

[urn:lsid:zoobank.org:act:6ECAA560-A7A9-4E7D-9DAD-2EB0F88B10E7](https://zoobank.org/urn:lsid:zoobank.org:act:6ECAA560-A7A9-4E7D-9DAD-2EB0F88B10E7)

Figs 12, 92–93

Diagnosis

Males of *A. savannensis* sp. nov. can be distinguished from all species for which males are known by a moderate to large body size (carapace length >4.0 mm), the presence of a short embolus (embolus length/bulb length <1.5) that curves gradually to a point, a large, digitiform tibial spur (spur length/tibia width >0.7), and a very short proximal excavation and long, straight distal pad on metatarsus I (excavation length/metatarsus length ~0.4). (Fig. 92L–Q).

Females of *A. savannensis* sp. nov. can be distinguished from all species for which females are known except *A. fossoria* sp. nov., *A. fuscochelicera* sp. nov., *A. nigrochelicera* sp. nov., *A. nigrotarsa* sp. nov., and *A. rubrochelicera* sp. nov. by the presence of spermathecae with two vesicles, with very short, wide lateral vesicles (lateral vesicle length/genitalia width <0.25) and thinner medial vesicles projecting from the ventral face of the lateral vesicles (Fig. 93A–L). Females of *A. savannensis* can be distinguished from those of *A. fossoria*, *A. fuscochelicera*, and *A. nigrotarsa* by the presence of spermathecae with straight medial vesicles (Fig. 93L; cf. Figs 83, 85, 89). Females of *A. savannensis* can be distinguished from those of *A. nigrochelicera* by the presence of spermathecae with lateral vesicles without narrow, round crowns (Fig. 93L; cf. Fig. 88). Females of *A. savannensis* can be distinguished from those of *A. rubrochelicera* by the presence of spermathecae with medial vesicles with distally-rounded crowns (Fig. 93L; cf. Fig. 91).

Etymology

The specific epithet ‘*savannensis*’ references the distribution of this species across the savannah of northern Queensland, from Cape York to the Gulf of Carpentaria.

Type material

Holotype

AUSTRALIA – Queensland • ♂; 5.4 km NNW of Killarney Homestead; 15°23′ S, 143°28′ E; 18–22 Jul. 2015; C.J. Burwell leg.; pitfall trap, *Melaleuca* woodland; QMB S22129.

Paratype

AUSTRALIA – Queensland • 1 ♂; 5.4 km NNW of Killarney HS; 15°23′ S, 143°28′ E; 150 m a.s.l.; 13–24 Jul. 2015; R.J. Raven and R.C. Santana leg.; pitfall trap, open forest; QMB S108756.

Other material examined

AUSTRALIA – Queensland • 1 ♂; Westmoreland Station; 17°21′ S, 138°15′ E; Nov. 2009; S. MacDonald leg.; QMB S104806 • 1 ♀; 29.2 km W of Georgetown, close to Gilbert River; 18°16′ S, 143°13′ E; 14 Aug. 2020; E.J. Briggs and B.R. Briggs leg.; excavated; QMB S118211.

Description

Male (holotype, QMB S22129)

GENERAL (Fig. 92A–Q). Body length 22.09, in good condition, collected relatively recently.

DORSAL PROSOMA (Fig. 92A, E–F). Carapace length 8.93, width 7.44, length/width 1.20, clypeus to fovea length/carapace length 0.68, caput width/carapace width 0.65, carapace orange-brown, caput much darker than thorax, reflective setae present, moderate on caput, moderate on thorax, fovea procurved, fovea width/carapace length 0.14 (Fig. 92A, F); chelicerae dark red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.53 (Fig. 92A); eye group rectangular, width/length 1.84, eye tubercle present (Fig. 92E).

ABDOMEN (Fig. 92B, D). Abdomen length 8.37, light grey, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 92C, G–I). Labium cuspules absent (Fig. 92H); maxillae heel distinct, cuspules present, count=about 83, extending posteriorly onto heel, extending laterally about 40% of maxillae length (Fig. 92C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 92C, I); sternum length/width 1.19, central sternum with consistent covering of short setae, row of longer setae around posterior edges, some shorter thorn-like setae around anterior edges (Fig. 92G–H); posterior sigilla elongate, central sternum to posterior sigilla length/sternum length 0.18, posterior sigilla length/sternum length 0.21 (Fig. 92G–H); other sigilla small, round and lateral (Fig. 92G–H).

LEG I (Fig. 92N–Q). Leg I golden, darker on femur and patella, reflective setae on dorsal femur, femur length 7.07, patella length 4.43, tibia length 5.45, metatarsus length 5.81, tarsus length 3.31, total length 26.08, leg I length/carapace length 2.92 (Fig. 92N–O); scopulae on distal metatarsus and tarsus (Fig. 92N–O); spine count Fe D 5, Fe PL 2, Pa PL 3, Ti PL 0, Ti RL 0, Me PL 0, Me RL 0, Ta 0 (Fig. 92N–O); tibia length/width [TIL/TID] 3.71, even width along length, spur present, digitiform, knuckle absent, megaspine angled at 25 degrees, length to distal face of spur/tibia length [TIS/TIL] 0.58, spur height/tibia width [TISH/TID] 0.77, megaspine length/tibia length 0.19 (Fig. 92N–P); metatarsus relatively straight, proximal excavation present, excavation concave with pronounced heel, heel rounded, excavation length/metatarsus length [MIPEL/MIL] 0.39, metatarsus length/width [MIL/MID] 5.01 (Fig. 92N–O, Q).

PEDIPALP (Fig. 92J–M). Tibia length 3.26, width 1.34, length/width [PTL/PTD] 2.43, aetose depression present, depression length/palp tibia length [PDL/PTL] 0.54, retrolateral face with consistent covering of light setae, ventral face with two elongate bristle-like setae below depression, prolateral face with patch of spines on distal half, disto-medial spine present (Fig. 92J–K); patella prolateral face with 2 spines (Fig. 92J–K); cymbium with scopulae present distally (Fig. 92J–K); copulatory organ total length 1.58, length/palp tibia length 0.48 (Fig. 92L–M); bulb length/width 1.07 (Fig. 92L–M); embolus demarcated and roughly perpendicular to bulb, attenuate, tapering and curving relatively evenly to point, one strong bend, at about 0.8 of length, width at base/bulb width 0.26, embolus length/bulb length 1.15 (Fig. 92L–M).

Female (QMB S118211)

GENERAL (Fig. 93A–L). Body length 22.39, in moderate condition, collectly recently but eye group and dorsal abdomen damaged.

DORSAL PROSOMA (Fig. 93A, F). Carapace length 9.12, width 8.06, length/width 1.13, clypeus to fovea length/carapace length 0.68, caput width/carapace width 0.76, carapace pallid, reflective setae absent or

inconspicuous, fovea procurved, fovea width/carapace length 0.19; chelicerae pallid, rastellum absent or inconspicuous, chelicerae length/carapace length 0.51 (Fig. 93A).

ABDOMEN (Fig. 93B, D). Abdomen length 8.71, light brown, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 93C, G–I). Labium cuspules absent (Fig. 93H); maxillae heel distinct, cuspules present, count=about 153, extending posteriorly onto heel, extending laterally about 60% of maxillae length (Fig. 93C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 93C, I); sternum length/width 1.17, central sternum with consistent covering of short setae, row of longer setae around posterior edges (Fig. 93G–H); posterior sigilla elongate, central sternum to posterior sigilla length/sternum length 0.22, posterior sigilla length/sternum length 0.19 (Fig. 93G–H); other sigilla small and lateral, medial sigilla semi-elongate, anterior sigilla round (Fig. 93G–H).

LEG I (Fig. 93J–K). Leg I pallid, femur length 7.02, patella length 4.27, tibia length 4.93, metatarsus length 4.76, tarsus length 2.69, total length 23.66, leg I length/carapace length 2.59; scopulae on distal metatarsus and tarsus; spine count Fe D 2, Fe PL 1, Pa PL 2, Ti PL 3, Ti RL 4, Me PL 3, Me RL 4, Ta 0; tibia length/width [TIL/TID] 3.64.

GENITALIA (Fig. 93D, L). Epigastric furrow unmodified (Fig. 93D); spermathecae with two vesicles each (Fig. 93L); lateral vesicle very wide, short and roughly triangular, length 0.25, lateral vesicle length/genitalia width 0.17, length/width at base 0.38, crown un-demarcated (Fig. 93L); medial vesicle short, undulating, and projecting postero-ventrally, medial vesicle length/genitalia width 0.23, length/width 4.19, medial vesicle length/lateral vesicle length 1.34 (Fig. 93L).

Distribution and natural history

Aname savannensis sp. nov. occurs in northern Queensland, in the Cape York Peninsula and Gulf Plains bioregions, from around the town of Laura west to Nicholson (Fig. 12). The form of burrows constructed by spiders of this species is unknown, but is likely to be similar to that of other *rubrochelicera*-complex species (Fig. 12).

Minor Aname complexes from eastern Australia

Figs 1, 4, 13, 94–104

Remarks

Here, we define minor complexes as those containing no more than three species, for which we have very little information. Minor complexes identified in this study include the *callitra*-complex (two species), the *aurantella*-complex (three species), the *mariala*-complex (two species), the *flexicaudula*-complex (two species), and the *savannella*-complex (two species). Only male specimens are known for these minor complexes. Because each contains so few species, we have not provided diagnostic keys to individual species within these complexes.

Aname callitra-complex

Figs 4A, 13, 94–95

Composition

The *callitra*-complex includes two described species: *A. callitra* sp. nov. and *A. corundaria* sp. nov.

Aname callitra sp. nov.

urn:lsid:zoobank.org:act:B21175C2-AEE2-4A3E-AA78-DA5700DFA420

Figs 13, 94

Diagnosis

Males of *A. callitra* sp. nov. can be distinguished from all species for which males are known except *A. corundaria* sp. nov. by a small body size (carapace length <4.0 mm), and the presence of a copulatory organ with a short embolus (embolus length/bulb length <1.5) and an angular bulb with a slight ridge adjacent to the embolus (Fig. 94J–Q). Males of *A. callitra* can be distinguished from those of *A. corundaria* by the presence of a thicker, straighter embolus (Fig. 94L–M; cf. Fig. 95).

Females of *A. callitra* sp. nov. are unknown.

Etymology

The specific epithet ‘*callitra*’ is an ad-hoc formation, referencing the cypress pine habitat in which both specimens of this species were collected. It is to be treated as a noun.

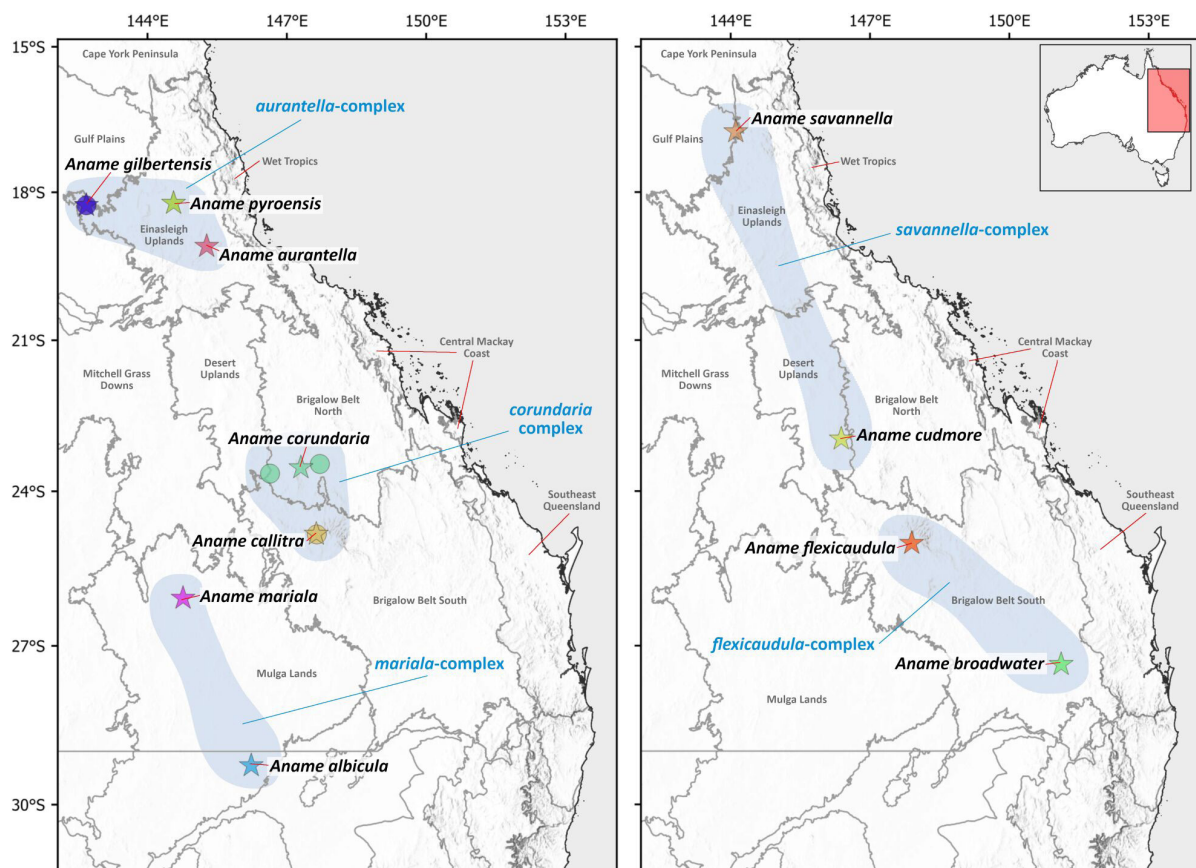


Fig. 13. Distribution of the five minor *Aname* complexes in eastern Australia. Points on the map represented by a star are type localities.

Type material

Holotype

AUSTRALIA – Queensland • ♂; Carnarvon Station; 24°50' S, 147°38' E; 690 m a.s.l.; 25 Nov.–14 Dec. 2010; C. Zwick leg.; pitfall trap, edge of *Callitris* stand; QMB S118363.

Paratypes

AUSTRALIA – Queensland • 3 ♂♂; Carnarvon Station, 11.5 km WSW of headquarters; 24°51' S, 147°39' E; 1 Dec. 2012–17 Jan. 2013; G.B. Monteith and C. Wilson leg.; gutter trap, *Callitris*; QMB S104753.

Description

Male (holotype, QMB S118363)

GENERAL (Fig. 94A–Q). Body length 14.59, in good condition, colour presumably faded due to preservation.

DORSAL PROSOMA (Fig. 94A, E–F). Carapace length 5.12, width 4.10, length/width 1.25, clypeus to fovea length/carapace length 0.69, caput width/carapace width 0.62, carapace red-brown, lighter patches running radially down sides of caput, reflective setae present, light on caput, light on thorax, fovea procurved, fovea width/carapace length 0.10 (Fig. 94A, F); chelicerae red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.51 (Fig. 94A); eye group rectangular, width/length 1.8, eye tubercle present (Fig. 94E).

ABDOMEN (Fig. 94B, D). Abdomen length 6.51, grey, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 94C, G–I). Labium cuspules absent (Fig. 94H); maxillae heel distinct, cuspules present, count=about 80, extending posteriorly onto heel, extending laterally about 40% of maxillae length (Fig. 94C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 94C, I); sternum length/width 1.24, central sternum with consistent covering of short setae, row of longer setae around posterior edges (Fig. 94G–H); posterior sigilla circular, central sternum to posterior sigilla length/sternum length 0.27, posterior sigilla length/sternum length 0.09 (Fig. 94G–H); other sigilla small, round and lateral (Fig. 94G–H).

LEG I (Fig. 94N–Q). Leg I orange-brown, reflective setae on dorsal femur, femur length 4.39, patella length 3.04, tibia length 3.17, metatarsus length 3.51, tarsus length 2.04, total length 16.15, leg I length/carapace length 3.15 (Fig. 94N–O); scopulae on distal metatarsus and tarsus (Fig. 94N–O); spine count Fe D 1, Fe PL 1, Pa PL 2, Ti PL 0, Ti RL 0, Me PL 0, Me RL 0, Ta 0 (Fig. 94N–O); tibia length/width [TIL/TID] 3.14, widening from proximal end to spur before narrowing again towards distal end, spur present, digitiform, knuckle absent, megaspine angled at 30 degrees, length to distal face of spur/tibia length [TIS/TIL] 0.55, spur height/tibia width [TISH/TID] 0.82, megaspine length/tibia length 0.26 (Fig. 94N–P); metatarsus slightly sinuous, proximal excavation present, excavation concave with inconspicuous heel, heel rounded, excavation length/metatarsus length [MIPEL/MIL] 0.54, metatarsus length/width [MIL/MID] 4.55 (Fig. 94N–O, Q).

PEDIPALP (Fig. 94J–M). Tibia length 2.01, width 0.81, length/width [PTL/PTD] 2.49, asetose depression present, depression length/palp tibia length [PDL/PTL] 0.57, retrolateral face with short, thorn-like setae along retrolateral edge of depression, getting denser proximally, ventral face with two elongate bristle-like setae below depression, prolateral face with two disto-ventral spines, disto-medial spine absent (Fig. 94J–K); patella prolateral face with 2 (proximal rubbed off) spines (Fig. 94J–K); cymbium with scopulae present distally (Fig. 94J–K); copulatory organ total length 1.01, length/palp tibia length 0.50

(Fig. 94L–M); bulb length/width 1.11, with angular ridge on bulb adjacent to embolus, embolus tapering and curving relatively evenly to point (Fig. 94L–M); embolus slightly reflexed, attenuate, tapering and curving relatively evenly to point, width at base/bulb width 0.16, embolus length/bulb length 1.00 (Fig. 94L–M).

Distribution and natural history

Aname callitra sp. nov. occurs in central Queensland, in the Brigalow Belt South bioregion, in the Upper Warrego region of the Carnarvon Station Reserve (Fig. 13). The form of burrows constructed by spiders of this species is unknown.

Aname corundaria sp. nov.

[urn:lsid:zoobank.org:act:38B0827E-31D8-4554-B082-CFFAE64BDF72](https://zoobank.org/urn:lsid:zoobank.org:act:38B0827E-31D8-4554-B082-CFFAE64BDF72)

Figs 13, 95

Diagnosis

Males of *A. corundaria* sp. nov. can be distinguished from all species for which males are known except *A. callitra* sp. nov. by a small body size (carapace length <4.0 mm), and the presence of a copulatory organ with a short embolus (embolus length/bulb length <1.5) and an angular bulb with a slight ridge adjacent to the embolus (Fig. 95J–Q). Males of *A. corundaria* can be distinguished from those of *A. callitra* by the presence of a thinner, more strongly curved embolus (Fig. 95L–M; cf. Fig. 94).

Females of *A. corundaria* sp. nov. are unknown.

Etymology

The specific epithet ‘*corundaria*’ is an adjective formed from the Latinised ‘*corundum*’, meaning the mineral corundum that forms sapphires and rubies, and the suffix ‘*-aria*’ denoting a connection or association, in reference to the distribution of this species near the ‘Gemfields’ region of central Queensland, which is famous for its sapphire and ruby deposits.

Type material

Holotype

AUSTRALIA – Queensland • ♂; Drummond Range, summit; 23°32′ S, 147°18′ E; 920 m a.s.l.; 18 Dec. 2000–27 Mar. 2001; D.J. Cook and G.B. Monteith leg.; pitfall trap, open forest; QMB S63017.

Paratype

AUSTRALIA – Queensland • 1 ♂; Sapphire; 23°28′ S, 147°43′ E; 2 Feb. 1991; L. Kempson leg.; QMB S118365.

Other material examined

AUSTRALIA – Queensland • 1 ♂; Alpha; 23°39′ S, 146°38′ E; Jun. 1981; Alpha Hospital leg.; QMB S9753.

Description

Male (holotype, QMB S63017)

GENERAL (Fig. 95A–Q). Body length 19.12, in good condition, colour presumably faded due to preservation.

DORSAL PROSOMA (Fig. 95A, E–F). Carapace length 6.69, width 5.42, length/width 1.24, clypeus to fovea length/carapace length 0.69, caput width/carapace width 0.66, carapace red-brown, reflective setae

present, moderate on caput, moderate on thorax, fovea procurved, fovea width/carapace length 0.16 (Fig. 95A, F); chelicerae dark red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.60 (Fig. 95A); eye group rectangular, width/length 1.94, eye tubercle present (Fig. 95E).

ABDOMEN (Fig. 95B, D). Abdomen length 7.64, grey-brown, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 95C, G–I). Labium cuspules absent (Fig. 95H); maxillae heel distinct, cuspules present, count=about 160, extending posteriorly onto heel, extending laterally about 45% of maxillae length (Fig. 95C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 95C, I); sternum length/width 1.26, central sternum with consistent covering of short setae, row of longer setae around posterior edges (Fig. 95G–H); posterior sigilla ovoid, central sternum to posterior sigilla length/sternum length 0.24, posterior sigilla length/sternum length 0.10 (Fig. 95G–H); other sigilla small, round and lateral (Fig. 95G–H).

LEG I (Fig. 95N–Q). Leg I red-brown, lighter on distal metatarsus and tarsus, reflective setae on dorsal femur, femur length 5.36, patella length 3.58, tibia length 3.84, metatarsus length 4.37, tarsus length 2.49, total length 19.64, leg I length/carapace length 2.93 (Fig. 95N–O); scopulae on distal metatarsus and tarsus (Fig. 95N–O); spine count Fe D 2, Fe PL 1, Pa PL 2, Ti PL 0, Ti RL 0, Me PL 0, Me RL 0, Ta 0 (Fig. 95N–O); tibia length/width [TIL/TID] 2.91, widening from proximal end to spur before narrowing again towards distal end, spur present, digitiform, knuckle absent, megaspine angled at 26 degrees, length to distal face of spur/tibia length [TIS/TIL] 0.58, spur height/tibia width [TISH/TID] 0.62, megaspine length/tibia length 0.21 (Fig. 95N–P); metatarsus slightly sinuous, proximal excavation present, excavation concave with inconspicuous heel, heel rounded, excavation length/metatarsus length [MIPEL/MIL] 0.53, metatarsus length/width [MIL/MID] 4.39 (Fig. 95N–O, Q).

PEDIPALP (Fig. 95J–M). Tibia length 2.45, width 1.18, length/width [PTL/PTD] 2.08, asetose depression present, depression length/palp tibia length [PDL/PTL] 0.54, retrolateral face with short, thorn-like setae along retrolateral edge of depression, getting denser proximally, ventral face with two elongate bristle-like setae below depression, prolateral face with patch of spines on distal half, disto-medial spine present (Fig. 95J–K); patella prolateral face with 2 spines (Fig. 95J–K); cymbium with scopulae present distally (Fig. 95J–K); copulatory organ total length 1.22, length/palp tibia length 0.50 (Fig. 95L–M); bulb length/width 1.10, with angular ridge on bulb adjacent to embolus, embolus tapering and curving relatively evenly to point (Fig. 95L–M); embolus slightly reflexed, attenuate, tapering and curving relatively evenly to point, width at base/bulb width 0.16, embolus length/bulb length 0.97 (Fig. 95L–M).

Distribution and natural history

Aname corundaria sp. nov. occurs in central Queensland, in the Brigalow Belt North bioregion. It is known from three locations, near Sapphire, Drummond Range, and Alpha respectively (Fig. 13). The form of burrows constructed by spiders of this species is unknown.

Aname aurantella-complex

Figs 4B, 13, 96–98

Composition

The *aurantella*-complex includes three described species: *A. aurantella* sp. nov., *A. gilbertensis* sp. nov. and *A. pyroensis* sp. nov.

Aname aurantella sp. nov.

urn:lsid:zoobank.org:act:B9A257C8-1C17-425C-ABAA-94BD7210477F

Figs 13, 96

Diagnosis

Males of *A. aurantella* sp. nov. can be distinguished from all species for which males are known except *A. gilbertensis* sp. nov. and *A. pyroensis* sp. nov. by a moderate to large body size (carapace length >4.0 mm), the presence of a short embolus (embolus length/bulb length <1.5) that curves gradually to a point, a triangular tibial spur (rather than more digitiform), a tibial megaspine of moderate length (megaspine length/tibia length 0.25–0.3), and short thorn-like setae along the retrolateral edge of the asetose depression on palp tibia (Fig. 96A–Q). Males of *A. aurantella* can be distinguished from those of *A. gilbertensis* and *A. pyroensis* by the presence of a straighter metatarsus I, with a shorter proximal excavation (excavation length/metatarsus length ~0.4; cf. ~0.5) (Fig. 96Q; cf. Figs 97–98).

Females of *A. aurantella* sp. nov. are unknown.

Etymology

The specific epithet ‘*aurantella*’ is an adjective formed from the Latin ‘*aurant*’ meaning ‘orange’, and the diminutive suffix ‘*-ella*’, together meaning ‘small and orange’, referencing the physical appearance of the holotype of this species.

Type material

Holotype

AUSTRALIA – Queensland • ♂; 1 km W [E] of Marble Creek crossing; 19°06' S, 145°16' E; 27 Sep.–17 Dec. 2006; R.J. Raven and A. Amey leg.; pitfall trap, open forest; QMB S76998.

Description

Male (holotype, QMB S76998)

GENERAL (Fig. 96A–Q). Body length 12.64, in good condition, colour presumably faded due to preservation.

DORSAL PROSOMA (Fig. 96A, E–F). Carapace length 5.28, width 4.21, length/width 1.25, clypeus to fovea length/carapace length 0.67, caput width/carapace width 0.69, carapace red-brown, caput slightly darker than thorax, reflective setae present, light on caput, very light on thorax, fovea procurved, fovea width/carapace length 0.15 (Fig. 96A, F); chelicerae dark red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.46 (Fig. 96A); eye group rectangular, width/length 2.18, eye tubercle present (Fig. 96E).

ABDOMEN (Fig. 96B, D). Abdomen length 4.67, grey-brown, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 96C, G–I). Labium cuspules present, count=2 (Fig. 96H); maxillae heel absent or inconspicuous, cuspules present, count=about 69, extending posteriorly onto heel, extending laterally about 30% of maxillae length (Fig. 96C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 96C, I); sternum length/width 1.29, central sternum with consistent covering of short setae, row of longer setae around posterior edges (Fig. 96G–H); posterior sigilla ovoid, central sternum to posterior sigilla length/sternum length 0.27, posterior sigilla length/sternum length 0.09 (Fig. 96G–H); other sigilla small, round and lateral (Fig. 96G–H).

LEG I (Fig. 96N–Q). Leg I orange-brown, lighter on patella, tibia, distal metatarsus and tarsus, femur length 4.31, patella length 2.74, tibia length 3.15, metatarsus length 3.13, tarsus length 2.08, total length 15.41, leg I length/carapace length 2.92 (Fig. 96N–O); scopulae on distal metatarsus and tarsus (Fig. 96N–O); spine count Fe D 2, Fe PL 1, Pa PL 2 (proximal rubbed off), Ti PL 0, Ti RL 0, Me PL 0, Me RL 0, Ta 0 (Fig. 96N–O); tibia length/width [TIL/TID] 3.52, even width along length, spur present, triangular, knuckle absent, megaspine angled at 20 degrees, length to distal face of spur/tibia length [TIS/TIL] 0.49, spur height/tibia width [TISH/TID] 0.45, megaspine length/tibia length 0.28 (Fig. 96N–P); metatarsus relatively straight, proximal excavation present, excavation concave with slight heel, heel rounded, excavation length/metatarsus length [MIPEL/MIL] 0.41, metatarsus length/width [MIL/MID] 4.29 (Fig. 96N–O, Q).

PEDIPALP (Fig. 96J–M). Tibia length 2.04, width 0.78, length/width [PTL/PTD] 2.61, asetose depression present, depression length/palp tibia length [PDL/PTL] 0.54, retrolateral face with short, thorn-like setae along retrolateral edge of depression, getting denser proximally, ventral face with two elongate bristle-like setae below depression, prolateral face with two disto-ventral spines, disto-medial spine present (Fig. 96J–K); patella prolateral face with 2 spines (Fig. 96J–K); cymbium with scopulae present distally (Fig. 96J–K); copulatory organ total length 0.98, length/palp tibia length 0.48 (Fig. 96L–M); bulb length/width 1.03 (Fig. 96L–M); embolus demarcated and roughly perpendicular to bulb, attenuate, tapering and curving relatively evenly to point, width at base/bulb width 0.21, embolus length/bulb length 1.46 (Fig. 96L–M).

Distribution and natural history

Aname aurantella sp. nov. occurs in northern Queensland, in the Einasleigh Uplands bioregion, where it is known from one location between the towns of Greenvale and Basalt, north-west of Townsville (Fig. 13). The burrow constructed by specimens of this species is unknown.

Aname gilbertensis sp. nov.

[urn:lsid:zoobank.org:act:4751401B-03B6-4DC4-A76C-BC0F677D363B](https://zoobank.org/act:4751401B-03B6-4DC4-A76C-BC0F677D363B)

Figs 13, 97

Diagnosis

Males of *A. gilbertensis* sp. nov. can be distinguished from all species for which males are known except *A. aurantella* sp. nov. and *A. pyroensis* sp. nov. by a moderate to large body size (carapace length >4.0 mm), the presence of a short embolus (embolus length/bulb length <1.5) that curves gradually to a point, a triangular tibial spur (rather than more digitiform), a tibial megaspine of moderate length (megaspine length/tibia length 0.25–0.3), and short thorn-like setae along the retrolateral edge of the asetose depression on palp tibia (Fig. 97A–Q). Males of *A. gilbertensis* can be distinguished from those of *A. aurantella* by the presence of a more sinuous metatarsus I, with a longer proximal excavation (excavation length/metatarsus length ~0.5; cf. ~0.4) (Fig. 97Q; cf. Fig. 96). Males of *A. gilbertensis* can be distinguished from those of *A. pyroensis* by the presence of a thicker, more strongly curving embolus (Fig. 97L–M; cf. Fig. 98).

Females of *A. gilbertensis* sp. nov. are unknown.

Etymology

The specific epithet ‘*gilbertensis*’ references the distribution of this species near the Gilbert River of the Gulf of Carpentaria, in northern Queensland.

Type material

Holotype

AUSTRALIA – Queensland • ♂; Marsupial Creek, 94 km W of Georgetown; 18°16' S, 142°41' E; 5 m a.s.l.; 5–11 Feb. 1998; G.B. Monteith and D.J. Cook leg.; pitfall trap, open forest; QMB S57129.

Other material examined

AUSTRALIA – Queensland • 1 ♂, 2 juvs; Marsupial Creek, 94 km W of Georgetown; 18°16' S, 142°41' E; 5 m a.s.l.; 5–11 Feb. 1998; G.B. Monteith and D.J. Cook leg.; pitfall trap, open forest; QMB S118366.

Description

Male (holotype, QMB S57129)

GENERAL (Fig. 97A–Q). Body length 13.92, in good condition, colour presumably faded due to preservation.

DORSAL PROSOMA (Fig. 97A, E–F). Carapace length 4.66, width 3.99, length/width 1.17, clypeus to fovea length/carapace length 0.68, caput width/carapace width 0.71, carapace red-brown, caput slightly darker than thorax, reflective setae present, moderate on caput, light on thorax, fovea procurved, fovea width/carapace length 0.15 (Fig. 97A, F); chelicerae dark red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.69 (Fig. 97A); eye group rectangular, width/length 1.88, eye tubercle present (Fig. 97E).

ABDOMEN (Fig. 97B, D). Abdomen length 5.92, grey-brown, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 97C, G–I). Labium cuspules absent (Fig. 97H); maxillae heel absent or inconspicuous, cuspules present, count=about 60, extending posteriorly onto heel, extending laterally about 45% of maxillae length (Fig. 97C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 97C, I); sternum length/width 1.27, many setae rubbed off, central sternum with consistent covering of short setae, row of longer setae around posterior edges (Fig. 97G–H); posterior sigilla ovoid, central sternum to posterior sigilla length/sternum length 0.23, posterior sigilla length/sternum length 0.15 (Fig. 97G–H); other sigilla small, round and lateral (Fig. 97G–H).

LEG I (Fig. 97N–Q). Leg I orange-brown, lighter on distal metatarsus and tarsus, reflective setae on dorsal femur, femur length 4.15, patella length 2.74, tibia length 3.07, metatarsus length 3.01, tarsus length 1.83, total length 14.80, leg I length/carapace length 3.17 (Fig. 97N–O); scopulae on distal metatarsus and tarsus (Fig. 97N–O); spine count Fe D 2, Fe PL 1, Pa PL 2, Ti PL 0, Ti RL 0, Me PL 0, Me RL 0, Ta 0 (Fig. 97N–O); tibia length/width [TIL/TID] 3.21, even width along length, spur present, triangular, knuckle absent, megaspine angled at 27 degrees, length to distal face of spur/tibia length [TIS/TIL] 0.56, spur height/tibia width [TISH/TID] 0.52, megaspine length/tibia length 0.28 (Fig. 97N–P); metatarsus relatively straight, proximal excavation present, excavation concave with slight heel, heel rounded, excavation length/metatarsus length [MIPEL/MIL] 0.53, metatarsus length/width [MIL/MID] 4.26 (Fig. 97N–O, Q).

PEDIPALP (Fig. 97J–M). Tibia length 2.07, width 0.86, length/width [PTL/PTD] 2.42, asetose depression present, depression length/palp tibia length [PDL/PTL] 0.51, retrolateral face with short, thorn-like setae along retrolateral edge of depression, getting denser proximally, ventral face with two elongate bristle-like setae below depression, prolateral face with two disto-ventral spines, disto-medial spine present (Fig. 97J–K); patella prolateral face with 2 (proximal spine weak) spines (Fig. 97J–K); cymbium with scopulae present distally (Fig. 97J–K); copulatory organ total length 0.93, length/palp tibia length 0.45

(Fig. 97L–M); bulb length/width 0.98 (Fig. 97L–M); embolus demarcated and roughly perpendicular to bulb, attenuate, tapering and curving relatively evenly to point, small hook on tip, width at base/bulb width 0.21, embolus length/bulb length 1.33 (Fig. 97L–M).

Distribution and natural history

Aname gilbertensis sp. nov. occurs in northern Queensland, near the boundary of the Einasleigh Uplands and Gulf Plains bioregions, near the town of Gilbert River (Fig. 13). The burrow constructed by specimens of this species is unknown.

Aname pyroensis sp. nov.

[urn:lsid:zoobank.org:act:E4E3B890-B323-43B3-94DD-3517C2C9A1C4](https://doi.org/10.21203/rs.3.rs-4444444/v1)

Figs 13, 98

Diagnosis

Males of *A. pyroensis* sp. nov. can be distinguished from all species for which males are known except *A. aurantella* sp. nov. and *A. gilbertensis* sp. nov. by a moderate to large body size (carapace length >4.0 mm), the presence of a short embolus (embolus length/bulb length <1.5) that curves gradually to a point, a triangular tibial spur (rather than more digitiform), a tibial megaspine of moderate length (megaspine length/tibia length 0.25–0.3), and short thorn-like setae along the retrolateral edge of the asetose depression on the palp tibia (Fig. 98A–Q). Males of *A. pyroensis* can be distinguished from those of *A. aurantella* by the presence of a more sinuous metatarsus I, with a longer proximal excavation (excavation length/metatarsus length ~0.5; cf. ~0.4) (Fig. 98Q; cf. Fig. 96). Males of *A. pyroensis* can be distinguished from those of *A. gilbertensis* by the presence of a thinner, straighter embolus (Fig. 98L–M; cf. Fig. 97).

Females of *A. pyroensis* sp. nov. are unknown.

Etymology

The specific epithet ‘*pyroensis*’ is a Latin adjective meaning ‘fire-born’, referencing both the fiery colours of the holotype of this species, and the type locality, which is near the Undara Lava Tubes.

Type material

Holotype

AUSTRALIA – Queensland • ♂; Undara Lava Tunnels [tubes], near 100 mile scrub; 18°13′ S, 144°34′ E; 20 Sep. 1989; Operation Raleigh leg.; on granite, open woodland; QMB S24999.

Description

Male (holotype, QMB S24999)

GENERAL (Fig. 98A–Q). Body length 15.52, in good condition, colour presumably faded due to preservation.

DORSAL PROSOMA (Fig. 98A, E–F). Carapace length 6.25, width 5.21, length/width 1.20, clypeus to fovea length/carapace length 0.70, caput width/carapace width 0.65, carapace red-brown, caput slightly darker than thorax, reflective setae present, light on caput, light on thorax, fovea procurved, fovea width/carapace length 0.15 (Fig. 98A, F); chelicerae dark red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.53 (Fig. 98A); eye group rectangular, width/length 2.14, eye tubercle present (Fig. 98E).

ABDOMEN (Fig. 98B, D). Abdomen length 6.06, grey-brown, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 98C, G–I). Labium cuspules absent (Fig. 98H); maxillae heel distinct, cuspules present, count=about 68, extending posteriorly onto heel, extending laterally about 40% of maxillae length (Fig. 98C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 98C, I); sternum length/width 1.22, central sternum with consistent covering of short setae, row of longer setae around posterior edges (Fig. 98G–H); posterior sigilla semi-elongate, central sternum to posterior sigilla length/sternum length 0.25, posterior sigilla length/sternum length 0.15 (Fig. 98G–H); other sigilla small, round and lateral (Fig. 98G–H).

LEG I (Fig. 98N–Q). Leg I orange, darker on femur and patella, reflective setae on dorsal femur, femur length 5.36, patella length 3.41, tibia length 3.86, metatarsus length 3.97, tarsus length 2.33, total length 18.93, leg I length/carapace length 3.03 (Fig. 98N–O); scopulae on distal metatarsus and tarsus (Fig. 98N–O); spine count Fe D 2, Fe PL 1, Pa PL 2, Ti PL 0, Ti RL 0, Me PL 0, Me RL 0, Ta 0 (Fig. 98N–O); tibia length/width [TIL/TID] 3.23, even width along length, spur present, triangular, knuckle absent, megaspine angled at 22 degrees, length to distal face of spur/tibia length [TIS/TIL] 0.56, spur height/tibia width [TISH/TID] 0.54, megaspine length/tibia length 0.26 (Fig. 98N–P); metatarsus slightly sinuous, proximal excavation present, excavation concave with inconspicuous heel, heel rounded, excavation length/metatarsus length [MIPEL/MIL] 0.53, metatarsus length/width [MIL/MID] 4.65 (Fig. 98N–O, Q).

PEDIPALP (Fig. 98J–M). Tibia length 2.77, width 1.14, length/width [PTL/PTD] 2.43, aetose depression present, depression length/palp tibia length [PDL/PTL] 0.49, retrolateral face with short, thorn-like setae along retrolateral edge of depression, getting denser proximally, ventral face with one elongate bristle-like setae below depression, prolateral face with two disto-ventral spines, disto-medial spine absent (Fig. 98J–K); patella prolateral face with 2 spines (Fig. 98J–K); cymbium with scopulae present distally (Fig. 98J–K); copulatory organ total length 1.32, length/palp tibia length 0.48 (Fig. 98L–M); bulb length/width 1.03 (Fig. 98L–M); embolus demarcated and roughly perpendicular to bulb, attenuate, tapering and curving relatively evenly to point, width at base/bulb width 0.20, embolus length/bulb length 1.09 (Fig. 98L–M).

Distribution and natural history

Aname pyroensis sp. nov. occurs in northern Queensland, in the Einasleigh Uplands bioregion. It is known from a single location in Undara Volcanic National Park (Fig. 13). The form of burrows constructed by spiders of this species is unknown.

Aname mariala-complex

Figs 4C, 13, 99–100

Composition

The *mariala*-complex includes two described species: *A. albicula* sp. nov. and *A. mariala* sp. nov.

Aname albicula sp. nov.

[urn:lsid:zoobank.org:act:F008E02B-2EFA-45EA-8510-C2A36FD412A6](https://zoobank.org/urn:lsid:zoobank.org:act:F008E02B-2EFA-45EA-8510-C2A36FD412A6)

Figs 13, 99

Diagnosis

Males of *A. albicula* sp. nov. can be distinguished from all species for which males are known except *A. mariala* sp. nov. by a small body size (carapace length <4.0 mm), the presence of a short embolus

(embolus length/bulb length < 1.5) that is very thin and sharp, a relatively thin metatarsus I (metatarsus I length/width > 4), and the absence of thorn-like setae on the retrolateral palp tibia (Fig. 99A–Q). Males of *A. albicula* can be distinguished from those of *A. mariala* by the presence of a small embolic apophysis on the copulatory organ, adjacent to the embolus (Fig. 99L–M; cf. Fig. 100).

Females of *A. albicula* sp. nov. are unknown.

Etymology

The specific epithet ‘*albicula*’ is an adjective formed from the Latin ‘*albus*’, meaning ‘white’, and the suffix ‘*-cula*’, which is associated with diminutiveness, referencing the spider’s physical appearance.

Type material

Holotype

AUSTRALIA – New South Wales • ♂; Ledknapper Nature Reserve; 29°16' S, 146°14' E; 5 Sep. 1994; QMB S108632.

Description

Male (holotype, QMB S108632)

GENERAL (Fig. 99A–Q). Body length 7.98, in good condition, colour presumably faded due to preservation.

DORSAL PROSOMA (Fig. 99A, E–F). Carapace length 3.09, width 2.26, length/width 1.37, clypeus to fovea length/carapace length 0.67, caput width/carapace width 0.66, carapace pallid, almost white, reflective setae absent or inconspicuous, fovea procurved, fovea width/carapace length 0.07 (Fig. 99A, F); chelicerae pallid, almost white, rastellum absent or inconspicuous, chelicerae length/carapace length 0.47 (Fig. 99A); eye group rectangular, width/length 1.96, eye tubercle present (Fig. 99E).

ABDOMEN (Fig. 99B, D). Abdomen length 3.45, very light grey, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 99C, G–I). Labium cuspules absent (Fig. 99H); maxillae heel distinct, cuspules present, count=about 60, extending posteriorly onto heel, extending laterally about 45% of maxillae length (Fig. 99C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 99C, I); sternum length/width 1.30, central sternum with consistent covering of short setae, row of longer setae around posterior edges (Fig. 99G–H); posterior sigilla ovoid, central sternum to posterior sigilla length/sternum length 0.34, posterior sigilla length/sternum length 0.06 (Fig. 99G–H); other sigilla small, round and lateral (Fig. 99G–H).

LEG I (Fig. 99N–Q). Leg I pallid, almost white, femur length 2.89, patella length 1.64, tibia length 2.05, metatarsus length 2.02, tarsus length 1.52, total length 10.12, leg I length/carapace length 3.27 (Fig. 99N–O); scopulae on distal metatarsus and tarsus (Fig. 99N–O); spine count Fe D 1, Fe PL 1, Pa PL 2, Ti PL 2, Ti RL 0, Me PL 2, Me RL 0, Ta 0 (Fig. 99N–O); tibia length/width [TIL/TID] 3.49, even width along length, spur present, intermediate triangular/digitiform, knuckle absent, megaspine angled at 21 degrees, length to distal face of spur/tibia length [TIS/TIL] 0.57, spur height/tibia width [TISH/TID] 0.64, megaspine length/tibia length 0.34 (Fig. 99N–P); metatarsus relatively straight, proximal excavation present, excavation gently concave, heel semi-sharp, excavation length/metatarsus length [MIPEL/MIL] 0.37, metatarsus length/width [MIL/MID] 4.20 (Fig. 99N–O, Q).

PEDIPALP (Fig. 99J–M). Tibia length 1.31, width 0.58, length/width [PTL/PTD] 2.27, aetose depression present, depression length/palp tibia length [PDL/PTL] 0.42, retrolateral face with consistent covering of light setae, ventral face with two elongate bristle-like setae below depression, prolateral face with

no spines, disto-medial spine present (Fig. 99J–K); patella prolateral face with 2 spines (Fig. 99J–K); cymbium with scopulae present distally (Fig. 99J–K); copulatory organ total length 0.62, length/palp tibia length 0.48 (Fig. 99L–M); bulb length/width 1.08, with small apophysis adjacent to embolus (Fig. 99L–M); embolus tapering from bulb, attenuate, tapering and curving relatively evenly to point, one slight bend, at about 0.4 of length, width at base/bulb width 0.18, embolus length/bulb length 0.84 (Fig. 99L–M).

Distribution and natural history

Aname albicula sp. nov. occurs in north-western New South Wales, in the Mulga Lands bioregion, in Ledknapper Nature Reserve (Fig. 13). The form of burrows constructed by spiders of this species is unknown.

Aname mariala sp. nov.

[urn:lsid:zoobank.org:act:1E42ECAA-350E-457A-88A3-CAC0C664F6E1](https://doi.org/10.21203/rs.3.rs-1131111/v1)

Figs 13, 100

Diagnosis

Males of *A. mariala* sp. nov. can be distinguished from all species for which males are known except *A. albicula* sp. nov. by a small body size (carapace length <4.0 mm), the presence of a short embolus (embolus length/bulb length <1.5) that is very thin and sharp, a relatively thin metatarsus I (metatarsus I length/width >4), and the absence of thorn-like setae on the retrolateral palp tibia (Fig. 100A–Q). Males of *A. mariala* can be distinguished from those of *A. albicula* by the absence of an embolic apophysis on the copulatory organ, adjacent to the embolus (Fig. 100L–M; cf. Fig. 99).

Females of *A. mariala* sp. nov. are unknown.

Etymology

The specific epithet ‘*mariala*’ is a noun in apposition, referencing Mariala National Park, near Charleville in central Queensland, where the type specimen was found.

Type material

Holotype

AUSTRALIA – Queensland • ♂; about 15 km W of Mariala National Park, “Gumbardo” property off Adavale Cheepie Rd; 26°05' S, 144°46' E; Apr. 2001; T. Beutel leg.; pitfall trap, mulga; QMB S77354.

Description

Male (holotype, QMB S77354)

GENERAL (Fig. 100A–Q). Body length 9.41, in good condition, colour presumably faded due to preservation.

DORSAL PROSOMA (Fig. 100A, E–F). Carapace length 3.67, width 3.06, length/width 1.20, clypeus to fovea length/carapace length 0.68, caput width/carapace width 0.64, carapace pallid-orange, caput slightly darker than thorax, with T-shaped pigmented area along frontal and medial caput, reflective setae absent or inconspicuous, fovea procurved, fovea width/carapace length 0.12 (Fig. 100A, F); chelicerae orange, rastellum absent or inconspicuous, chelicerae length/carapace length 0.51 (Fig. 100A); eye group rectangular, width/length 1.99, eye tubercle present (Fig. 100E).

ABDOMEN (Fig. 100B, D). Abdomen length 3.91, pallid, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 100C, G–I). Labium cuspules absent (Fig. 100H); maxillae heel distinct, cuspules present, count=about 45, extending posteriorly onto heel, extending laterally about 35% of maxillae length (Fig. 100C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 100C, I); sternum length/width 1.26, central sternum with consistent covering of short setae, row of longer setae around posterior edges (Fig. 100G–H); posterior sigilla ovoid, central sternum to posterior sigilla length/sternum length 0.29, posterior sigilla length/sternum length 0.10 (Fig. 100G–H); other sigilla small, round and lateral (Fig. 100G–H).

LEG I (Fig. 100N–Q). Leg I pallid-orange, darker on distal femur, patella, and proximal metatarsus, femur length 3.45, patella length 2.05, tibia length 2.50, metatarsus length 2.67, tarsus length 1.71, total length 12.37, leg I length/carapace length 3.37 (Fig. 100N–O); scopulae on distal metatarsus and tarsus (Fig. 100N–O); spine count Fe D 1, Fe PL 1, Pa PL 3, Ti PL 0, Ti RL 1, Me PL 0, Me RL 0, Ta 0 (Fig. 100N–O); tibia length/width [TIL/TID] 3.48, even width along length, spur present, triangular, knuckle absent, megaspine angled at 27 degrees, length to distal face of spur/tibia length [TIS/TIL] 0.50, spur height/tibia width [TISH/TID] 0.59, megaspine length/tibia length 0.38 (Fig. 100N–P); metatarsus relatively straight, proximal excavation present, excavation straight with inconspicuous heel, heel rounded, excavation length/metatarsus length [MIPEL/MIL] 0.37, metatarsus length/width [MIL/MID] 5.52 (Fig. 100N–O, Q).

PEDIPALP (Fig. 100J–M). Tibia length 1.44, width 0.56, length/width [PTL/PTD] 2.59, aetose depression present, depression length/palp tibia length [PDL/PTL] 0.49, retrolateral face with consistent covering of light setae, ventral face with one spine-like, and one bristle-like seta below depression, prolateral face with one disto-ventral spine and a single medial spine, disto-medial spine present (Fig. 100J–K); patella prolateral face with 3 (proximal weak) spines (Fig. 100J–K); cymbium with scopulae present distally (Fig. 100J–K); copulatory organ total length 0.72, length/palp tibia length 0.50 (Fig. 100L–M); bulb length/width 1.13 (Fig. 100L–M); embolus tapering from bulb, attenuate, tapering and curving relatively evenly to point, one slight bend, at about 0.5 of length, width at base/bulb width 0.14, embolus length/bulb length 0.82 (Fig. 100L–M).

Distribution and natural history

Aname mariala sp. nov. occurs in south-western Queensland, in the Mulga Lands bioregion, where it is known from one location in Mariala National Park (Fig. 13). The form of burrows constructed by spiders of this species is unknown.

Aname flexicaudula-complex Figs 4D, 13, 101–102

Composition

The *flexicaudula*-complex includes two described species: *A. broadwater* sp. nov. and *A. flexicaudula* sp. nov.

Aname broadwater sp. nov. [urn:lsid:zoobank.org:act:87049CA7-0C2B-4ECC-ADF7-BBCE2F0D20E6](https://doi.org/10.21203/rs.3.rs-87049CA7-0C2B-4ECC-ADF7-BBCE2F0D20E6) Figs 13, 101

Diagnosis

Males of *A. broadwater* sp. nov. can be distinguished from all species for which males are known except *A. flexicaudula* sp. nov. by a small body size (carapace length <4.0 mm), and the presence of a long

embolus (embolus length/bulb length >1.5) that is reflexed relative to the bulb and relatively straight (Fig. 101K–P). Males of *A. broadwater* can be distinguished from those of *A. flexicaudula* by presence of a thinner tibia I (tibia length/width ~3.1; cf. ~3.5 in *A. flexicaudula*) with a more distally-positioned tibial spur (length to spur/tibia length ~0.5; cf. ~0.4 in *A. flexicaudula*) (Fig. 101P; cf. Fig. 102).

Females of *A. broadwater* sp. nov. are unknown.

Etymology

The specific epithet ‘*broadwater*’ is a noun in apposition, referencing Lake Broadwater Conservation Park, just west of Dalby, the type locality of this species.

Type material

Holotype

AUSTRALIA – Queensland • ♂; Lake Broadwater, via Dalby, Site 5; 27°21' S, 151°07' E; 17 May–24 Nov. 1985; Queensland Museum Party, M. Bennie leg.; pitfall trap; QMB S3148.

Description

Male (holotype, QMB S3148)

GENERAL (Fig. 101A–Q). Body length 8.02, in good condition, colour presumably faded due to preservation.

DORSAL PROSOMA (Fig. 101A, E–F). Carapace length 3.16, width 2.47, length/width 1.28, clypeus to fovea length/carapace length 0.68, caput width/carapace width 0.76, carapace pallid-orange, caput slightly darker than thorax, reflective setae absent or inconspicuous, fovea straight, fovea width/carapace length 0.15 (Fig. 101A, F); chelicerae orange, rastellum absent or inconspicuous, chelicerae length/carapace length 0.50 (Fig. 101A); eye group rectangular, width/length 1.99, eye tubercle present (Fig. 101E).

ABDOMEN (Fig. 101B, D). Abdomen length 3.24, light brown, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 101C, G–I). Labium cuspules absent (Fig. 101H); maxillae heel distinct, cuspules present, count=about 75, extending posteriorly onto heel, extending laterally about 60% of maxillae length (Fig. 101C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 101C, I); sternum length/width 1.34, central sternum with consistent covering of short setae, row of longer setae around posterior edges (Fig. 101G–H); posterior sigilla ovoid, central sternum to posterior sigilla length/sternum length 0.30, posterior sigilla length/sternum length 0.07 (Fig. 101G–H); other sigilla small, round and lateral (Fig. 101G–H).

LEG I (Fig. 101N–Q). Leg I pallid, darker on distal femur and patella, femur length 2.74, patella length 1.64, tibia length 1.98, metatarsus length 1.96, tarsus length 1.29, total length 9.61, leg I length/carapace length 3.04 (Fig. 101N–O); scopulae on distal metatarsus and tarsus (Fig. 101N–O); spine count Fe D 1, Fe PL 1, Pa PL 2, Ti PL 0, Ti RL 0, Me PL 0, Me RL 0, Ta 0 (Fig. 101N–O); tibia length/width [TIL/TID] 3.53, even width along length, spur present, intermediate triangular/digitiform, knuckle absent, megaspine angled at 22 degrees, length to distal face of spur/tibia length [TIS/TIL] 0.49, spur height/tibia width [TISH/TID] 0.55, megaspine length/tibia length 0.36 (Fig. 101N–P); metatarsus slightly sinuous, proximal excavation present, excavation straight with inconspicuous heel, heel rounded, excavation length/metatarsus length [MIPEL/MIL] 0.42, metatarsus length/width [MIL/MID] 4.19 (Fig. 101N–O, Q).

PEDIPALP (Fig. 101J–M). Tibia length 1.69, width 0.55, length/width [PTL/PTD] 3.07, asetose depression present, depression length/palp tibia length [PDL/PTL] 0.49, retrolateral face with consistent covering

of light setae, ventral face with many very fine, bristle-like setae, prolateral face with two disto-ventral spines, disto-medial spine present (Fig. 101J–K); patella prolateral face with 2 (both rubbed off) spines (Fig. 101J–K); cymbium with scopulae present distally (Fig. 101J–K); copulatory organ total length 1.24, length/palp tibia length 0.73 (Fig. 101L–M); bulb length/width 0.95 (Fig. 101L–M); embolus strongly reflexed, attenuate, long and relatively straight, width at base/bulb width 0.15, embolus length/bulb length 2.85 (Fig. 101L–M).

Distribution and natural history

Aname broadwater sp. nov. occurs in southern Queensland, in the Brigalow Belt South bioregion. It is only known from the type locality, in Lake Broadwater Conservation Park, near the town of Dalby (Fig. 13). The form of burrows constructed by spiders of this species is unknown.

Aname flexicaudula sp. nov.

[urn:lsid:zoobank.org:act:BC0DE856-8900-41F2-BD36-D16165F8753C](https://zoobank.org/urn:lsid:zoobank.org:act:BC0DE856-8900-41F2-BD36-D16165F8753C)

Figs 13, 102

Diagnosis

Males of *A. flexicaudula* sp. nov. can be distinguished from all species for which males are known except *A. broadwater* sp. nov. by a small body size (carapace length <4.0 mm), and the presence of a long embolus (embolus length/bulb length >1.5) that is reflexed relative to the bulb and relatively straight (Fig. 102K–P). Males of *A. flexicaudula* can be distinguished from those of *A. broadwater* by presence of a thicker tibia I (tibia length/width ~3.5; cf. ~3.1 in *A. broadwater*) with a proximally-positioned tibial spur (length to spur/tibia length ~0.4; cf. ~0.5 in *A. broadwater*) (Fig. 102P; cf. Fig. 101).

Females of *A. flexicaudula* sp. nov. are unknown.

Etymology

The specific epithet '*flexicaudula*' is an adjective formed from the Latin '*flexus*', meaning 'bent', and '*cauda*' meaning 'tail' or 'appendage', and the diminutive suffix '*-ula*'. Combined, the epithet references the small size of the species, and its distinctive, long, reflexed embolus.

Type material

Holotype

AUSTRALIA – Queensland • ♂; Carnarvon National Park, Mount Moffatt Section; 25°01' S, 147°54' E; 720 m a.s.l.; 26 Sep.–2 Nov. 2012; N. Starick, C. Lambkin, S. Wright and B. Keith leg.; pitfall trap; QMB S27992.

Description

Male (holotype, QMB S27992)

GENERAL (Fig. 102A–Q). Body length 7.41, in good condition, colour presumably faded due to preservation.

DORSAL PROSOMA (Fig. 102A, E–F). Carapace length 3.07, width 2.45, length/width 1.25, clypeus to fovea length/carapace length 0.65, caput width/carapace width 0.66, carapace red-brown, caput slightly darker than thorax, reflective setae absent or inconspicuous, fovea straight, fovea width/carapace length 0.12 (Fig. 102A, F); chelicerae red-brown, rastellum present, chelicerae length/carapace length 0.55 (Fig. 102A); eye group rectangular, width/length 2.1, eye tubercle present (Fig. 102E).

ABDOMEN (Fig. 102B, D). Abdomen length 2.62, charcoal dorsally, pallid laterally, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 102C, G–I). Labium cuspules absent (Fig. 102H); maxillae heel distinct, cuspules present, count=about 92, extending posteriorly onto heel, extending laterally about 60% of maxillae length (Fig. 102C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 102C, I); sternum length/width 1.35, central sternum with consistent covering of very short setae, row of longer setae around posterior edges (Fig. 102G–H).

LEG I (Fig. 102N–Q). Leg I pallid, darker on distal femur and patella, femur length 2.59, patella length 1.52, tibia length 1.74, metatarsus length 1.83, tarsus length 1.28, total length 8.96, leg I length/carapace length 2.92 (Fig. 102N–O); scopulae on distal metatarsus and tarsus (Fig. 102N–O); spine count Fe D 1, Fe PL 1, Pa PL 2, Ti PL 0, Ti RL 0, Me PL 0, Me RL 0, Ta 0 (Fig. 102N–O); tibia length/width [TIL/TID] 3.11, even width along length, spur present, digitiform, knuckle absent, megaspine angled at 22 degrees, length to distal face of spur/tibia length [TIS/TIL] 0.42, spur height/tibia width [TISH/TID] 0.64, megaspine length/tibia length 0.38 (Fig. 102N–P); metatarsus slightly sinuous, proximal excavation present, excavation straight with inconspicuous heel, heel rounded, excavation length/metatarsus length [MIPEL/MIL] 0.48, metatarsus length/width [MIL/MID] 4.16 (Fig. 102N–O, Q).

PEDIPALP (Fig. 102J–M). Tibia length 1.53, width 0.54, length/width [PTL/PTD] 2.81, asetose depression present, depression length/palp tibia length [PDL/PTL] 0.67, retrolateral face with consistent covering of light setae, ventral face with two elongate bristle-like setae below depression, prolateral face with two disto-ventral spines, disto-medial spine absent (Fig. 102J–K); patella prolateral face with 0 spines (Fig. 102J–K); cymbium with scopulae present distally (Fig. 102J–K); copulatory organ total length 1.09, length/palp tibia length 0.71 (Fig. 102L–M); bulb length/width 1.02 (Fig. 102L–M); embolus strongly reflexed, attenuate, long and relatively straight, slight bend before tip, width at base/bulb width 0.19, embolus length/bulb length 2.26 (Fig. 102L–M).

Distribution and natural history

Aname flexicaudula sp. nov. occurs in central Queensland, in the Brigalow Belt South bioregion, in the Mount Moffatt region of Carnarvon National Park (Fig. 13). The form of burrows constructed by spiders of this species is unknown.

Aname savanella-complex

Figs 4E, 13, 103–104

Composition

The *savanella*-complex includes two described species: *A. cudmore* sp. nov. and *A. savannella* sp. nov.

Aname cudmore sp. nov.

[urn:lsid:zoobank.org:act:EC482C09-C9E6-4BB8-BBAF-41C6F46D800B](https://doi.org/10.21203/rs.3.rs-1031031/v1)

Figs 13, 103

Diagnosis

Males of *A. cudmore* sp. nov. can be distinguished from all species for which males are known except *A. savannella* sp. nov. by a small body size (carapace length <4.0 mm), the presence of a short embolus (embolus length/bulb length <1.5), a relatively thick metatarsus I (metatarsus I length/width <4), and the absence of thorn-like setae on the retrolateral palp tibia (Fig. 103A–Q). Males of *A. cudmore* can be distinguished from those of *A. savannella* by the presence of a thicker metatarsus I (metatarsus I length/width ~3.2; cf. ~3.9 in *A. savannella*) (Fig. 103Q; cf. Fig. 104).

Females of *A. cudmore* sp. nov. are unknown.

Etymology

The specific epithet '*cudmore*' is a noun in apposition, referencing the only known collection locality of this species, in Cudmore National Park at the northern end of the Drummond Range in central Queensland.

Type material

Holotype

AUSTRALIA – Queensland • ♂; Cudmore National Park; 22°58' S, 146°23' E; 351 m a.s.l.; 28 Oct. 2010–2 Aug. 2011; C. Lambkin, N. Starick and J. Bailey leg.; pitfall trap; QMB S96936.

Description

Male (holotype, QMB S96936)

GENERAL (Fig. 103A–Q). Body length 9.67, in good condition except abdomen which has lost all internal tissue, colour probably also faded due to preservation.

DORSAL PROSOMA (Fig. 103A, E–F). Carapace length 3.23, width 2.54, length/width 1.27, clypeus to fovea length/carapace length 0.73, caput width/carapace width 0.71, carapace red-brown, caput slightly darker than thorax, reflective setae absent or inconspicuous, fovea procurved, fovea width/carapace length 0.18 (Fig. 103A, F); chelicerae red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.69 (Fig. 103A); eye group rectangular, width/length 2.07, eye tubercle present (Fig. 103E).

ABDOMEN (Fig. 103B, D). Abdomen length 4.05, pallid, translucent, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 103C, G–I). Labium cuspules absent (Fig. 103H); maxillae heel distinct, cuspules present, count=about 50, extending posteriorly onto heel, extending laterally about 30% of maxillae length (Fig. 103C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 103C, I); sternum length/width 1.17, central sternum with consistent covering of short setae, row of longer setae around posterior edges (Fig. 103G–H); posterior sigilla circular, central sternum to posterior sigilla length/sternum length 0.32, posterior sigilla length/sternum length 0.08 (Fig. 103G–H); other sigilla small, round and lateral (Fig. 103G–H).

LEG I (Fig. 103N–Q). Leg I pallid, darker on femur and patella, femur length 2.66, patella length 1.58, tibia length 1.99, metatarsus length 1.62, tarsus length 1.03, total length 8.87, leg I length/carapace length 2.75 (Fig. 103N–O); scopulae on distal metatarsus and tarsus (Fig. 103N–O); spine count Fe D 1, Fe PL 1, Pa PL 2, Ti PL 0, Ti RL 0, Me PL 0, Me RL 0, Ta 0 (Fig. 103N–O); tibia length/width [TIL/TID] 3.75, even width along length, spur present, triangular, knuckle absent, megaspine angled at 19 degrees, length to distal face of spur/tibia length [TIS/TIL] 0.50, spur height/tibia width [TISH/TID] 0.51, megaspine length/tibia length 0.35 (Fig. 103N–P); metatarsus relatively straight, proximal excavation present, excavation straight with inconspicuous heel, heel rounded, excavation length/metatarsus length [MIPEL/MIL] 0.43, metatarsus length/width [MIL/MID] 3.16 (Fig. 103N–O, Q).

PEDIPALP (Fig. 103J–M). Tibia length 1.36, width 0.55, length/width [PTL/PTD] 2.48, asetose depression present, depression length/palp tibia length [PDL/PTL] 0.60, retrolateral face with consistent covering of light setae, ventral face with two elongate bristle-like setae below depression, prolateral face with patch of spines on distal half, disto-medial spine present (Fig. 103J–K); patella prolateral face with 2 (proximal spine weak) spines (Fig. 103J–K); cymbium with scopulae present distally (Fig. 103J–K); copulatory organ total length 0.77, length/palp tibia length 0.57 (Fig. 103L–M); bulb length/width 1.07 (Fig. 103L–M); embolus slightly reflexed, attenuate, tapering and curving relatively evenly to point, width at base/bulb width 0.14, embolus length/bulb length 1.08 (Fig. 103L–M).

Distribution and natural history

Aname cudmore sp. nov. occurs in central Queensland, in the Desert Uplands bioregion, in the Cudmore Resources Reserve (Fig. 13). The form of burrows constructed by spiders of this species is unknown.

Aname savannella sp. nov.

[urn:lsid:zoobank.org:act:98C87D92-C503-4E12-9BC2-7814CC508076](https://doi.org/10.21203/rs.3.rs-10000000/v1)

Figs 13, 104

Diagnosis

Males of *A. savannella* sp. nov. can be distinguished from all species for which males are known except *A. cudmore* sp. nov. by a small body size (carapace length <4.0 mm), the presence of a short embolus (embolus length/bulb length <1.5), a relatively thick metatarsus I (metatarsus I length/width <4), and the absence of thorn-like setae on the retrolateral palp tibia (Fig. 104A–Q). Males of *A. savannella* can be distinguished from those of *A. cudmore* by the presence of a thinner metatarsus I (metatarsus I length/width ~3.9; cf. ~3.2 in *A. cudmore*) (Fig. 104Q; cf. Fig. 103).

Females of *A. savannella* sp. nov. are unknown.

Etymology

The specific epithet ‘*savannella*’ is a combination of ‘savanna’, referencing the distribution of this species within the savannah of northern Queensland, and the diminutive suffix ‘-ella’, referencing the small size of the species.

Type material

Holotype

AUSTRALIA – Queensland • ♂; Burketown Developmental Road, W of Chillagoe, E of jumpup; 16° 46' S, 144° 06' E; 256 m a.s.l.; 12 Jul. 2006–26 Sep. 2011; R. Raven, B. Baehr and A. Amey leg.; pitfall trap; QMB S76052.

Description

Male (holotype, QMB S76052)

GENERAL (Fig. 104A–Q). Body length 7.66, in good condition, colour presumably faded due to preservation.

DORSAL PROSOMA (Fig. 104A, E–F). Carapace length 2.49, width 2.14, length/width 1.16, clypeus to fovea length/carapace length 0.70, caput width/carapace width 0.73, carapace pallid-orange, caput slightly darker than thorax, reflective setae absent or inconspicuous, fovea procurved, fovea width/carapace length 0.17 (Fig. 104A, F); chelicerae orange-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.77 (Fig. 104A); eye group rectangular, width/length 2.24, eye tubercle present (Fig. 104E).

ABDOMEN (Fig. 104B, D). Abdomen length 2.89, light grey, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 104C, G–I). Labium cuspules absent (Fig. 104H); maxillae heel absent or inconspicuous, cuspules present, count=about 49, extending posteriorly onto heel, extending laterally about 55% of maxillae length (Fig. 104C, I); coxae cuspules present, around 15 cuspules on inner corner of leg I coxa, thorn-like setae on prolateral face present (Fig. 104C, I); sternum length/width 1.18, central sternum with consistent covering of very short setae, row of longer setae around posterior

edges (Fig. 104G–H); posterior sigilla circular, central sternum to posterior sigilla length/sternum length 0.36, posterior sigilla length/sternum length 0.08 (Fig. 104G–H); other sigilla small, round and lateral (Fig. 104G–H).

LEG I (Fig. 104N–Q). Leg I pallid, darker on metatarsus and tarsus, femur length 2.21, patella length 1.27, tibia length 1.87, metatarsus length 1.44, tarsus length 0.94, total length 7.73, leg I length/carapace length 3.11 (Fig. 104N–O); scopulae on distal metatarsus and tarsus (Fig. 104N–O); spine count Fe D 4, Fe PL 1, Pa PL 2, Ti PL 1, Ti RL 1, Me PL 0, Me RL 0, Ta 0 (Fig. 104N–O); tibia length/width [TIL/TID] 3.54, widening from proximal end to spur before narrowing again towards distal end, spur present, obtuse triangular, knuckle absent, megaspine angled at 18 degrees, length to distal face of spur/tibia length [TIS/TIL] 0.67, spur height/tibia width [TISH/TID] 0.24, megaspine length/tibia length 0.27 (Fig. 104N–P); metatarsus relatively straight, proximal excavation present, excavation straight with inconspicuous heel, heel rounded, excavation length/metatarsus length [MIPEL/MIL] 0.53, metatarsus length/width [MIL/MID] 3.86 (Fig. 104N–O, Q).

PEDIPALP (Fig. 104J–M). Tibia length 1.01, width 0.44, length/width [PTL/PTD] 2.31, asetose depression present, depression length/palp tibia length [PDL/PTL] 0.54, retrolateral face with short, thorn-like setae along retrolateral edge of depression, getting denser proximally, ventral face with two elongate bristle-like setae below depression, prolateral face with patch of spines on distal half, disto-medial spine present (Fig. 104J–K); patella prolateral face with 3 spines (Fig. 104J–K); cymbium with scopulae present distally (Fig. 104J–K); copulatory organ total length 0.53, length/palp tibia length 0.53 (Fig. 104L–M); bulb length/width 1.00 (Fig. 104L–M); embolus demarcated and roughly perpendicular to bulb, attenuate, tapering and curving relatively evenly to point, width at base/bulb width 0.12, embolus length/bulb length 0.89 (Fig. 104L–M).

Distribution and natural history

Aname savannella sp. nov. occurs in central Queensland, in the Gulf Plains bioregion. It is only known from the type locality, off Burketown Developmental Road, inland of the town of Chillagoe (Fig. 13). The form of burrows constructed by spiders of this species is unknown.

Miscellaneous species from eastern Australia

Figs 1, 4–5, 14, 105–120

Remarks

Miscellaneous species are those that display sufficiently unique morphology so as not to fit into an easily definable complex.

Composition

Miscellaneous species from subtropical and tropical eastern Australia include 11 species: *A. camara* Raven, 1985, *A. consuelo* sp. nov., *A. distorta* sp. nov., *A. ethabuka* sp. nov., *A. insolita* sp. nov., *A. lawrenceae* sp. nov., *A. litoralis* sp. nov., *A. namoi* sp. nov., *A. olkola* sp. nov., *A. serpentina* sp. nov. and *A. viridiensis* sp. nov.

Aname camara Raven, 1985

Figs 14, 105–107

Aname camara Raven, 1985: 387, figs 3, 15, 23, 27, 37, 54, 63.

Diagnosis

Males of *A. camara* can be distinguished from all species for which males are known by a moderate to large body size (carapace length >4.0 mm), the presence of a long embolus (embolus length/bulb length >1.5) that is very strongly curved, and a small, tight patch of thorn-like setae on the retrolateral palp tibia (Figs 105J–M, 106J–M).

Females of *A. camara* can be distinguished from all species for which females are known except *A. aurensis* sp. nov., *A. briggsi* sp. nov., *A. dingo* sp. nov., *A. eddieorum* sp. nov., *A. longithecata*, *A. mulgana* sp. nov., and *A. rupicola* sp. nov. by the presence of spermathecae with two vesicles, with relatively long and straight lateral vesicles (lateral vesicle length/genitalia width >0.25) and long medial vesicles (medial vesicle length/lateral vesicle length >1) that project medially or posteromedially, before undulating towards the anterior (Fig. 107L). Females of *A. camara* can be distinguished from those of *A. aurensis*, *A. briggsi*, *A. dingo*, *A. eddieorum*, *A. longithecata*, *A. mulgana*, and *A. rupicola* by the presence of a light tan body colouration and spermathecae with relatively short vesicles (medial vesicle length/genitalia width ~0.3; cf. >0.35) with widely-spaced crowns (distance between crowns is roughly equal to the length of the lateral vesicles) (Fig. 107A–L; cf. Figs 35, 37–38, 40, 43, 45, 47).

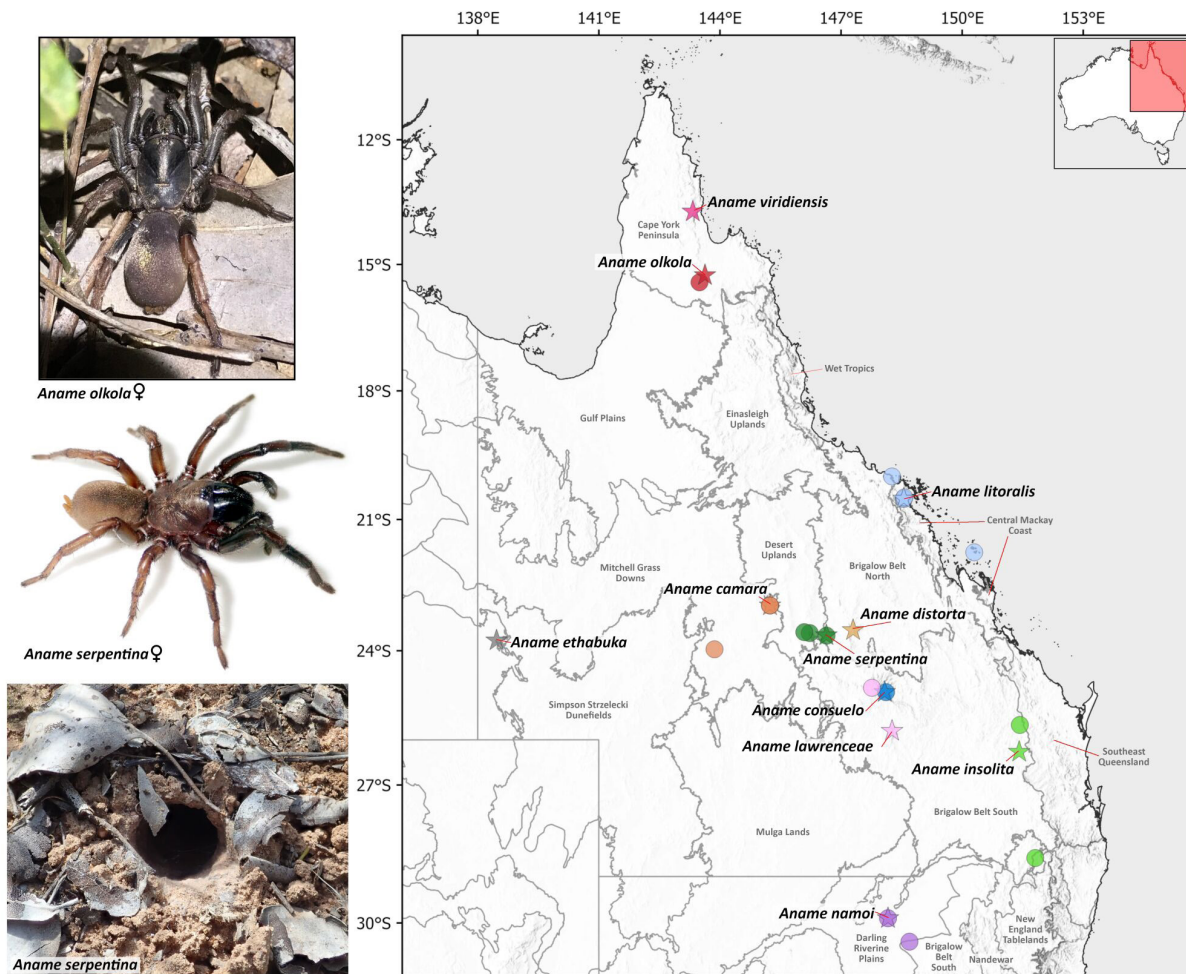


Fig. 14. Distribution, habitus images, and burrow architecture of miscellaneous species of *Aname* from eastern Australia. Points on the map represented by a star are type localities.

Type material

Holotype

AUSTRALIA – Queensland • ♂; Aramac; 22°58' S, 145°15' E; 21 Aug. 1960; F. McKenzie leg.; QMB S1250.

Allotype

AUSTRALIA – Queensland • 1 ♀; Aramac; 22°58' S, 145°15' E; 21 Aug. 1960; F. McKenzie leg.; QMB S1251.

Other material examined

AUSTRALIA – Queensland • 2 ♀♀; Aramac; 22°58' S, 145°15' E; 21 Aug. 1960; F. McKenzie leg.; QMB S1252 • 1 ♂; Bellen Park Station; 23°58' S, 143°52' E; 200–250 m a.s.l.; 14 Mar. 1992; A. Emmott leg.; grey cracking clay, mitchell grass downs; QMB S20402.

Description

Male (holotype, QMB S1250)

GENERAL (Fig. 105A–Q). Body length 17.93, in poor condition, colour dramatically faded, embolus broken, tissue degraded.

DORSAL PROSOMA (Fig. 105A, E–F). Carapace length 6.34, width 5.31, length/width 1.20, clypeus to fovea length/carapace length 0.67, caput width/carapace width 0.63, carapace pallid red-brown, caput much darker than thorax, reflective setae absent or inconspicuous, fovea procurved, fovea width/carapace length 0.13 (Fig. 105A, F); chelicerae orange-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.57 (Fig. 105A); eye group rectangular, width/length 1.92, eye tubercle present (Fig. 105E).

ABDOMEN (Fig. 105B, D). Abdomen length 7.48, light tan, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 105C, G–I). Labium cuspules absent (Fig. 105H); maxillae heel distinct, cuspules present, count=about 50, extending posteriorly onto heel, extending laterally about 35% of maxillae length (Fig. 105C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 105C, I); sternum length/width 1.10, most setae rubbed off, row of longer setae around posterior edges, some shorter thorn-like setae around anterior edges (Fig. 105G–H).

LEG I (Fig. 105N–Q). Leg I pallid, translucent, femur length 5.11, patella length 3.12, tibia length 3.71, metatarsus length 3.41, tarsus length 2.29, total length 17.65, leg I length/carapace length 2.78 (Fig. 105N–O); scopulae on distal metatarsus and tarsus (Fig. 105N–O); spine count Fe D 1, Fe PL 1, Pa PL 4, Ti PL 0, Ti RL 0, Me PL 0, Me RL 0, Ta 0 (Fig. 105N–O); tibia length/width [TIL/TID] 2.73, widening from proximal end to spur before narrowing again towards distal end, spur present, triangular, knuckle absent, megaspine angled at 25 degrees, length to distal face of spur/tibia length [TIS/TIL] 0.42, spur height/tibia width [TISH/TID] 0.47, megaspine length/tibia length 0.25 (Fig. 105N–P); metatarsus slightly sinuous, proximal excavation present, excavation concave with pronounced heel, heel sharp, excavation length/metatarsus length [MIPEL/MIL] 0.57, metatarsus length/width [MIL/MID] 3.09 (Fig. 105N–O, Q).

PEDIPALP (Fig. 105J–M). Tibia length 2.46, width 1.17, length/width [PTL/PTD] 2.10, aetose depression present, depression length/palp tibia length [PDL/PTL] 0.54, retrolateral face with distinct patch of short thorn-like setae proximally, ventral face with two elongate bristle-like setae below depression, prolateral face with two disto-ventral spines, disto-medial spine present (Fig. 105J–K); patella prolateral face with

three (one rubbed off) spines (Fig. 105J–K); cymbium with scopulae present distally (Fig. 105J–K); copulatory organ total length 1.44, length/palp tibia length 0.58 (Fig. 105L–M); bulb length/width 0.80 (Fig. 105L–M); embolus demarcated and roughly perpendicular to bulb, attenuate, embolus protruding relatively perpendicular to bulb, with sharp bend just after base, one strong bend, at about 0.3 of length, width at base/bulb width 0.25, embolus length/bulb length 1.91 (Fig. 105L–M).

Male (QMB S20402)

GENERAL (Fig. 106A–Q). Body length 15.83, in good condition, colour presumably faded due to preservation.

DORSAL PROSOMA (Fig. 106A, E–F). Carapace length 6.82, width 5.57, length/width 1.22, clypeus to fovea length/carapace length 0.68, caput width/carapace width 0.63, carapace red-brown, caput much darker than thorax, reflective setae present, moderate on caput, moderate on thorax, fovea procurved, fovea width/carapace length 0.13 (Fig. 106A, F); chelicerae red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.37 (Fig. 106A); eye group rectangular, width/length 1.98, eye tubercle present (Fig. 106E).

ABDOMEN (Fig. 106B, D). Abdomen length 6.46, tan, with grey dorsal strip, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 106C, G–I). Labium cuspules absent (Fig. 106H); maxillae heel distinct, cuspules present, count=about 70, extending posteriorly onto heel, extending laterally about 35% of maxillae length (Fig. 106C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 106C, I); sternum length/width 1.16, central sternum with consistent covering of short setae, row of longer setae around posterior edges, some shorter thorn-like setae around anterior edges (Fig. 106G–H); posterior sigilla semi-elongate, central sternum to posterior sigilla length/sternum length 0.21, posterior sigilla length/sternum length 0.19 (Fig. 106G–H); other sigilla small, round and lateral (Fig. 106G–H).

LEG I (Fig. 106N–Q). Leg I pallid, darker on proximal patella, metatarsus and tarsus, femur length 5.24, patella length 3.24, tibia length 3.75, metatarsus length 3.48, tarsus length 2.22, total length 17.93, leg I length/carapace length 2.63 (Fig. 106N–O); scopulae on distal metatarsus and tarsus (Fig. 106N–O); spine count Fe D 1, Fe PL 1, Pa PL 1, Ti PL 0, Ti RL 0, Me PL 0, Me RL 0, Ta 0 (Fig. 106N–O); tibia length/width [TIL/TID] 2.78, even width along length, spur present, triangular, knuckle absent, megaspine angled at 28 degrees, length to distal face of spur/tibia length [TIS/TIL] 0.43, spur height/tibia width [TISH/TID] 0.61, megaspine length/tibia length 0.23 (Fig. 106N–P); metatarsus slightly sinuous, proximal excavation present, excavation concave with pronounced heel, heel sharp, excavation length/metatarsus length [MIPEL/MIL] 0.60, metatarsus length/width [MIL/MID] 3.27 (Fig. 106N–O, Q).

PEDIPALP (Fig. 106J–M). Tibia length 2.49, width 1.19, length/width [PTL/PTD] 2.09, asetose depression present, depression length/palp tibia length [PDL/PTL] 0.56, retrolateral face with distinct patch of short thorn-like setae proximally, ventral face with one elongate bristle-like seta below depression, prolateral face with two disto-ventral spines, disto-medial spine present (Fig. 106J–K); patella prolateral face with 3 spines (Fig. 106J–K); cymbium with scopulae present distally (Fig. 106J–K); copulatory organ total length 1.01, length/palp tibia length 0.41 (Fig. 106L–M); bulb length/width 0.78 (Fig. 106L–M); embolus demarcated and roughly perpendicular to bulb, attenuate, embolus protruding relatively perpendicular to bulb, with sharp bend just after base, one strong bend, at about 0.3 of length, width at base/bulb width 0.25, embolus length/bulb length 1.81 (Fig. 106L–M).

Female (allotype, QMB S1252)

GENERAL (Fig. 107A–L). Body length 23.43, in moderate condition, colour faded significantly due to preservation.

DORSAL PROSOMA (Fig. 107A, E–F). Carapace length 6.52, width 5.18, length/width 1.26, clypeus to fovea length/carapace length 0.67, caput width/carapace width 0.65, carapace orange, reflective setae present, light on caput, light on thorax, fovea procurved, fovea width/carapace length 0.14 (Fig. 107A, F); chelicerae red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.63 (Fig. 107A); eye group rectangular, width/length 1.78, eye tubercle present (Fig. 107E).

ABDOMEN (Fig. 107B, D). Abdomen length 11.96, light tan-brown, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 107C, G–I). Labium cuspules absent (Fig. 107H); maxillae heel distinct, cuspules present, count=about 54, extending posteriorly onto heel, extending laterally about 50% of maxillae length (Fig. 107C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 107C, I); sternum length/width 1.15, central sternum with consistent covering of short setae, row of longer setae around posterior edges (Fig. 107G–H); posterior sigilla semi-elongate, central sternum to posterior sigilla length/sternum length 0.23, posterior sigilla length/sternum length 0.17 (Fig. 107G–H); other sigilla small, round and lateral (Fig. 107G–H).

LEG I (Fig. 107J–K). Leg I orange, femur length 4.93, patella length 3.24, tibia length 3.23, metatarsus length 2.82, tarsus length 1.94, total length 16.16, leg I length/carapace length 2.48; scopulae on distal metatarsus and tarsus; spine count Fe D 1, Fe PL 1, Pa PL 2, Ti PL 1, Ti RL 4 (2 proximal weak), Me PL 2, Me RL 3, Ta 0; tibia length/width [TIL/TID] 2.66.

GENITALIA (Fig. 107D, L). Epigastric furrow unmodified (Fig. 107D); spermathecae with two vesicles each (Fig. 107L); lateral vesicle relatively straight, length 0.62, lateral vesicle length/genitalia width 0.29, length/width at base 1.32, crown un-demarcated (Fig. 107L); medial vesicle with distinct basal section angled medially, before undulating towards anterior, medial vesicle length/genitalia width 0.40, length/width 8.3, medial vesicle length/lateral vesicle length 1.37 (Fig. 107L).

Distribution and natural history

Aname camara occurs in central Queensland, in the Mitchell Grass Downs bioregion, roughly between the towns of Stonehenge and Aramac (Fig. 14). The form of burrows constructed by spiders of this species is unknown.

Remarks

A male specimen from further west within the same bioregion (QMB S20402) is here linked with this species. The embolus shape is distinct; however, both emboli of the holotype male are damaged and may not reflect the original form. In all other respects, the two specimens are virtually identical, and we have therefore designated them as conspecific.

Aname consuelo sp. nov.

[urn:lsid:zoobank.org:act:1A5A1833-F760-478E-B25F-F76C5E8B0170](https://zoobank.org/act:1A5A1833-F760-478E-B25F-F76C5E8B0170)

Figs 14, 108–109

Diagnosis

Males of *A. consuelo* sp. nov. can be distinguished from all species for which males are known by a moderate to large body size (carapace length >4.0 mm), the presence of a very long embolus (embolus

length/bulb length > 2.5), a very long asetose depression on the palp tibia (depression length/palp tibia length ~0.8), and a very long tibial megaspine (megaspine length/tibia length > 0.3) (Fig. 108J–Q).

Females of *A. consuelo* sp. nov. can be distinguished from all species for which females are known by the presence of spermathecae with two vesicles, with highly elongate, relatively straight lateral vesicles (lateral vesicle length/width ~5.9), and short, medially-angled medial vesicles (Fig. 109L).

Etymology

The specific epithet '*consuelo*' is a noun in apposition, referencing the only known collection locality of this species, on the Consuelo Tableland, within Carnarvon National Park, in central Queensland.

Type material

Holotype

AUSTRALIA – Queensland • ♂; Consuelo Tableland, about 15 km W of Consuelo Walkers Camp; 24°56' S, 148°05' E; 1120 m a.s.l.; 23 Aug. 2001–21 Jan. 2002; C. Eddie leg.; pitfall trap, eucalypt woodland; QMB S58082.

Paratypes

AUSTRALIA – Queensland • 3 ♂♂, 1 ♀; Consuelo Tableland, about 15 km W of Consuelo Walkers Camp; 24°56' S, 148°07' E; 1150 m a.s.l.; 2 Aug. 2001–21 Jan. 2002; C. Eddie leg.; pitfall trap, tall open forest; QMB S59299.

Description

Male (holotype, QMB S58082)

GENERAL (Fig. 108A–Q). Body length 13.12, in good condition, colour presumably faded due to preservation.

DORSAL PROSOMA (Fig. 108A, E–F). Carapace length 5.19, width 4.34, length/width 1.20, clypeus to fovea length/carapace length 0.72, caput width/carapace width 0.63, carapace dark red-brown, reflective setae present, light on caput, light on thorax, fovea procurved, fovea width/carapace length 0.14 (Fig. 108A, F); chelicerae dark red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.52 (Fig. 108A); eye group rectangular, width/length 1.97, eye tubercle present (Fig. 108E).

ABDOMEN (Fig. 108B, D). Abdomen length 5.18, dark grey, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 108C, G–I). Labium cuspules absent (Fig. 108H); maxillae heel distinct, cuspules present, count=about 70, extending posteriorly onto heel, extending laterally about 30% of maxillae length (Fig. 108C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 108C, I); sternum length/width 1.21, central sternum with consistent covering of short setae, row of longer setae around posterior edges (Fig. 108G–H); posterior sigilla ovoid, central sternum to posterior sigilla length/sternum length 0.27, posterior sigilla length/sternum length 0.11 (Fig. 108G–H); other sigilla small, round and lateral (Fig. 108G–H).

LEG I (Fig. 108N–Q). Leg I red-brown, femur length 4.20, patella length 2.76, tibia length 3.05, metatarsus length 2.80, tarsus length 1.99, total length 14.80, leg I length/carapace length 2.85 (Fig. 108N–O); scopulae on distal metatarsus and tarsus (Fig. 108N–O); spine count Fe D 3, Fe PL 1, Pa PL 2, Ti PL 0, Ti RL 0, Me PL 0, Me RL 0, Ta 0 (Fig. 108N–O); tibia length/width [TIL/TID] 3.18, even width along length, spur present, intermediate triangular/digitiform, knuckle absent, megaspine angled at 23 degrees, length to distal face of spur/tibia length [TIS/TIL] 0.41, spur height/tibia width [TISH/TID] 0.49, megaspine length/tibia length 0.32 (Fig. 108N–P); metatarsus relatively straight, proximal

excavation present, excavation concave with slight heel, heel semi-sharp, excavation length/metatarsus length [MIPEL/MIL] 0.45, metatarsus length/width [MIL/MID] 3.61 (Fig. 108N–O, Q).

PEDIPALP (Fig. 108J–M). Tibia length 2.11, width 0.80, length/width [PTL/PTD] 2.65, asetose depression present, depression length/palp tibia length [PDL/PTL] 0.80, retrolateral face with consistent covering of light setae, ventral face with two elongate bristle-like setae below depression, prolateral face with patch of spines on distal half, disto-medial spine present (Fig. 108J–K); patella prolateral face with 2 spines (Fig. 108J–K); cymbium with scopulae present distally (Fig. 108J–K); copulatory organ total length 1.58, length/palp tibia length 0.75 (Fig. 108L–M); bulb length/width 0.92 (Fig. 108L–M); embolus tapering from bulb, attenuate, tapering and curving relatively evenly to point, one strong bend, at about 0.6 of length, slight bend before tip, width at base/bulb width 0.37, embolus length/bulb length 2.77 (Fig. 108L–M).

Female (paratype, QMB S59299)

GENERAL (Fig. 109A–L). Body length 16.92, in good condition, colour presumably faded due to preservation.

DORSAL PROSOMA (Fig. 109A, E–F). Carapace length 5.93, width 4.36, length/width 1.36, clypeus to fovea length/carapace length 0.72, caput width/carapace width 0.70, carapace orange-brown, caput slightly darker than thorax, reflective setae present, light on caput, light on thorax, fovea procurved, fovea width/carapace length 0.12 (Fig. 109A, F); chelicerae red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.56 (Fig. 109A); eye group rectangular, width/length 2, eye tubercle present (Fig. 109E).

ABDOMEN (Fig. 109B, D). Abdomen length 7.47, light brown, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 109C, G–I). Labium cuspules absent (Fig. 109H); maxillae heel distinct, cuspules present, count=about 85, extending posteriorly onto heel, extending laterally about 30% of maxillae length (Fig. 109C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 109C, I); sternum length/width 1.11, setae along posterior edge rubbed off, central sternum with consistent covering of moderate setae, row of longer setae around posterior edges (Fig. 109G–H); posterior sigilla ovoid, central sternum to posterior sigilla length/sternum length 0.28, posterior sigilla length/sternum length 0.15 (Fig. 109G–H); other sigilla small, round and lateral (Fig. 109G–H).

LEG I (Fig. 109J–K). Leg I orange-brown, femur length 4.03, patella length 2.63, tibia length 2.73, metatarsus length 2.35, tarsus length 1.65, total length 13.40, leg I length/carapace length 2.26; scopulae on distal metatarsus and tarsus; spine count Fe D 1, Fe PL 1, Pa PL 2 (proximal rubbed off), Ti PL 2 (weak), Ti RL 4 (weak), Me PL 1, Me RL 3, Ta 0; tibia length/width [TIL/TID] 2.84.

GENITALIA (Fig. 109D, L). Epigastric furrow unmodified (Fig. 109D); spermathecae with two vesicles each (Fig. 109L); lateral vesicle relatively straight, length 1.06, lateral vesicle length/genitalia width 0.87, length/width at base 5.89, crown un-demarcated (Fig. 109L); medial vesicle short, relatively straight and projecting ventrally, medial vesicle length/genitalia width 0.20, length/width 2.91, medial vesicle length/lateral vesicle length 0.23 (Fig. 109L).

Distribution and natural history

Aname consuelo sp. nov. occurs in central Queensland, in the Brigalow Belt South bioregion, in the Consuelo region of Carnarvon National Park (Fig. 14). The form of burrows constructed by spiders of this species is unknown.

Aname distorta sp. nov.

[urn:lsid:zoobank.org:act:7AEAEDB0-DFEB-44E8-806D-DE2B075C1116](https://doi.org/10.21203/rs.3.rs-11111111)

Figs 14, 110

Diagnosis

Males of *A. distorta* sp. nov. can be distinguished from all species for which males are known by a moderate to large body size (carapace length >4.0 mm) and the presence of an extremely long embolus (embolus length/bulb length >4) (Fig. 110J–M).

Females of *A. distorta* sp. nov. are unknown.

Etymology

The specific epithet '*distorta*' is a Latin adjective meaning 'twisted' or 'distorted', in reference to both the deformed leg I and pedipalp of the holotype and only known specimen of the species, and to the unusually long embolus of the species.

Type material

Holotype

AUSTRALIA – Queensland • ♂; Drummond Range, summit; 23°32' S, 147°18' E; 920 m a.s.l.; 18 Dec. 2000–27 Mar. 2001; D.J. Cook and G.B. Monteith leg.; pitfall trap, open forest; QMB S63018.

Description

Male (holotype, QMB S63018)

GENERAL (Fig. 110A–Q). Body length 21.82, in good condition, colour presumably faded due to preservation.

DORSAL PROSOMA (Fig. 110A, E–F). Carapace length 7.34, width 6.43, length/width 1.14, clypeus to fovea length/carapace length 0.72, caput width/carapace width 0.64, carapace dark red-brown, reflective setae present, light on caput, light on thorax, fovea procurved, fovea width/carapace length 0.16 (Fig. 110A, F); chelicerae dark red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.75 (Fig. 110A); eye group rectangular, width/length 1.95, eye tubercle present (Fig. 110E).

ABDOMEN (Fig. 110B, D). Abdomen length 8.12, grey, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 110C, G–I). Labium cuspules absent (Fig. 110H); maxillae heel distinct, cuspules present, count=about 160, extending posteriorly onto heel, extending laterally about 25% of maxillae length (Fig. 110C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 110C, I); sternum length/width 1.23, many setae rubbed off, row of longer setae around posterior edges (Fig. 110G–H); posterior sigilla ovoid, central sternum to posterior sigilla length/sternum length 0.25, posterior sigilla length/sternum length 0.14 (Fig. 110G–H); other sigilla small, round and lateral (Fig. 110G–H).

LEG I (Fig. 110N–Q). Leg I red-brown, lighter on distal metatarsus and tarsus, femur length 6.30, patella length 4.30, tibia length 4.95, metatarsus length 4.58, tarsus length 3.14, total length 23.27, leg I length/carapace length 3.17 (Fig. 110N–O); scopulae on distal metatarsus and tarsus (Fig. 110N–O); spine count Fe D 1, Fe PL 1, Pa PL 2, Ti PL 0, Ti RL 0, Me PL 0, Me RL 0, Ta 0 (Fig. 110N–O); tibia length/width [TIL/TID] 3.71, even width along length, spur present, intermediate triangular/digitiform, knuckle present, megaspine angled at 21 degrees, length to distal face of spur/tibia length [TIS/TIL] 0.43, spur height/tibia width [TISH/TID] 0.62, megaspine length/tibia length 0.27 (Fig. 110N–P);

metatarsus slightly sinuous, proximal excavation present, excavation concave with pronounced heel, heel rounded, excavation length/metatarsus length [MIPEL/MIL] 0.41, metatarsus length/width [MIL/MID] 3.98 (Fig. 110N–O, Q).

PEDIPALP (Fig. 110J–M). Tibia length 3.78, width 1.14, length/width [PTL/PTD] 3.31, asetose depression present, depression length/palp tibia length [PDL/PTL] 0.79, retrolateral face with consistent covering of light setae, ventral face with one elongate bristle-like seta below depression, prolateral face with two disto-ventral spines, disto-medial spine absent (Fig. 110J–K); patella prolateral face with 2 spines (Fig. 110J–K); cymbium with scopulae present distally (Fig. 110J–K); copulatory organ total length 3.32, length/palp tibia length 0.88 (Fig. 110L–M); bulb length/width 0.84 (Fig. 110L–M); embolus demarcated and roughly perpendicular to bulb, attenuate, tapering and curving relatively evenly to point, one strong bend, at about 0.6 of length, slight bend before tip, width at base/bulb width 0.28, embolus length/bulb length 4.64 (Fig. 110L–M).

Distribution and natural history

Aname distorta sp. nov. occurs in central Queensland, in the Brigalow Belt North bioregion, where it is known from one location on the Drummond Range, west of Emerald (Fig. 14). The form of burrows constructed by spiders of this species is unknown.

Aname ethabuka sp. nov.

[urn:lsid:zoobank.org:act:5FE7BA2C-CF73-4963-A344-BD2360528288](https://zoobank.org/act:5FE7BA2C-CF73-4963-A344-BD2360528288)

Figs 14, 111

Diagnosis

Males of *A. ethabuka* sp. nov. can be distinguished from all species for which males are known by a moderate to large body size (carapace length >4.0 mm), the presence of a short embolus (embolus length/bulb length <1.5) that is straight (and thus looks relatively long), a digitiform tibial spur with a long megaspine (megaspine length/tibia length >0.3), and a very inconspicuous proximal excavation on metatarsus I (Fig. 111A–Q).

Females of *A. ethabuka* sp. nov. are unknown.

Etymology

The specific epithet ‘*ethabuka*’ is a noun in apposition, referencing the Ethabuka Nature Reserve (previously Ethabuka Station), in the northern Simpson Desert, where this species was found.

Type material

Holotype

AUSTRALIA – Queensland • ♂; Simpson Desert, Ethabuka Station; 23°46′ S, 138°28′ E; Apr.–May 1991; C. Dickman and F. Downey leg.; pitfall trap; QMB S95216.

Description

Male (holotype, QMB S95216)

GENERAL (Fig. 111A–Q). Body length 12.89, in moderate condition, abdomen damaged, colour presumably faded.

DORSAL PROSOMA (Fig. 111A, E–F). Carapace length 4.90, width 4.32, length/width 1.13, clypeus to fovea length/carapace length 0.67, caput width/carapace width 0.61, carapace red-orange, caput slightly darker than thorax, reflective setae present, light on caput, light on thorax, fovea procurved, fovea

width/carapace length 0.10 (Fig. 111A, F); chelicerae red, rastellum absent or inconspicuous, chelicerae length/carapace length 0.48 (Fig. 111A); eye group rectangular, width/length 1.89, eye tubercle present (Fig. 111E).

ABDOMEN (Fig. 111B, D). Abdomen length 5.57, grey-brown, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 111C, G–I). Labium cuspules absent (Fig. 111H); maxillae heel absent or inconspicuous, cuspules present, count=about 46, extending posteriorly onto heel, extending laterally about 35% of maxillae length (Fig. 111C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 111C, I); sternum length/width 1.21, central sternum with consistent covering of short setae, row of longer setae around posterior edges (Fig. 111G–H); posterior sigilla ovoid, central sternum to posterior sigilla length/sternum length 0.30, posterior sigilla length/sternum length 0.13 (Fig. 111G–H); other sigilla small, round and lateral (Fig. 111G–H).

LEG I (Fig. 111N–Q). Leg I pallid-orange, reflective setae on dorsal femur, femur length 4.57, patella length 2.74, tibia length 3.09, metatarsus length 3.39, tarsus length 2.10, total length 15.88, leg I length/carapace length 3.24 (Fig. 111N–O); scopulae on distal metatarsus and tarsus (Fig. 111N–O); spine count Fe D 2, Fe PL 1, Pa PL 2, Ti PL 0, Ti RL 0, Me PL 0, Me RL 0, Ta 0 (Fig. 111N–O); tibia length/width [TIL/TID] 3.26, even width along length, spur present, digitiform, knuckle absent, megaspine angled at 36 degrees, length to distal face of spur/tibia length [TIS/TIL] 0.46, spur height/tibia width [TISH/TID] 0.71, megaspine length/tibia length 0.33 (Fig. 111N–P); metatarsus relatively straight, proximal excavation present, excavation straight with inconspicuous heel, heel rounded, excavation length/metatarsus length [MIPEL/MIL] 0.43, metatarsus length/width [MIL/MID] 4.56 (Fig. 111N–O, Q).

PEDIPALP (Fig. 111J–M). Tibia length 2.31, width 0.80, length/width [PTL/PTD] 2.88, asetose depression present, depression length/palp tibia length [PDL/PTL] 0.59, retrolateral face with consistent covering of light setae, ventral face with two elongate bristle-like setae below depression, prolateral face with patch of spines on distal half, disto-medial spine present (Fig. 111J–K); patella prolateral face with 0 spines (Fig. 111J–K); cymbium with scopulae present distally (Fig. 111J–K); copulatory organ total length 1.26, length/palp tibia length 0.55 (Fig. 111L–M); bulb length/width 1.05 (Fig. 111L–M); embolus tapering from bulb, attenuate, long and relatively straight, slight bend before tip, width at base/bulb width 0.23, embolus length/bulb length 1.31 (Fig. 111L–M).

Distribution and natural history

Aname ethabuka sp. nov. occurs in far western Queensland, in the Simpson Strzelecki Dunefields bioregion. The species is known from one location near the Ethabuka Reserve, north-west of Bedourie (Fig. 14). The form of burrows constructed by spiders of this species is unknown.

Aname insolita sp. nov.

[urn:lsid:zoobank.org:act:5D2A5790-F70C-4DBA-AC68-5DEC4F32CD8C](https://zoobank.org/act:5D2A5790-F70C-4DBA-AC68-5DEC4F32CD8C)

Figs 14, 112

Diagnosis

Males of *A. insolita* sp. nov. can be distinguished from all species for which males are known by a moderate to large body size (carapace length >4.0 mm), and the presence of a short embolus (embolus length/bulb length <1.5) that is straight (and thus looks relatively long), wide and flattened (Fig. 112L–M).

Females of *A. insolita* sp. nov. are unknown.

Etymology

The specific epithet '*insolita*' is a Latin adjective meaning 'unusual, strange' or 'rare', referencing the strangeness of the genital morphology of this species, and its rarity in collections.

Type material

Holotype

AUSTRALIA – Queensland • ♂; Brigooda, Koy property; 26°16' S, 151°25' E; 26 Jan.–20 Apr. 1995; G.B. Monteith leg.; pitfall trap, vine scrub; QMB S46416.

Other material examined

AUSTRALIA – Queensland • 1 ♂; Nipping Gully; 25°40' S, 151°26' E; 280 m a.s.l.; 26 Jan. 1995–2 Jun. 1999; G. B. Monteith and J. Thompson leg.; intercept trap, open forest; QMB S51942 • 1 ♂; Amiens; 28°36' S, 151°49' E; 22 Oct. 2004; K. Ryan leg.; QMB S66531.

Description

Male (holotype, QMB S46416)

GENERAL (Fig. 112A–Q). Body length 24.66, in good condition, colour presumably faded due to preservation.

DORSAL PROSOMA (Fig. 112A, E–F). Carapace length 8.72, width 6.74, length/width 1.29, clypeus to fovea length/carapace length 0.67, caput width/carapace width 0.63, carapace orange-brown, reflective setae present, moderate on caput, moderate on thorax, fovea procurved, fovea width/carapace length 0.10 (Fig. 112A, F); chelicerae red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.58 (Fig. 112A); eye group rectangular, width/length 1.91, eye tubercle present (Fig. 112E).

ABDOMEN (Fig. 112B, D). Abdomen length 9.87, light grey, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 112C, G–I). Labium cuspules absent (Fig. 112H); maxillae heel distinct, cuspules present, count=about 150, extending posteriorly onto heel, extending laterally about 30% of maxillae length (Fig. 112C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 112C, I); sternum length/width 1.23, central sternum with consistent covering of short setae, row of longer setae around posterior edges (Fig. 112G–H); posterior sigilla elongate, central sternum to posterior sigilla length/sternum length 0.27, posterior sigilla length/sternum length 0.15 (Fig. 112G–H); other sigilla small, round and lateral (Fig. 112G–H).

LEG I (Fig. 112N–Q). Leg I orange-brown, reflective setae on dorsal femur, femur length 6.38, patella length 4.30, tibia length 4.78, metatarsus length 5.32, tarsus length 2.76, total length 23.53, leg I length/carapace length 2.70 (Fig. 112N–O); scopulae on distal metatarsus and tarsus (Fig. 112N–O); spine count Fe D 2, Fe PL 2, Pa PL 2, Ti PL 0, Ti RL 0, Me PL 0, Me RL 0, Ta 0 (Fig. 112N–O); tibia length/width [TIL/TID] 3.43, widening from proximal end to spur before narrowing again towards distal end, spur present, triangular, knuckle absent, megaspine angled at 35 degrees, length to distal face of spur/tibia length [TIS/TIL] 0.49, spur height/tibia width [TISH/TID] 0.60, megaspine length/tibia length 0.27 (Fig. 112N–P); metatarsus relatively straight, proximal excavation present, excavation straight with inconspicuous heel, heel rounded, excavation length/metatarsus length [MIPEL/MIL] 0.51, metatarsus length/width [MIL/MID] 4.55 (Fig. 112N–O, Q).

PEDIPALP (Fig. 112J–M). Tibia length 3.42, width 1.48, length/width [PTL/PTD] 2.30, asetose depression present, depression length/palp tibia length [PDL/PTL] 0.56, retrolateral face with short, thorn-like setae along retrolateral edge of depression, getting denser proximally, ventral face with two elongate bristle-

like setae below depression, prolateral face with patch of spines on distal half, disto-medial spine present (Fig. 112J–K); patella prolateral face with 2 spines (Fig. 112J–K); cymbium with scopulae present distally (Fig. 112J–K); copulatory organ total length 1.57, length/palp tibia length 0.46 (Fig. 112L–M); bulb length/width 0.98 (Fig. 112L–M); embolus tapering from bulb, wide and flattened, straight, wide and flattened embolus thinning just before tip, angled, pointed tip, width at base/bulb width 0.30, embolus length/bulb length 1.29 (Fig. 112L–M).

Distribution and natural history

Aname insolita sp. nov. occurs in south-eastern Queensland, in the Brigalow Belt South and New England Tablelands bioregions. It is known from three locations, all just west of the Great Dividing Range, from Stanthorpe north to Gayndah (Fig. 14). The form of burrows constructed by spiders of this species is unknown.

Aname lawrenceae sp. nov.

[urn:lsid:zoobank.org:act:3879AB1F-3A73-4E09-A75B-B00C4EECA937](https://doi.org/10.3879/AB1F-3A73-4E09-A75B-B00C4EECA937)

Figs 14, 113

Diagnosis

Males of *A. lawrenceae* sp. nov. can be distinguished from all species for which males are known by a moderate to large body size (carapace length >4.0 mm), the presence of a long embolus (embolus length/bulb length >1.5) that curves gradually to a point, a short asetose depression on the palp tibia (depression length/palp tibia length <0.5), a slight indentation below the asetose depression, and a digitiform tibial spur (Fig. 113J–Q).

Females of *A. lawrenceae* sp. nov. are unknown.

Etymology

The specific epithet ‘*lawrenceae*’ honours Melinda Lawrence, for the friendship and support she provided to the authors in her role as Project Manager of Project DIG. Project DIG, a collaboration between the Queensland Museum Network and Broken Hill Proprietary Company Limited, provided funding that allowed the authors to conduct fieldwork throughout Queensland, which led to the collection of many new specimens and a wealth of natural history information on eastern *Aname*.

Type material

Holotype

AUSTRALIA – Queensland • ♂; Hutton Creek, “Oak Wells”; 25°48’ S, 148°16’ E; 600 m a.s.l.; 15 Dec. 2001–7 Mar. 2002; D.J. Cook and G.B. Monteith leg.; pitfall trap, vine scrub; QMB S58049.

Other material examined

AUSTRALIA – Queensland • 2 ♂♂; Carnarvon Station, Swers Lookout; 24°50’ S, 147°46’ E; 870 m a.s.l.; 1 Dec. 2012–17 Jan. 2013; G.B. Monteith and C. Wilson leg.; gutter trap, *Acacia* scrub; QMB S50874.

Description

Male (holotype, QMB S58049)

GENERAL (Fig. 113A–Q). Body length 22.17, in good condition, colour presumably faded due to preservation.

DORSAL PROSOMA (Fig. 113A, E–F). Carapace length 8.74, width 7.27, length/width 1.20, clypeus to fovea length/carapace length 0.69, caput width/carapace width 0.74, carapace red-brown, reflective setae present, light on caput, light on thorax, fovea procurved, fovea width/carapace length 0.13 (Fig. 113A, F); chelicerae red, rastellum absent or inconspicuous, chelicerae length/carapace length 0.51 (Fig. 113A); eye group rectangular, width/length 1.79, eye tubercle present (Fig. 113E).

ABDOMEN (Fig. 113B, D). Abdomen length 8.91, grey-brown, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 113C, G–I). Labium cuspules absent (Fig. 113H); maxillae heel distinct, cuspules present, count=about 129, extending posteriorly onto heel, extending laterally about 40% of maxillae length (Fig. 113C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 113C, I); sternum length/width 1.14, central sternum with consistent covering of short setae, row of longer setae around posterior edges, setae at higher density around anterior edges (Fig. 113G–H); posterior sigilla elongate, central sternum to posterior sigilla length/sternum length 0.24, posterior sigilla length/sternum length 0.18 (Fig. 113G–H); other sigilla small and lateral, medial sigilla semi-elongate, anterior sigilla round (Fig. 113G–H).

LEG I (Fig. 113N–Q). Leg I orange-brown, femur length 6.47, patella length 4.10, tibia length 4.64, metatarsus length 4.44, tarsus length 3.01, total length 22.65, leg I length/carapace length 2.59 (Fig. 113N–O); scopulae on distal metatarsus and tarsus (Fig. 113N–O); spine count Fe D 2, Fe PL 2, Pa PL 2, Ti PL 0, Ti RL 0, Me PL 0, Me RL 0, Ta 0 (Fig. 113N–O); tibia length/width [TIL/TID] 2.93, even width along length, spur present, intermediate triangular/digitiform, knuckle absent, megaspine angled at 6 degrees, length to distal face of spur/tibia length [TIS/TIL] 0.56, spur height/tibia width [TISH/TID] 0.43, megaspine length/tibia length 0.20 (Fig. 113N–P); metatarsus slightly sinuous, proximal excavation present, excavation concave with pronounced heel, heel rounded, excavation length/metatarsus length [MIPEL/MIL] 0.46, metatarsus length/width [MIL/MID] 3.77 (Fig. 113N–O, Q).

PEDIPALP (Fig. 113J–M). Tibia length 3.25, width 1.07, length/width [PTL/PTD] 3.05, asetose depression present, depression length/palp tibia length [PDL/PTL] 0.47, retrolateral face with consistent covering of light setae, ventral face with two elongate bristle-like setae below depression, prolateral face with patch of spines on distal half, disto-medial spine present (Fig. 113J–K); patella prolateral face with 2 spines (Fig. 113J–K); cymbium with scopulae present distally (Fig. 113J–K); copulatory organ total length 1.65, length/palp tibia length 0.51 (Fig. 113L–M); bulb length/width 0.99 (Fig. 113L–M); embolus tapering from bulb, attenuate, tapering and curving relatively evenly to point, width at base/bulb width 0.34, embolus length/bulb length 1.77 (Fig. 113L–M).

Distribution and natural history

Aname lawrenceae sp. nov. occurs in central Queensland, in the northern part of the Brigalow Belt South bioregion. It is known from two locations, a southern location near Hutton Creek, and a northern location in the Upper Warrego region of the Carnarvon Station Reserve (Fig. 14). The form of burrows constructed by spiders of this species is unknown.

Aname litoralis sp. nov.

[urn:lsid:zoobank.org:act:0EF6AC14-C139-468F-85CB-F53D4BE946C3](https://zoobank.org/urn:lsid:zoobank.org:act:0EF6AC14-C139-468F-85CB-F53D4BE946C3)

Figs 14, 114

Diagnosis

Males of *A. litoralis* sp. nov. can be distinguished from all species for which males are known by a small body size (carapace length <4.0 mm), the presence of a short embolus (embolus length/bulb length

<1.5), a triangular tibial spur with a long megaspine (megaspine length/tibia length >0.3), and short thorn-like setae along the retrolateral edge of the asetose depression (Fig. 114L–Q).

Females of *A. littoralis* sp. nov. are unknown.

Etymology

The specific epithet '*littoralis*' is a Latin adjective meaning 'coastal' or 'pertaining to the shore', in reference to the distribution of this species on the central Queensland coast and coastal islands.

Type material

Holotype

AUSTRALIA – Queensland • ♂; Proserpine, Thompson Creek; 20°31' S, 148°33' E; 30 m a.s.l.; 15 Aug.–6 Nov. 2007; R.J. Raven and C. Burwell leg.; pitfall trap, closed forest; QMB S85445.

Paratypes

AUSTRALIA – Queensland • 1 ♂; Proserpine, Thompson Creek; 20°29' S, 148°34' E; 37 m a.s.l.; 5 Nov. 2007–13 Feb. 2008; R.J. Raven leg.; pitfall trap, closed forest; QMB S85456 • 1 ♂; Proserpine, Thompson Creek; 20°31' S, 148°33' E; 30 m a.s.l.; 10 May–15 Aug. 2007; R.J. Raven leg.; pitfall trap, closed forest; QMB S85023 • 1 ♂; Proserpine, Thompson Creek; 20°31' S, 148°33' E; 30 m a.s.l.; 15 Aug.–6 Nov. 2007; R.J. Raven and C. Burwell leg.; pitfall trap, closed forest; QMB S85194.

Other material examined

AUSTRALIA – Queensland • 2 ♂♂, 3 juvs; Bowen, Rose Bay; 20°00' S, 148°16' E; 2 Dec. 1992–22 Apr. 1993; R.J. Raven, S. Raven, P. Lawless and E. Lawless leg.; pitfall trap, vine thicket; QMB S57686 • 1 ♂; Percy Isles National Park, South Island, north-western bay; 21°45' S, 150°18' E; 26 Nov. 1992–15 Apr. 1993; G.B. Monteith, G. Thompson, D.J. Cook and H. Janetzki leg.; gutter trap; QMB S27416.

Description

Male (holotype, QMB S85445)

GENERAL (Fig. 114A–Q). Body length 8.99, in good condition, colour presumably faded due to preservation.

DORSAL PROSOMA (Fig. 114A, E–F). Carapace length 2.98, width 2.45, length/width 1.22, clypeus to fovea length/carapace length 0.71, caput width/carapace width 0.64, carapace orange-brown, reflective setae present, light on caput, light on thorax, fovea procurved, fovea width/carapace length 0.16 (Fig. 114A, F); chelicerae orange-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.73 (Fig. 114A); eye group rectangular, width/length 2.05, eye tubercle present (Fig. 114E).

ABDOMEN (Fig. 114B, D). Abdomen length 3.38, grey, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 114C, G–I). Labium cuspules absent (Fig. 114H); maxillae heel absent or inconspicuous, cuspules present, count=about 31, extending posteriorly onto heel, extending laterally about 30% of maxillae length (Fig. 114C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 114C, I); sternum length/width 1.15, central sternum with consistent covering of moderate setae, row of longer setae around posterior edges (Fig. 114G–H); posterior sigilla ovoid, central sternum to posterior sigilla length/sternum length 0.35, posterior sigilla length/sternum length 0.10 (Fig. 114G–H); other sigilla small, round and lateral (Fig. 114G–H).

LEG I (Fig. 114N–Q). Leg I red-brown, femur length 2.67, patella length 1.80, tibia length 2.11, metatarsus length 2.00, tarsus length 1.32, total length 9.90, leg I length/carapace length 3.32 (Fig. 114N–O);

scopulae on distal metatarsus and tarsus (Fig. 114N–O); spine count Fe D 1, Fe PL 1, Pa PL 2 (proximal rubbed off), Ti PL 0, Ti RL 0, Me PL 0, Me RL 0, Ta 0 (Fig. 114N–O); tibia length/width [TIL/TID] 3.52, even width along length, spur present, triangular, knuckle absent, megaspine angled at 33 degrees, length to distal face of spur/tibia length [TIS/TIL] 0.50, spur height/tibia width [TISH/TID] 0.51, megaspine length/tibia length 0.33 (Fig. 114N–P); metatarsus relatively straight, proximal excavation present, excavation concave with slight heel, heel semi-sharp, excavation length/metatarsus length [MIPEL/MIL] 0.53, metatarsus length/width [MIL/MID] 4.12 (Fig. 114N–O, Q).

PEDIPALP (Fig. 114J–M). Tibia length 1.36, width 0.53, length/width [PTL/PTD] 2.59, asetose depression present, depression length/palp tibia length [PDL/PTL] 0.54, retrolateral face with short, thorn-like setae along retrolateral edge of depression, getting denser proximally, ventral face with two elongate bristle-like setae below depression, prolateral face with two disto-ventral spines, disto-medial spine present (Fig. 114J–K); patella prolateral face with 2 spines (Fig. 114J–K); cymbium with scopulae present distally (Fig. 114J–K); copulatory organ total length 0.62, length/palp tibia length 0.45 (Fig. 114L–M); bulb length/width 0.93 (Fig. 114L–M); embolus tapering from bulb, attenuate, tapering and curving relatively evenly to point, width at base/bulb width 0.27, embolus length/bulb length 1.35 (Fig. 114L–M).

Distribution and natural history

Aname litoralis sp. nov. occurs in central-eastern Queensland, in the Central Mackay Coast bioregion (including on at least one offshore island), near the town of Proserpine and its surroundings (Fig. 14). The form of burrows constructed by spiders of this species is unknown.

Aname namoi sp. nov.

[urn:lsid:zoobank.org:act:BFAD7E66-57BB-41F7-99AF-4592C6FC5049](https://zoobank.org/urn:lsid:zoobank.org:act:BFAD7E66-57BB-41F7-99AF-4592C6FC5049)

Figs 14, 115

Diagnosis

Males of *A. namoi* sp. nov. can be distinguished from all species for which males are known by a moderate to large body size (carapace length >4.0 mm), the presence of a short embolus (embolus length/bulb length <1.5) that has a bend near the base before a straight distal section, and a long proximal excavation (excavation length/metatarsus length ~0.5) on metatarsus I (Fig. 115L–Q).

Females of *A. namoi* sp. nov. are unknown.

Etymology

The specific epithet ‘*namoi*’ is a noun in apposition, referencing the distribution of this species around the Namoi River in northern New South Wales.

Type material

Holotype

AUSTRALIA – New South Wales • ♂; Walgett, “Kalamos”; 29°54' S, 148°10' E; 23 Nov.–13 Dec. 1999; F.J. Christie, P. Flemons and M.G. Elliott leg.; pitfall trap; AMS KS71468.

Paratype

AUSTRALIA – New South Wales • 1 ♂; same data as for holotype; AMS KS77907.

Other material examined

AUSTRALIA – New South Wales • 1 ♂; Pilliga, ‘Womba’; 30°24' S, 148°42' E; Feb. 2001; I. Oliver leg.; pitfall trap; AMS KS80709.

Description

Male (holotype, AMS KS77907)

GENERAL (Fig. 115A–Q). Body length 17.35, in good condition, colour presumably faded due to preservation.

DORSAL PROSOMA (Fig. 115A, E–F). Carapace length 5.86, width 5.03, length/width 1.16, clypeus to fovea length/carapace length 0.71, caput width/carapace width 0.65, carapace red-brown, reflective setae present, moderate on caput, very light on thorax, fovea procurved, fovea width/carapace length 0.11 (Fig. 115A, F); chelicerae dark red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.66 (Fig. 115A); eye group rectangular, width/length 2.07, eye tubercle present (Fig. 115E).

ABDOMEN (Fig. 115B, D). Abdomen length 7.07, dark grey, dorsal pattern absent, with reflective setae on anterior portion.

VENTRAL PROSOMA (Fig. 115C, G–I). Labium cuspules absent (Fig. 115H); maxillae heel distinct, cuspules present, count=about 90, extending posteriorly onto heel, extending laterally about 35% of maxillae length (Fig. 115C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 115C, I); sternum length/width 1.10, central sternum with consistent covering of short setae, row of longer setae around posterior edges (Fig. 115G–H); posterior sigilla ovoid, central sternum to posterior sigilla length/sternum length 0.29, posterior sigilla length/sternum length 0.11 (Fig. 115G–H); other sigilla small, round and lateral (Fig. 115G–H).

LEG I (Fig. 115N–Q). Leg I red-brown, lighter on distal metatarsus and tarsus, femur length 4.88, patella length 3.00, tibia length 3.38, metatarsus length 3.33, tarsus length 2.08, total length 16.68, leg I length/carapace length 2.85 (Fig. 115N–O); scopulae on distal metatarsus and tarsus (Fig. 115N–O); spine count Fe D 1, Fe PL 1, Pa PL 2, Ti PL 0, Ti RL 0, Me PL 0, Me RL 0, Ta 0 (Fig. 115N–O); tibia length/width [TIL/TID] 2.85, even width along length, spur present, triangular, knuckle absent, megaspine angled at 21 degrees, length to distal face of spur/tibia length [TIS/TIL] 0.51, spur height/tibia width [TISH/TID] 0.40, megaspine length/tibia length 0.17 (Fig. 115N–P); metatarsus slightly sinuous, proximal excavation present, excavation concave with pronounced heel, heel semi-sharp, excavation length/metatarsus length [MIPEL/MIL] 0.52, metatarsus length/width [MIL/MID] 3.74 (Fig. 115N–O, Q).

PEDIPALP (Fig. 115J–M). Tibia length 2.26, width 0.96, length/width [PTL/PTD] 2.35, asetose depression present, depression length/palp tibia length [PDL/PTL] 0.54, retrolateral face with short, thorn-like setae along retrolateral edge of depression, getting denser proximally, ventral face with two elongate bristle-like setae below depression, prolateral face with two disto-ventral spines, disto-medial spine absent (Fig. 115J–K); patella prolateral face with 2 spines (Fig. 115J–K); cymbium with scopulae present distally (Fig. 115J–K); copulatory organ total length 1.04, length/palp tibia length 0.46 (Fig. 115L–M); bulb length/width 1.01 (Fig. 115L–M); embolus slightly reflexed, attenuate, protruding laterally with strong basal curve, one strong bend, at about 0.2 of length, width at base/bulb width 0.17, embolus length/bulb length 1.04 (Fig. 115L–M).

Distribution and natural history

Aname namoi sp. nov. occurs in northern New South Wales, in the Darling Riverine Plains bioregion, where it is known from two locations, near Pilliga and Walgett (Fig. 14). The form of burrows constructed by spiders of this species is unknown.

Aname olkola sp. nov.

[urn:lsid:zoobank.org:act:1AEC5765-6983-47DE-A36A-A431190F5414](https://zoobank.org/urn:lsid:zoobank.org:act:1AEC5765-6983-47DE-A36A-A431190F5414)

Figs 14, 116–117

Diagnosis

Males of *A. olkola* sp. nov. can be distinguished from all species for which males are known by a moderate to large body size (carapace length >4.0 mm), the presence of a copulatory organ with a highly rounded bulb and a short embolus (embolus length/bulb length <1.5) that is strongly curved, and a digitiform tibial spur (Fig. 116L–Q).

Females of *A. olkola* sp. nov. can be distinguished from all species for which females are known by the presence of spermathecae with two vesicles, with relatively wide, bulbous lateral spermathecae (lateral vesicle length/width ~1.7), widening towards rounded ends, and short, straight medial vesicles projecting from a position posterior to, and separated from, lateral vesicles (Fig. 117).

Etymology

The specific epithet ‘*olkola*’ is a noun in apposition, referencing Olkola National Park, where the specimens were collected.

Type material

Holotype

AUSTRALIA – Queensland • ♂; Olkola, Valley of Kimba Plateau; 15°15' S, 143°38' E; 129 m a.s.l.; Jul. 2015; R.C. Santana leg.; pitfall trap, moist gully; QMB S22650.

Paratype

AUSTRALIA – Queensland • 9 ♂♂, 1 ♀, 1 juv.; Killarney HS, campsite and airstrip; 15°25' S, 143°30' E; 165 m a.s.l.; 13–24 Jul. 2015; R.J. Raven, R.C. Santana and L. Carr leg.; open eucalypt forest; QMB S22010.

Description

Male (holotype, QMB S22650)

GENERAL (Fig. 116A–Q). Body length 17.09, in good condition, colour presumably faded due to preservation.

DORSAL PROSOMA (Fig. 116A, E–F). Carapace length 6.81, width 5.67, length/width 1.20, clypeus to fovea length/carapace length 0.71, caput width/carapace width 0.71, carapace dark red-brown, caput slightly darker than thorax, reflective setae present, heavy on caput, moderate on thorax, fovea procurved, fovea width/carapace length 0.19 (Fig. 116A, F); chelicerae dark red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.41 (Fig. 116A); eye group rectangular, width/length 2.42, eye tubercle present (Fig. 116E).

ABDOMEN (Fig. 116B, D). Abdomen length 7.46, brown, dorsal pattern absent, with some evidence of reflective setae, and consistent cover of short setae.

VENTRAL PROSOMA (Fig. 116C, G–I). Labium cuspules absent (Fig. 116H); maxillae heel distinct, cuspules present, count=about 164, extending posteriorly onto heel, extending laterally about 50% of maxillae length (Fig. 116C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 116C, I); sternum length/width 1.27, central sternum with consistent covering of moderate setae, row of longer setae around posterior edges, some shorter bristle-like setae around anterior edges (Fig. 116G–H);

posterior sigilla semi-elongate, central sternum to posterior sigilla length/sternum length 0.24, posterior sigilla length/sternum length 0.14 (Fig. 116G–H); other sigilla small, round and lateral (Fig. 116G–H).

LEG I (Fig. 116N–Q). Leg I red-brown, lighter on distal metatarsus and tarsus, reflective setae on dorsal femur, femur length 5.32, patella length 3.63, tibia length 3.81, metatarsus length 3.86, tarsus length 2.33, total length 18.95, leg I length/carapace length 2.78 (Fig. 116N–O); scopulae on distal metatarsus and tarsus (Fig. 116N–O); spine count Fe D 2, Fe PL 1, Pa PL 2 (distal rubbed off), Ti PL 0, Ti RL 0, Me PL 0, Me RL 0, Ta 0 (Fig. 116N–O); tibia length/width [TIL/TID] 3.25, even width along length, spur present, digitiform, knuckle present, megaspine angled at 35 degrees, length to distal face of spur/tibia length [TIS/TIL] 0.61, spur height/tibia width [TISH/TID] 0.70, megaspine length/tibia length 0.23 (Fig. 116N–P); metatarsus relatively straight, proximal excavation present, excavation concave with slight heel, heel semi-sharp, excavation length/metatarsus length [MIPEL/MIL] 0.47, metatarsus length/width [MIL/MID] 3.83 (Fig. 116N–O, Q).

PEDIPALP (Fig. 116J–M). Tibia length 2.55, width 1.14, length/width [PTL/PTD] 2.24, asetose depression present, depression length/palp tibia length [PDL/PTL] 0.58, retrolateral face with patch of long setae proximally of asetose depression, ventral face with two elongate spine-like setae below depression, prolateral face with two disto-ventral spines, disto-medial spine present (Fig. 116J–K); patella prolateral face with 2 spines (Fig. 116J–K); cymbium with scopulae present distally (Fig. 116J–K); copulatory organ total length 1.21, length/palp tibia length 0.47 (Fig. 116L–M); bulb length/width 1.06 (Fig. 116L–M); embolus slightly reflexed, attenuate, tapering and curving relatively evenly to point, one strong bend, at about 0.2 of length, slight bend before tip, width at base/bulb width 0.20, embolus length/bulb length 0.92 (Fig. 116L–M).

Female (paratype, QMB S22010)

GENERAL (Fig. 117A–L). Body in moderate condition except for abdomen, which is completely destroyed.

DORSAL PROSOMA (Fig. 117A, E–F). Carapace length 7.43, width 6.26, length/width 1.19, clypeus to fovea length/carapace length 0.72, caput width/carapace width 0.81, carapace orange-brown, caput slightly darker than thorax, reflective setae present, moderate on caput, light on thorax, fovea procurved, fovea width/carapace length 0.21 (Fig. 117A, F); chelicerae red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.63 (Fig. 117A); eye group rectangular, width/length 2, eye tubercle present (Fig. 117E).

VENTRAL PROSOMA (Fig. 117C, H). Labium cuspules absent (Fig. 117H); maxillae heel distinct, cuspules present, count=about 216, extending posteriorly onto heel, extending laterally about 55% of maxillae length (Fig. 117C); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 117C); sternum length/width 1.24, central sternum with consistent covering of moderate setae, row of longer setae around posterior edges, some shorter bristle-like setae around anterior edges (Fig. 117H); posterior sigilla semi-elongate, central sternum to posterior sigilla length/sternum length 0.24, posterior sigilla length/sternum length 0.15 (Fig. 117H); other sigilla small, round and lateral (Fig. 117H).

LEG I (Fig. 117J–K). Leg I red-brown, darker on femur, reflective setae on dorsal femur, femur length 5.57, patella length 3.84, tibia length 3.73, metatarsus length 3.36, tarsus length 2.17, total length 18.67, leg I length/carapace length 2.51; scopulae on distal metatarsus and tarsus; spine count Fe D 2, Fe PL 1, Pa PL 2 (proximal rubbed off), Ti PL 2, Ti RL 4, Me PL 2, Me RL 3, Ta 4; tibia length/width [TIL/TID] 2.75.

GENITALIA (Fig. 117L). Spermathecae with two vesicles each; lateral vesicle relatively straight, widening towards tip, length 0.88, lateral vesicle length/genitalia width 0.33, length/width at base 1.66, crown

un-demarcated; medial vesicle short, relatively straight and projecting postero-ventrally, medial vesicle length/genitalia width 0.18, length/width 2.56, medial vesicle length/lateral vesicle length 0.54.

Distribution and natural history

Aname olkola sp. nov. occurs in far northern Queensland, in the Cape York Peninsula bioregion, where it is known from two locations in and around Olkola National Park, west of the town of Laura (Fig. 14). The form of burrows constructed by spiders of this species is unknown.

Aname serpentina sp. nov.

[urn:lsid:zoobank.org:act:3A29CF45-A90F-45E1-99B1-B4EB3A29CF50](https://zoobank.org/act:3A29CF45-A90F-45E1-99B1-B4EB3A29CF50)

Figs 1, 14, 118–119

Diagnosis

Males of *A. serpentina* sp. nov. can be distinguished from all species for which males are known by a moderate to large body size (carapace length >4.0 mm), and the presence of a long embolus (embolus length/bulb length >1.5) that is flattened, highly reflexed, and the shape of a broad corkscrew (Fig. 118L–M).

Females of *A. serpentina* sp. nov. can be distinguished from all species for which females are known by the presence of spermathecae with two extremely elongate vesicles (lateral vesicle length/width ~13.7), with the lateral vesicles projecting laterally before extending towards the anterior, and the medial vesicles extending medially before extending towards the anterior, and the presence of distinctive groups of bristle-like setae around the edges of the sternum, between the sigilla (Fig. 119).

Etymology

The specific epithet ‘*serpentina*’ is a Latin adjective meaning ‘serpent-like’, in reference to the highly elongate, sinuous spermathecae and embolus of this species.

Type material

Holotype

AUSTRALIA – Queensland • ♂; Alpha; 23°39′ S, 146°38′ E; 10 Jan. 2022; S. Thorn leg.; QMB S118221.

Paratypes

AUSTRALIA – Queensland • 1 ♂; Jericho; 23°35′ S, 146°05′ E; 5 Feb. 1987; J. McDonald leg.; QMB S96506 • 1 ♀; Alpha, off Star Downs Road, near junction of Tambo Road; 23°39′ S, 146°39′ E; 359 m a.s.l.; 19 Apr. 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground; QMB S118284.

Other material examined

AUSTRALIA – Queensland • 1 juv.; Capricorn Highway, E of Jericho; 23°36′ S, 146°14′ E; 403 m a.s.l.; 19 Apr. 2023; J.D. Wilson and M.G. Rix leg.; excavated, open burrow on ground; QMB S118288.

Description

Male (holotype, QMB S118221)

GENERAL (Fig. 118A–Q). Body length 18.16, in good condition but with dehydrated tissue.

DORSAL PROSOMA (Fig. 118A, E–F). Carapace length 7.91, width 6.50, length/width 1.22, clypeus to fovea length/carapace length 0.70, caput width/carapace width 0.71, carapace dark red-brown, reflective

setae present, heavy on caput, moderate on thorax, fovea procurved, fovea width/carapace length 0.14 (Fig. 118A, F); chelicerae dark red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.45 (Fig. 118A); eye group rectangular, width/length 2.01, eye tubercle present (Fig. 118E).

ABDOMEN (Fig. 118B, D). Abdomen length 6.69, grey, dorsal pattern absent, with reflective setae on anterior portion.

VENTRAL PROSOMA (Fig. 118C, G–I). Labium cuspules absent (Fig. 118H); maxillae heel distinct, cuspules present, count=about 86, extending posteriorly onto heel, extending laterally about 30% of maxillae length (Fig. 118C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 118C, I); sternum length/width 1.35, central sternum with consistent covering of moderate setae, row of longer setae around posterior edges, distinct bristle-like setae in small groups around anterior edge of sternum (Fig. 118G–H); posterior sigilla semi-elongate, central sternum to posterior sigilla length/sternum length 0.20, posterior sigilla length/sternum length 0.19 (Fig. 118G–H); other sigilla small, round and lateral (Fig. 118G–H).

LEG I (Fig. 118N–Q). Leg I very dark red-brown, lighter on distal metatarsus and tarsus, femur length 6.22, patella length 3.80, tibia length 4.56, metatarsus length 4.40, tarsus length 2.93, total length 21.91, leg I length/carapace length 2.77 (Fig. 118N–O); scopulae on distal metatarsus and tarsus (Fig. 118N–O); spine count Fe D 1, Fe PL 1, Pa PL 2, Ti PL 0, Ti RL 0, Me PL 0, Me RL 0, Ta 0 (Fig. 118N–O); tibia length/width [TIL/TID] 3.14, even width along length, spur present, intermediate triangular/digitiform, knuckle absent, megaspine angled at 22 degrees, length to distal face of spur/tibia length [TIS/TIL] 0.54, spur height/tibia width [TISH/TID] 0.66, megaspine length/tibia length 0.22 (Fig. 118N–P); metatarsus slightly sinuous, proximal excavation present, excavation concave with pronounced heel, heel semi-sharp, excavation length/metatarsus length [MIPEL/MIL] 0.49, metatarsus length/width [MIL/MID] 3.70 (Fig. 118N–O, Q).

PEDIPALP (Fig. 118J–M). Tibia length 3.39, width 1.65, length/width [PTL/PTD] 2.06, asetose depression present, depression length/palp tibia length [PDL/PTL] 0.57, retrolateral face with patch of long setae proximally of asetose depression, ventral face with two elongate bristle-like setae below depression, prolateral face with two disto-ventral spines, disto-medial spine absent (Fig. 118J–K); patella prolateral face with 2 spines (Fig. 118J–K); cymbium with scopulae present distally (Fig. 118J–K); copulatory organ total length 1.99, length/palp tibia length 0.59 (Fig. 118L–M); bulb length/width 0.92 (Fig. 118L–M); embolus significantly reflexed, attenuate, flattened, corkscrew-shaped, protruding distally from bulb, slight bend before tip, width at base/bulb width 0.29, embolus length/bulb length 2.19 (Fig. 118L–M).

Female (paratype, QMB S118284)

GENERAL (Fig. 119A–L). Body length 20.91, in good condition.

DORSAL PROSOMA (Fig. 119A, E–F). Carapace length 8.00, width 6.71, length/width 1.19, clypeus to fovea length/carapace length 0.71, caput width/carapace width 0.79, carapace orange-brown, reflective setae present, moderate on caput, light on thorax, fovea procurved, fovea width/carapace length 0.16 (Fig. 119A, F); chelicerae red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.54 (Fig. 119A); eye group rectangular, width/length 1.79, eye tubercle present (Fig. 119E).

ABDOMEN (Fig. 119B, D). Abdomen length 8.77, brown, darker dorsally and lighter laterally, dorsal pattern absent, with consistent cover of short setae.

VENTRAL PROSOMA (Fig. 119C, G–I). Labium cuspules present, count=6 (Fig. 119H); maxillae heel distinct, cuspules present, count=about 88, extending posteriorly onto heel, extending laterally about

40% of maxillae length (Fig. 119C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 119C, I); sternum length/width 1.18, central sternum with consistent covering of moderate setae, row of longer setae around posterior edges (Fig. 119G–H); posterior sigilla elongate, central sternum to posterior sigilla length/sternum length 0.19, posterior sigilla length/sternum length 0.22 (Fig. 119G–H); other sigilla small and lateral, medial sigilla semi-elongate, anterior sigilla round (Fig. 119G–H).

LEG I (Fig. 119J–K). Leg I red-brown, femur length 6.26, patella length 4.02, tibia length 4.31, metatarsus length 3.91, tarsus length 2.35, total length 20.85, leg I length/carapace length 2.61; scopulae on distal metatarsus and tarsus; spine count Fe D 1, Fe PL 1, Pa PL 2, Ti PL 2, Ti RL 4, Me PL 2, Me RL 3, Ta 0; tibia length/width [TIL/TID] 2.86.

GENITALIA (Fig. 119D, L). Epigastric furrow extending significantly, posterior edge with squared shape (Fig. 119D); spermathecae with two vesicles each (Fig. 119L); lateral vesicle extremely elongate, angled laterally before right-angled anterior turn, and medial turn before tip, length 2.36, lateral vesicle length/genitalia width 0.79, length/width at base 13.74, crown un-demarcated (Fig. 119L); medial vesicle projecting from medial part of lateral vesicle, medial vesicle length/genitalia width 0.96, length/width 10.46, medial vesicle length/lateral vesicle length 1.21 (Fig. 119L).

Distribution and natural history

Aname serpentina sp. nov. occurs in central Queensland, in the Desert Uplands bioregion and the edge of the Brigalow Belt North bioregion. It is only known from around the town of Alpha (Fig. 14). It constructs an open, silk-lined burrow without silk outside of the entrance, often on an angle, and with a hidden secondary ‘wishbone’ entrance (Fig. 14).

Aname viridiensis sp. nov.

[urn:lsid:zoobank.org:act:01917EEC-D5B2-4CCA-9FE5-88AFA903FCAD](https://zoobank.org/act:01917EEC-D5B2-4CCA-9FE5-88AFA903FCAD)

Figs 14, 120

Diagnosis

Males of *A. viridiensis* sp. nov. can be distinguished from all species for which males are known by the presence of thorn-like setae along the retrolateral edge of the asetose depression on the palp tibia, becoming denser proximally, and a copulatory organ with the bulb tapering gradually into the relatively long embolus (embolus length/bulb length ~2) with distinct curve at about 0.6 of length, and a small hook at the tip of the embolus (Fig. 120J–P).

Females of *A. viridiensis* sp. nov. are unknown.

Etymology

The specific epithet ‘*viridiensis*’ is a Latin adjective combining the Latin ‘*viridis*’ meaning ‘green’ or ‘verdant’, and the suffix ‘*-ensis*’ indicating connection to a place, referencing the type locality of this species in the lush tropical forest of the McIlwraith Range in Cape York.

Type material

Holotype

AUSTRALIA – Queensland • ♂; McIlwraith Range, Upper Peach Creek; 13°44' S, 143°20' E; 25 Sep. 2017; K. Alard and D. DeBusch leg.; QMB S108682.

Description

Male (holotype, QMB S108682)

GENERAL (Fig. 120A–Q). Body length 20.22, in good condition, colour presumably faded due to preservation.

DORSAL PROSOMA (Fig. 120A, E–F). Carapace length 7.43, width 6.25, length/width 1.19, clypeus to fovea length/carapace length 0.70, caput width/carapace width 0.62, carapace dark red-brown, caput slightly darker than thorax, reflective setae present, light on caput, light on thorax, fovea procurved, fovea width/carapace length 0.16 (Fig. 120A, F); chelicerae dark red-brown, rastellum absent or inconspicuous, chelicerae length/carapace length 0.62 (Fig. 120A); eye group rectangular, width/length 2.1, eye tubercle present (Fig. 120E).

ABDOMEN (Fig. 120B, D). Abdomen length 7.60, dark grey, dorsal pattern absent, with some reflective setae on anterior portion.

VENTRAL PROSOMA (Fig. 120C, G–I). Labium cuspules absent (Fig. 120H); maxillae heel distinct, cuspules present, count=about 72, extending posteriorly onto heel, extending laterally about 25% of maxillae length (Fig. 120C, I); coxae cuspules absent, thorn-like setae on prolateral face present (Fig. 120C, I); sternum length/width 1.20, central sternum with consistent covering of moderate setae, row of longer setae around posterior edges (Fig. 120G–H); posterior sigilla ovoid, central sternum to posterior sigilla length/sternum length 0.26, posterior sigilla length/sternum length 0.14 (Fig. 120G–H); other sigilla small, round and lateral (Fig. 120G–H).

LEG I (Fig. 120N–Q). Leg I red-brown, lighter on distal metatarsus and tarsus, reflective setae on dorsal femur, femur length 5.89, patella length 4.02, tibia length 4.67, metatarsus length 4.27, tarsus length 2.71, total length 21.56, leg I length/carapace length 2.90 (Fig. 120N–O); scopulae on distal metatarsus and tarsus (Fig. 120N–O); spine count Fe D 1, Fe PL 1, Pa PL 2 (proximal rubbed off), Ti PL 0, Ti RL 0, Me PL 0, Me RL 0, Ta 0 (Fig. 120N–O); tibia length/width [TIL/TID] 3.60, even width along length, spur present, digitiform, knuckle absent, megaspine angled at 29 degrees, length to distal face of spur/tibia length [TIS/TIL] 0.56, spur height/tibia width [TISH/TID] 0.66, megaspine length/tibia length 0.26 (Fig. 120N–P); metatarsus slightly sinuous, proximal excavation present, excavation concave with slight heel, heel semi-sharp, excavation length/metatarsus length [MIPEL/MIL] 0.52, metatarsus length/width [MIL/MID] 3.61 (Fig. 120N–O, Q).

PEDIPALP (Fig. 120J–M). Tibia length 3.09, width 1.23, length/width [PTL/PTD] 2.51, aetose depression present, depression length/palp tibia length [PDL/PTL] 0.53, retrolateral face with short, thorn-like setae along retrolateral edge of depression, getting denser proximally, ventral face with two elongate bristle-like setae below depression, prolateral face with two disto-ventral spines and a single medial spine, disto-medial spine present (Fig. 120J–K); patella prolateral face with 2 spines (Fig. 120J–K); cymbium with scopulae present distally (Fig. 120J–K); copulatory organ total length 1.50, length/palp tibia length 0.49 (Fig. 120L–M); bulb length/width 0.86 (Fig. 120L–M); embolus tapering from bulb, attenuate, swollen base tapering before strong curve to sinuous tip, one strong band, at about 0.7 of length, small hook on tip, width at base/bulb width 0.27, embolus length/bulb length 2.00 (Fig. 120L–M).

Distribution and natural history

Aname viridiensis sp. nov. occurs in far northern Queensland, in the Cape York Peninsula bioregion, in the McIlwraith Range near Coen (Fig. 14). The form of burrows constructed by spiders of this species is unknown.

Discussion

Application of integrative taxonomy to the north-eastern *Aname*

The conservative morphology, marked sexual dimorphism, and high levels of genetic structuring in mygalomorph spiders make an integrative taxonomic approach, which synthesises multiple lines of evidence, especially effective for forming robust species hypotheses (Montes de Oca *et al.* 2016; Rix

et al. 2018; Ferretti *et al.* 2019; Wilson & Rix 2021; Monjaraz-Ruedas *et al.* 2023; Nelson *et al.* 2024). Recent applications of such an approach in Australia have seen highly accessible revisionary work done on some of the country's most vulnerable taxa (e.g., Rix *et al.* 2018; Harvey *et al.* 2020b), revealing many new species as well as providing insights into behaviour and natural history (e.g., Rix *et al.* 2020b; Wilson *et al.* 2020).

Previous molecular studies highlighted a largely untapped diversity in the genus *Aname* across the continent (Castalanelli *et al.* 2014; Rix *et al.* 2017a), yet, prior to this study, all revisions on *Aname* had been relatively small and piece-meal (Harvey *et al.* 2012, 2020a, 2022; Castalanelli *et al.* 2020; Wilson *et al.* 2023b), and the eastern fauna had received virtually no attention since Raven (1985a). To address this gap, we applied an integrative taxonomic approach at a scale not seen before in Australian mygalomorph systematics, combining comprehensive morphological monography, fieldwork, DNA barcoding, molecular phylogenetics and natural history. This has led to a remarkable five-fold increase in the number of recognised species in the region – from 14 to 71. This includes the 68 species revised in this study, and three that were not included. The Australian endemic genus *Aname* now contains 110 species, even before the majority of the continent has been revised, and with an estimated 40 new species from South Australia (based on examination of the South Australian Museum collection, JDW unpublished data) and at least 150 from Western Australia (based on preliminary “MYG” codes assigned by the authors plus expected additional species), as well as an unknown number of additional species from the monsoon tropics, we expect the total diversity of the genus to reach or exceed 300 species, making it perhaps the most diverse mygalomorph spider genus in the world. Despite this, it remains an incredibly cohesive unit, being easily recognisable and with few (if any) morphological characters that could be used to further divide it in a systematic way.

Pattern of phylogenetic diversity and behaviour in north-eastern *Aname*

Prior to this study, only eight specimens from subtropical and tropical eastern Australia had been included in molecular phylogenetic analyses, comprising six representatives of the *pallida*-group and a single member of the *whitei*-group (Rix *et al.* 2021). This sparse coverage precluded any meaningful assessment of phylogenetic diversity patterns in the area. In his morphological revision of eastern *Aname*, Raven (1985a) made preliminary comments on interspecific relationships but acknowledged the limitations of his dataset, and indeed his conclusions do not align well with the relationships revealed in this study. Our results reveal a complex tapestry of overlapping evolutionary lineages, with at least seven relatively widespread species complexes occurring in the region (Figs 1, 6–12).

Assuming a western origin for the genus (as per Rix *et al.* 2021), these complexes belong to three independent incursions into the east: one by the dominant *pallida*-group, which includes five species complexes, and two independent incursions of the *whitei*-group – the *warialda*-complex and the *rubrochelicerca*-complex (this complex was recovered as two separate clades in our molecular analysis, but the overwhelming morphological and behavioural homogeneity of this group leads us to believe that it will be recovered as a single clade with sufficient molecular data). Within the *pallida* group, sympatry occurs occasionally between species of some of the more distantly related complexes (for example, between the *pallida*- and *barrema*-complexes, and between the *eddieorum*- and *barakula*-complexes) but is rarely seen within them. Likewise, species of the *warialda*- and *rubrochelicerca*-complexes are almost exclusively allopatric. In contrast, species from each of the three independent eastern lineages (*pallida* group, *warialda*-complex, and *rubrochelicerca*-complex) were frequently found co-occurring in the field, and their widespread sympatry is evident from the distribution maps, with all of them occurring over most of the region addressed in this study. This follows what is now becoming a recognised pattern in the Australian Mygalomorphae – ‘sympatry driven by lineage diversity’ (Rix *et al.* 2020a), in which it is only distantly related lineages that occur together.

The inclusion in our study of behavioural information for many of the eastern species reveals one mechanism that may explain this pattern in *Aname* – these three lineages differ markedly in their burrowing behaviour, and probably also their microhabitat preferences. Species of the *pallida* group are relatively homogeneous in constructing angled, silk-lined burrows without silk extending outside the main entrance and with a secondary hidden entrance, and are often found embedded in leaf litter. Members of the *warialda*-complex build vertical burrows with extensive silk and sometimes a soil mound at the entrance, with a short hidden secondary entrance, and are often found on exposed ground or at the base of shrubs or grass clumps. Finally, members of the *rubrochelicera*-complex make vertical burrows without a silk lining and often without a secondary hidden entrance, and are often found in exposed sandy, or rocky soil.

This suggests that the three lineages that now occur in eastern Australia colonised the region with preexisting behavioural niche differences, which may have prevented direct competition and allowed each lineage to diversify independently. This niche divergence mechanism is explored in detail by Satler *et al.* (2011) in *Aliatypus* Smith, 1908 (also see Coyle & Icenogle 1994), and has been proposed to explain widespread sympatry in other closely related Australian mygalomorph lineages, for instance, the idiopid genera *Euoplos* Rainbow, 1914 and *Cryptoforis* Wilson, Rix & Raven, 2020 (Wilson *et al.* 2018, 2020). Additionally, sympatry between behaviourally divergent species is seen in other mygalomorph groups, such as the Atracidae (Beavis *et al.* 2011).

In the case of *Aname*, it may be possible to test whether sympatry is driven more specifically by behavioural niche diversity, which may or may not be strongly coupled with lineage diversity more generally. To use our data as an example, the *pallida*-group – a clade at least 6 million years old (Harvey *et al.* 2018), is relatively consistent in its behavioural niche, yet the *whitei*-group, of comparable age, includes two markedly different behavioural groups. Given the widespread sympatry in *Aname*, the genus presents an opportunity to investigate (1) whether behavioural change in *Aname* is correlated with genetic change and/or time, and (2) whether sympatry is driven specifically by differences in behavioural niche or is better explained by lineage divergence more generally (e.g., genetic divergence or time). This could be done by gathering comprehensive burrow data from species across the continent, coupled with molecular phylogenetic data, and conducting comparative phylogenetic analyses. Regardless of the evolutionary significance of burrowing behaviour, it clearly holds significant phylogenetic signal and should be incorporated into future taxonomic revisions on the Anamidae whenever possible.

Range size variation in north-eastern *Aname*

The size of species ranges across the *Aname* fauna of subtropical and tropical eastern Australia varies considerably, even within complexes. For example, in the *pallida*-complex, species such as *A. attenuata* and *A. ferruginea* sp. nov. have relatively large ranges across multiple bioregions in south-eastern Queensland, whereas species such as *A. blackdownensis* and *A. vigilata* sp. nov. are each restricted to small areas within a bioregion, and probably represent short-range endemic taxa (with ranges less than 10 000 km²; see Harvey 2002; Harvey *et al.* 2011). Likewise, in the *eddieorum*-complex, the small ranges of species in and around Carnarvon National Park, such as *A. rupicola* sp. nov. and *A. warrego* sp. nov., contrast with wide ranging species further south such as *A. mulgana* sp. nov. and *A. eddieorum* sp. nov. Most of the areas harbouring restricted species are regions of increased topological complexity, but are also isolated from the Great Dividing Range. For example both Carnarvon Gorge and Blackdown Tableland are topologically complex regions containing refugial wet forest habitats known to harbour endemic species or disjunct populations of taxa generally found coastally (e.g., see Theischinger & Watson 1979; Simpson *et al.* 2018); however, in the case of the Anamidae, neither location hosts the typical ‘mesic’ anamid genera found along the Great Dividing Range, such as *Namea* Raven, 1984 or *Chenistonia* Hogg, 1901. It thus seems likely that these regions host endemic *Aname* species due to a

combination of complex topology and constrained environments, and the lack of other spiders in the same functional niche.

Conclusion

By conducting integrative taxonomy at an unprecedented scale, we have uncovered a remarkable diversity, as well as intricate evolutionary patterns, in the *Aname* of subtropical and tropical eastern Australia. Our findings underscore the importance of this type of comprehensive taxonomic revision for efficiently revealing species diversity and evolutionary processes among diverse, taxonomically difficult taxa such as mygalomorph spiders. Furthermore, our study highlights the need for further research on *Aname* to fully understand the mechanisms driving sympatry and range size variation in eastern Australia in these fascinating spiders.

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Fig. 15. *Aname pallida* L. Koch, 1873, ♂ (QMB S86817). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J–K.** Left pedipalp, full prolateral view (**J**), partial retrolateral view (**K**). **L–M.** Right bulb, prolateral view (**L**), dorsal view (**M**). **N–Q.** Left leg I, full prolateral view (**N**), full retrolateral view (**O**), retrolateral view of tibia (**P**), retrolateral view of metatarsus (**Q**). Scale bars: A–B, J, N=2 mm; L=1 mm.

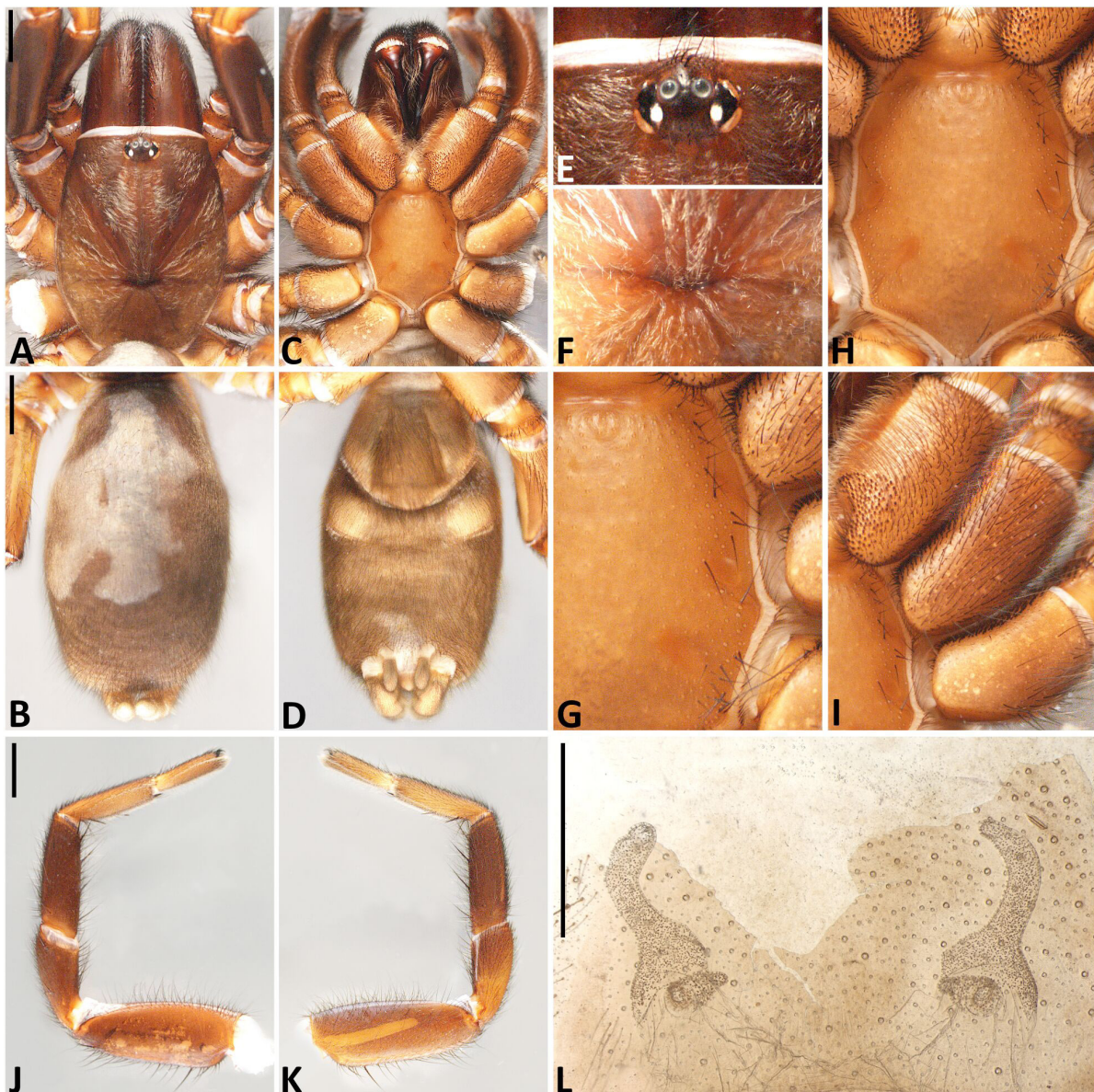


Fig. 16. *Aname pallida* L. Koch, 1873, ♀ (QMB S118205). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J.** Left leg I, prolateral view. **K.** Left leg I, retrolateral view. **L.** Internal genitalia, dorsal view. Scale bars: A–B, J=2 mm; L=1 mm.

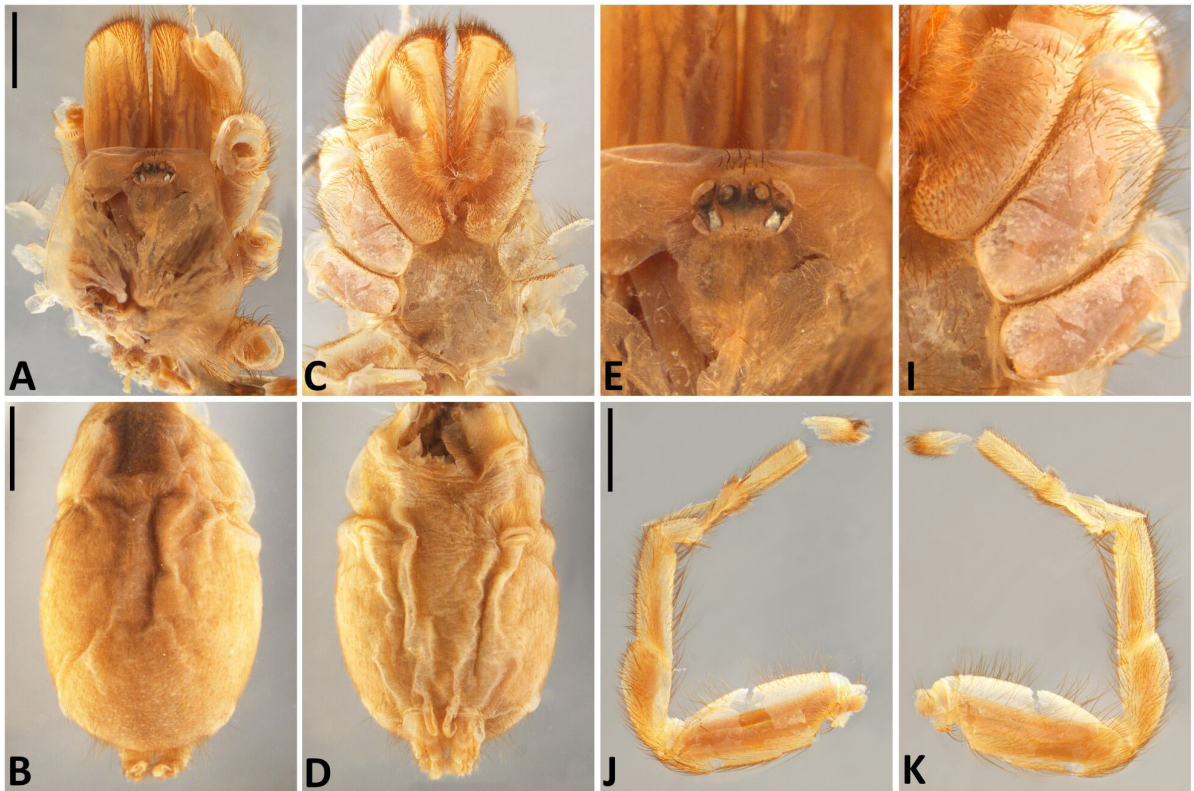


Fig. 17. *Aname pallida* L. Koch, 1873, subadult male holotype (ZMH MGH 8104). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **I.** Maxilla and coxae I–II, left view. **J.** Left leg I, prolateral view. **K.** Left leg I, retrolateral view. Scale bars: A–B, J=2 mm.

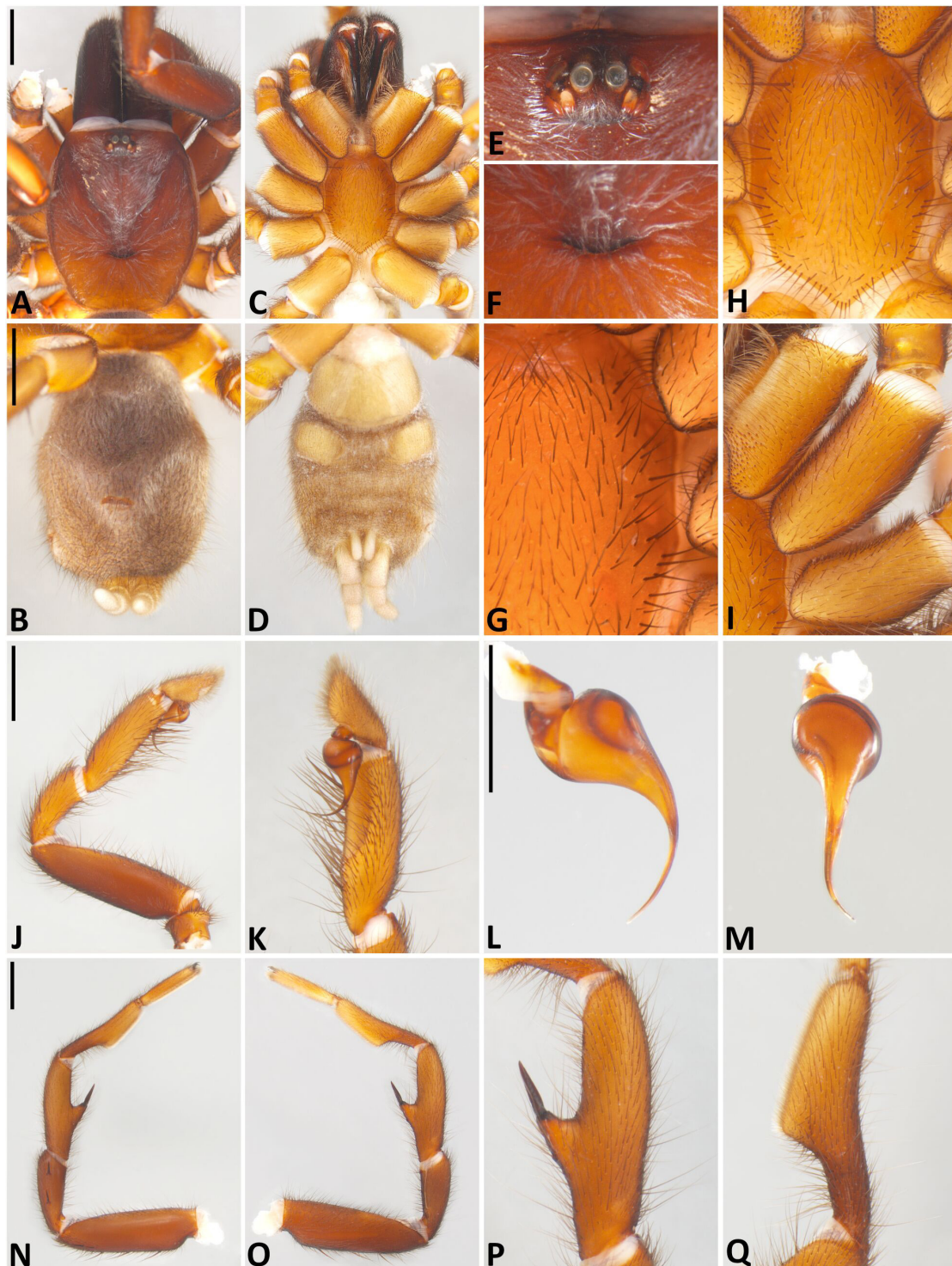


Fig. 18. *Aname attenuata* (Rainbow & Pulleine, 1918), ♂ (QMB S58407). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J–K.** Left pedipalp, full prolateral view (J), partial retrolateral view (K). **L–M.** Right bulb, prolateral view (L), dorsal view (M). **N–Q.** Left leg I, full prolateral view (N), full retrolateral view (O), retrolateral view of tibia (P), retrolateral view of metatarsus (Q). Scale bars: A–B, J, N=2 mm; L=1 mm.

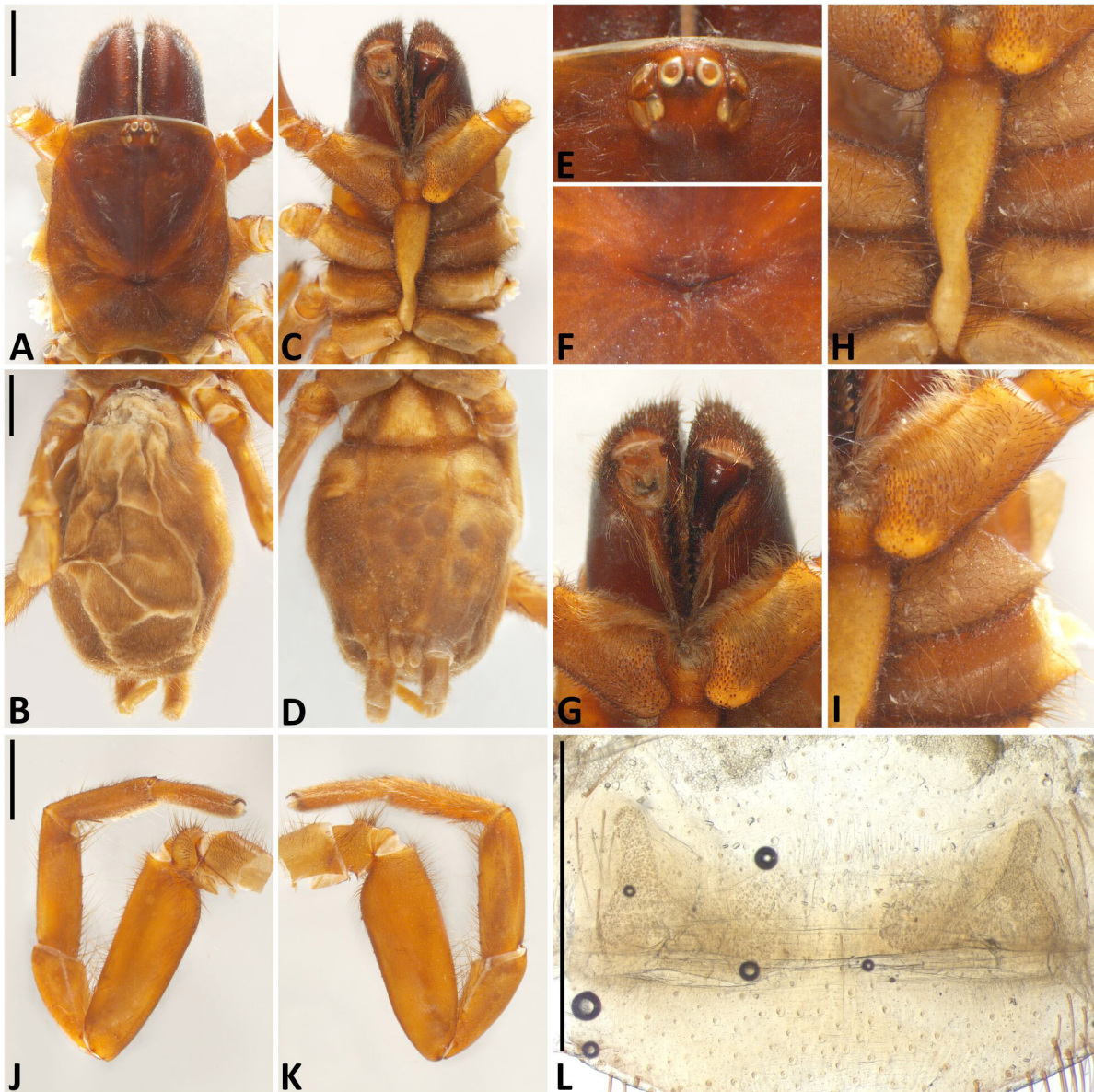


Fig. 19. *Aname attenuata* (Rainbow & Pulleine, 1918), holotype, ♀ (AMS KS8213). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J.** Left leg I, prolateral view. **K.** Left leg I, retrolateral view. **L.** Internal genitalia, dorsal view. Scale bars: A–B, J=2 mm; L=1 mm.

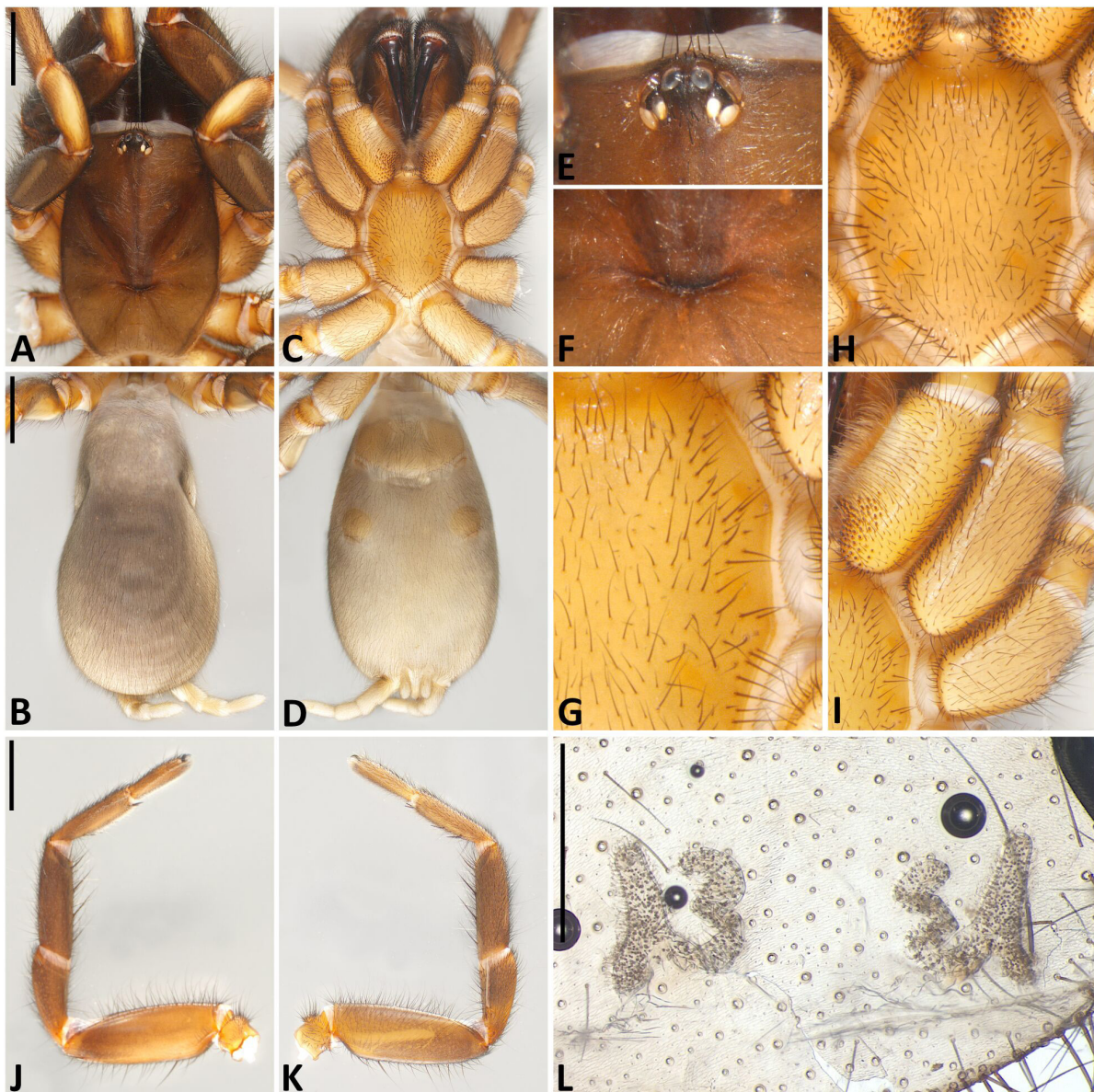


Fig. 20. *Aname attenuata* (Rainbow & Pulleine, 1918), ♀ (QMB S118309). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J.** Left leg I, prolateral view. **K.** Left leg I, retrolateral view. **L.** Internal genitalia, dorsal view. Scale bars: A–B, J=2 mm; L=0.5 mm.

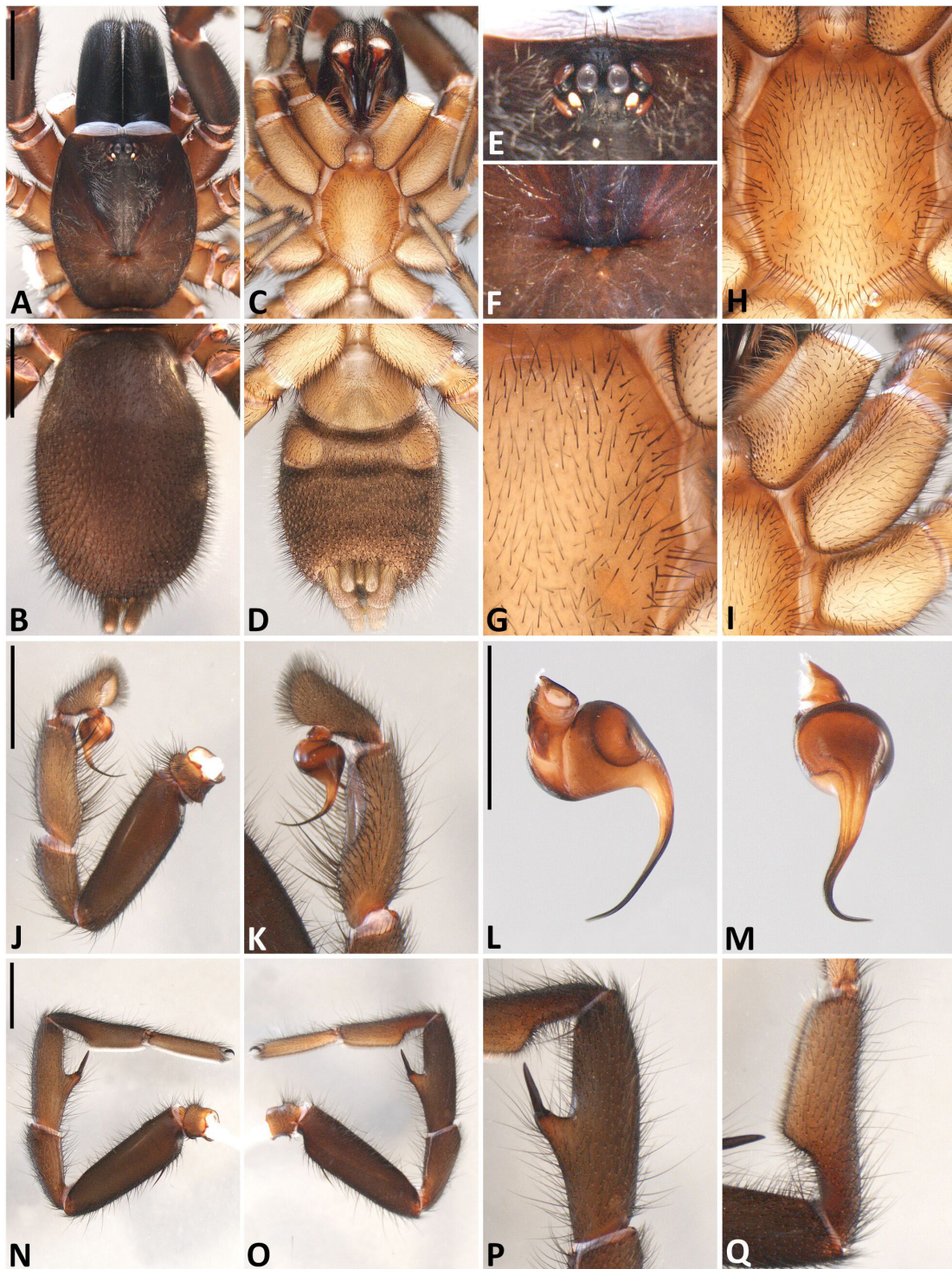


Fig. 21. *Aname blackdownensis* Raven, 1985, ♂ (QMB S118292). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J–K.** Left pedipalp, full prolateral view (J), partial retrolateral view (K). **L–M.** Right bulb, prolateral view (L), dorsal view (M). **N–Q.** Left leg I, full prolateral view (N), full retrolateral view (O), retrolateral view of tibia (P), retrolateral view of metatarsus (Q). Scale bars: A–B, J, N=2 mm; L=1 mm.

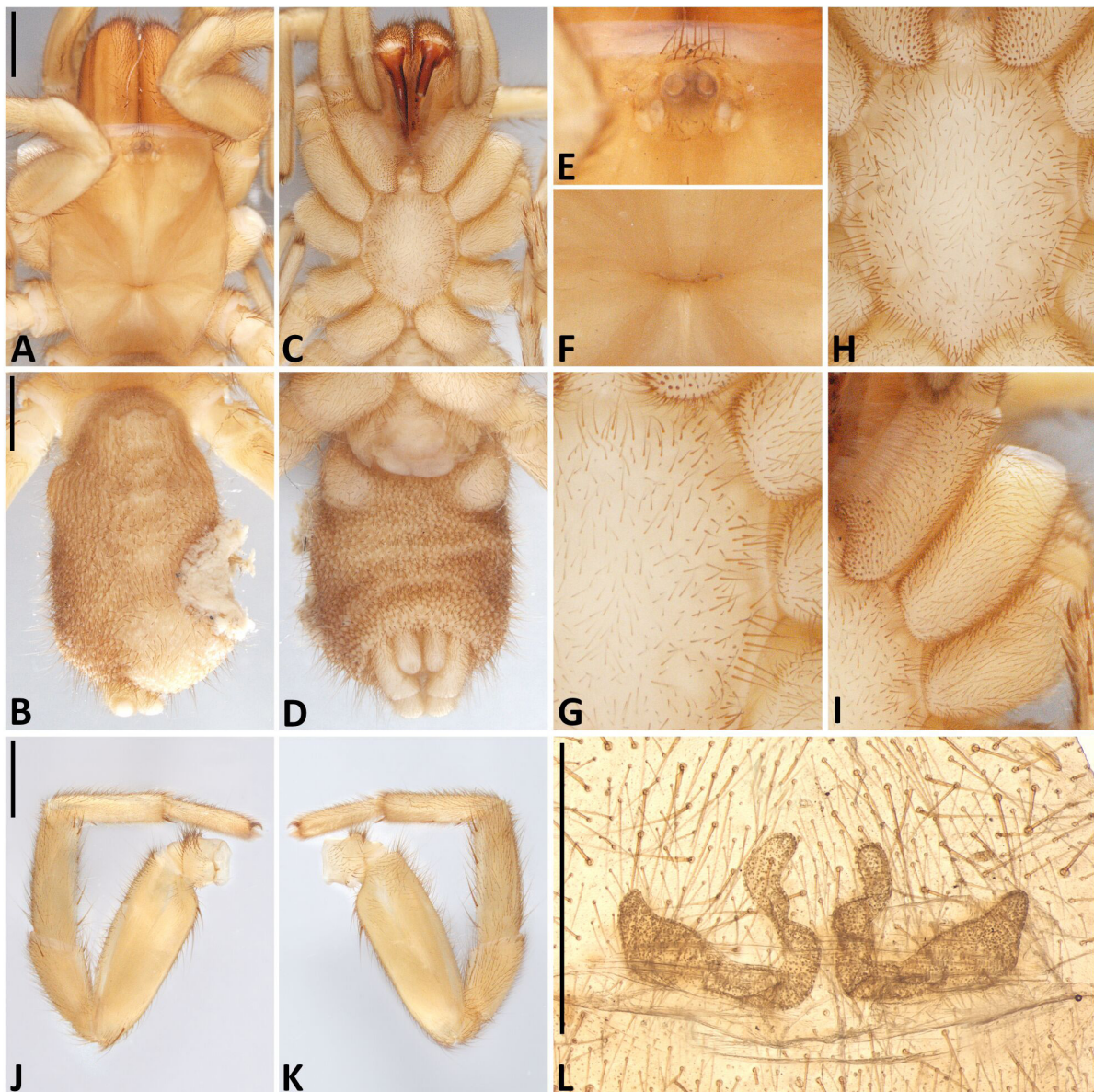


Fig. 22. *Aname blackdownensis* Raven, 1985, holotype, ♀ (QMB S1248). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J.** Left leg I, prolateral view. **K.** Left leg I, retrolateral view. **L.** Internal genitalia, dorsal view. Scale bars: A–B, J=2 mm; L=1 mm.



Fig. 23. *Aname convoluta* sp. nov., holotype, ♂ (QMB S57732). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J–K.** Left pedipalp, full prolateral view (J), partial retrolateral view (K). **L–M.** Right bulb, prolateral view (L), dorsal view (M). **N–Q.** Left leg I, full prolateral view (N), full retrolateral view (O), retrolateral view of tibia (P), retrolateral view of metatarsus (Q). Scale bars: A–B, J, N=2 mm; L=1 mm.

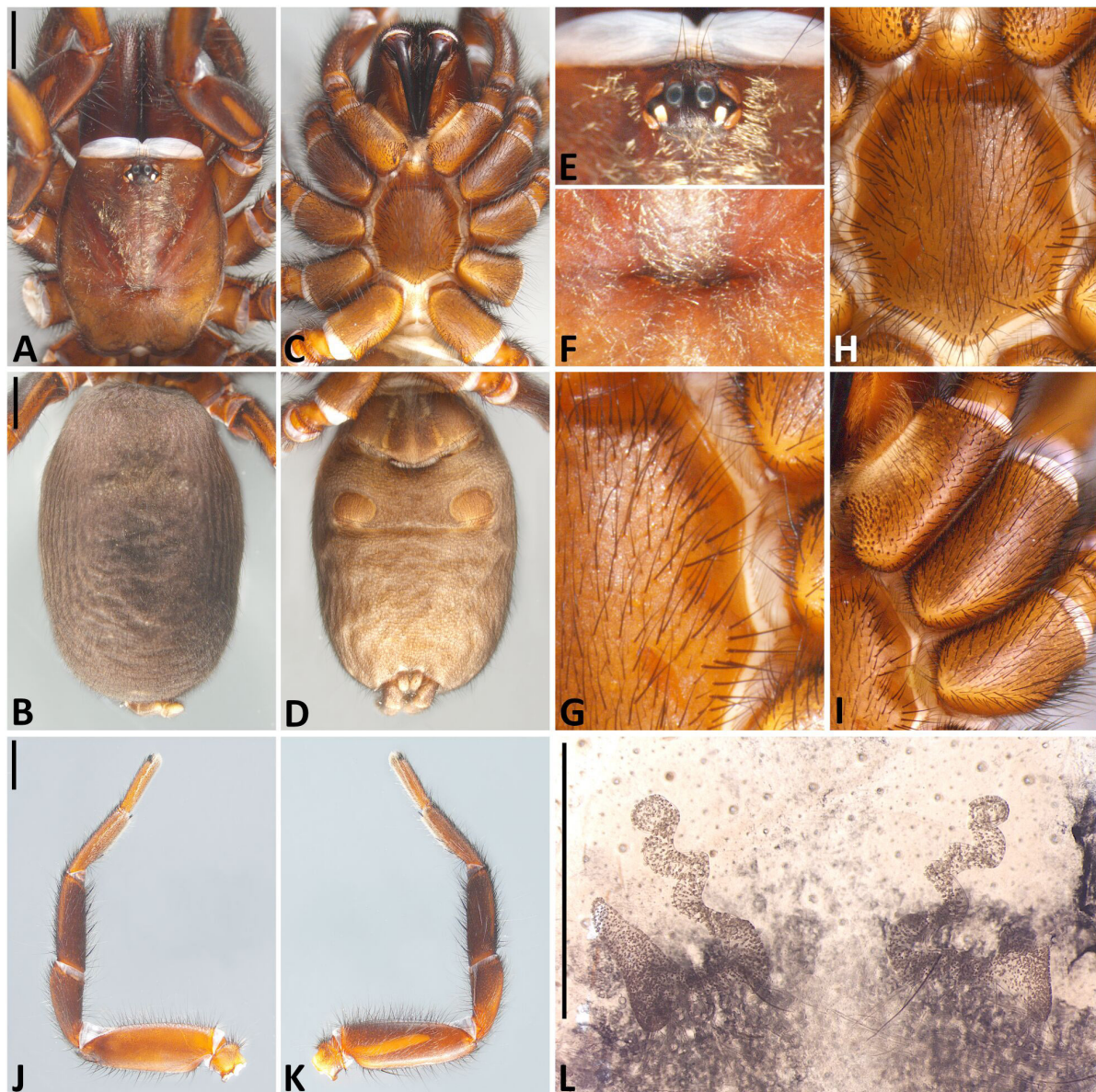


Fig. 24. *Aname convoluta* sp. nov., ♀ (QMB S118255). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J.** Left leg I, prolateral view. **K.** Left leg I, retrolateral view. **L.** Internal genitalia, dorsal view. Scale bars: A–B, J=2 mm; L=1 mm.



Fig. 25. *Aname ferruginea* sp. nov., holotype, ♂ (QMB S48106). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J–K.** Left pedipalp, full prolateral view (J), partial retrolateral view (K). **L–M.** Right bulb, prolateral view (L), dorsal view (M). **N–Q.** Right leg I (images reflected), full prolateral view (N), full retrolateral view (O), retrolateral view of tibia (P), retrolateral view of metatarsus (Q). Scale bars: A–B, J, N=2 mm; L=1 mm.

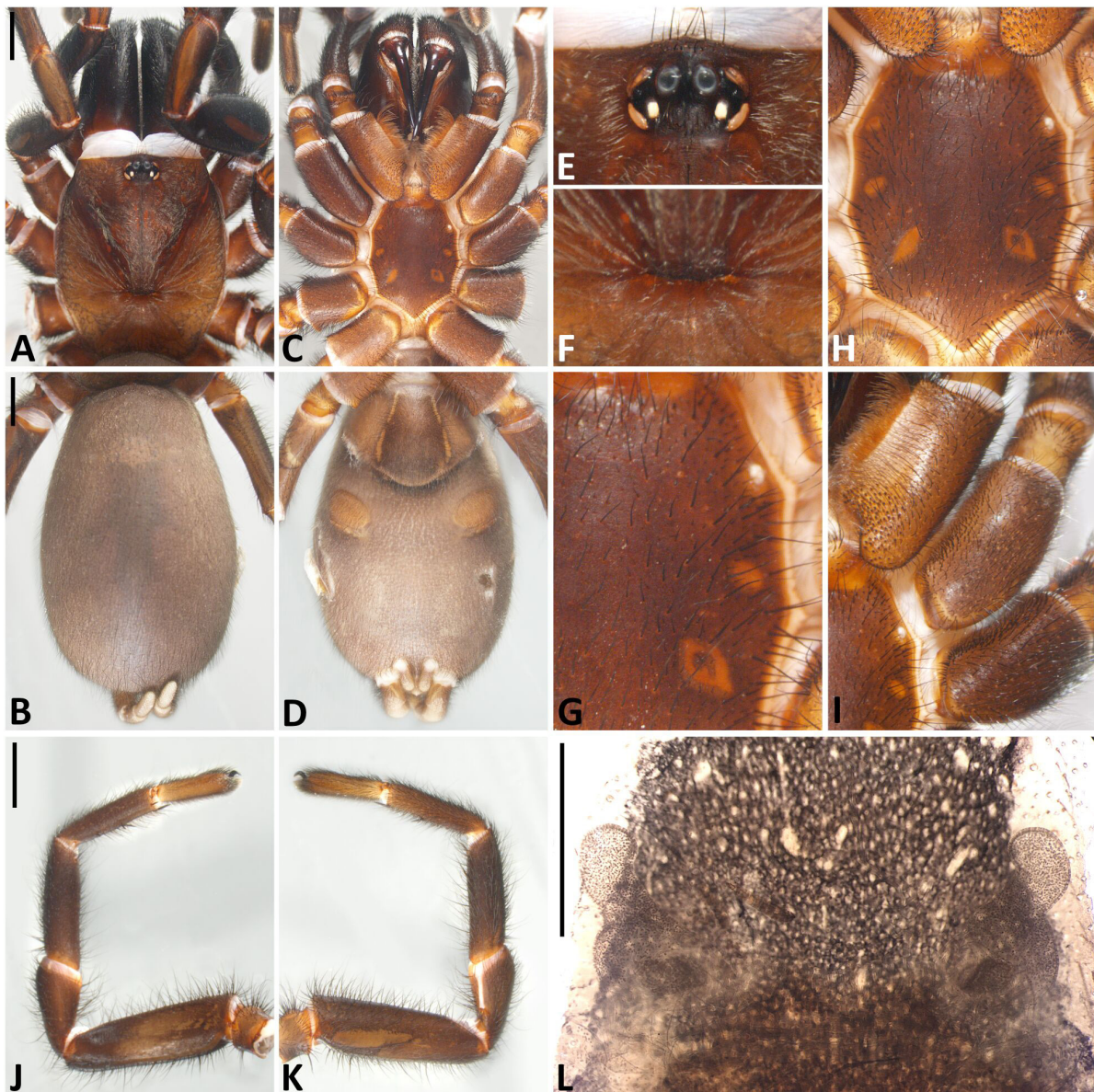


Fig. 26. *Aname ferruginea* sp. nov., ♀ (QMB S118301). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J.** Left leg I, prolateral view. **K.** Left leg I, retrolateral view. **L.** Internal genitalia, dorsal view. Scale bars: A–B, J=2 mm; L=1 mm.



Fig. 27. *Aname giraulti* Rainbow, 1914, ♂ (QMB S1259). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J–K.** Left pedipalp, full prolateral view (J), partial retrolateral view (K). **L–M.** Right bulb, prolateral view (L), dorsal view (M). **N–Q.** Left leg I, full prolateral view (N), full retrolateral view (O), retrolateral view of tibia (P), retrolateral view of metatarsus (Q). Scale bars: A–B, J, N=2 mm; L=1 mm.

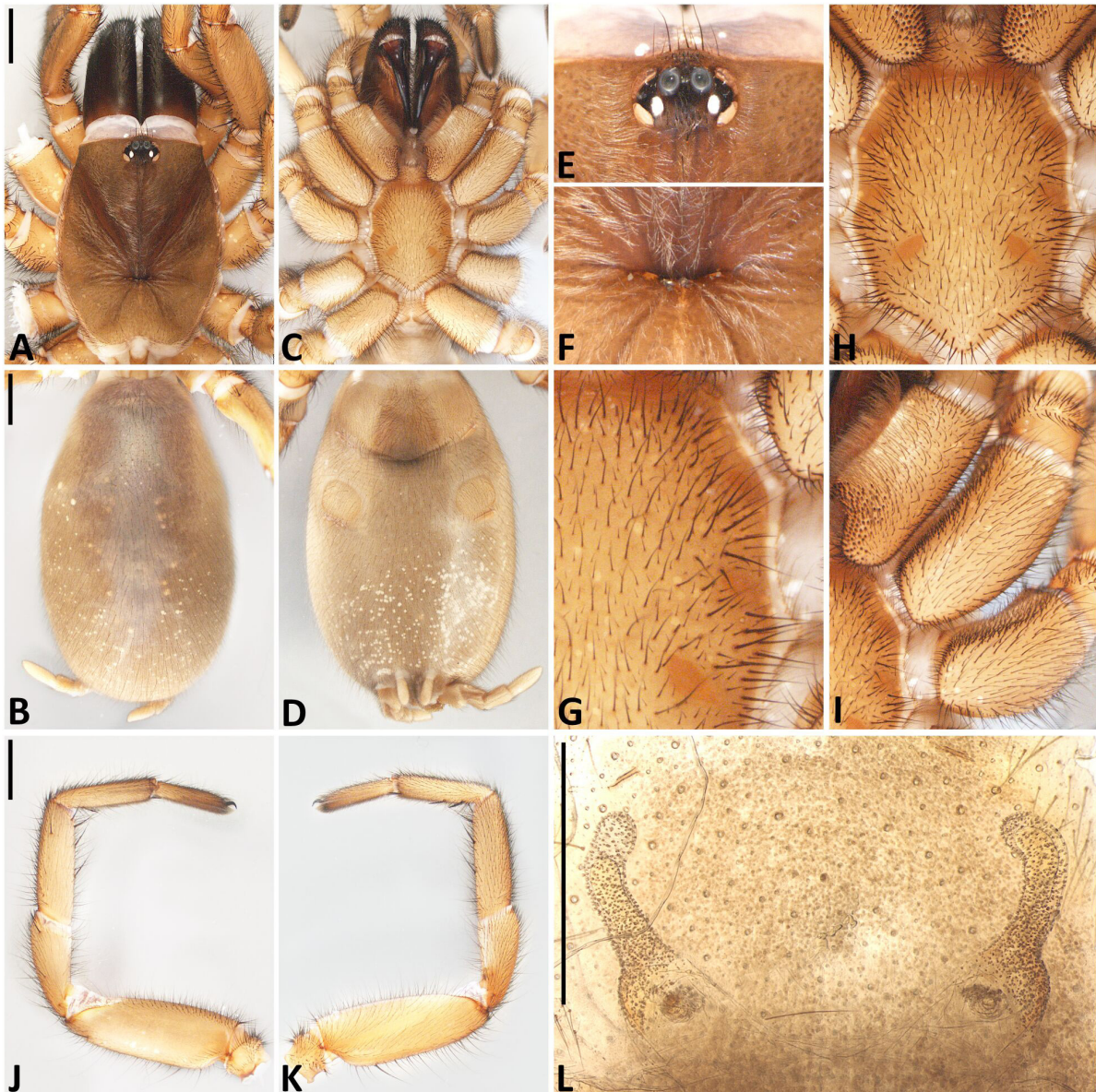


Fig. 28. *Aname giraulti* Rainbow, 1914, ♀ (QMB S118344). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J.** Left leg I, prolateral view. **K.** Left leg I, retrolateral view. **L.** Internal genitalia, dorsal view. Scale bars: A–B, J=2 mm; L=1 mm.

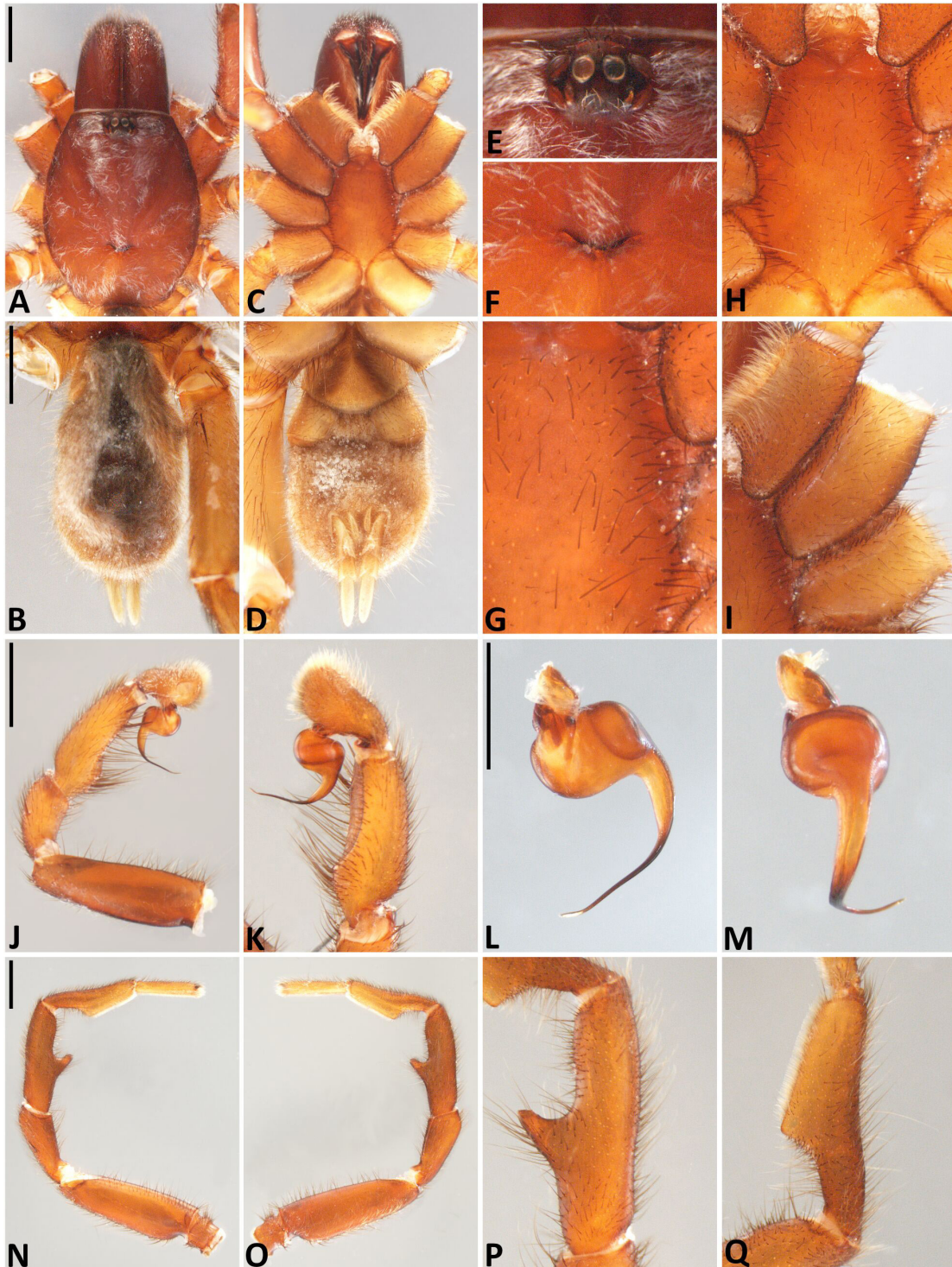


Fig. 29. *Aname intermedia* sp. nov., holotype, ♂ (QMB S22502). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J–K.** Left pedipalp, full prolateral view (J), partial retrolateral view (K). **L–M.** Left bulb (images reflected), prolateral view (L), dorsal view (M). **N–Q.** Left leg I, full prolateral view (N), full retrolateral view (O), retrolateral view of tibia (P), retrolateral view of metatarsus (Q). Scale bars: A–B, J, N=2 mm; L=1 mm.

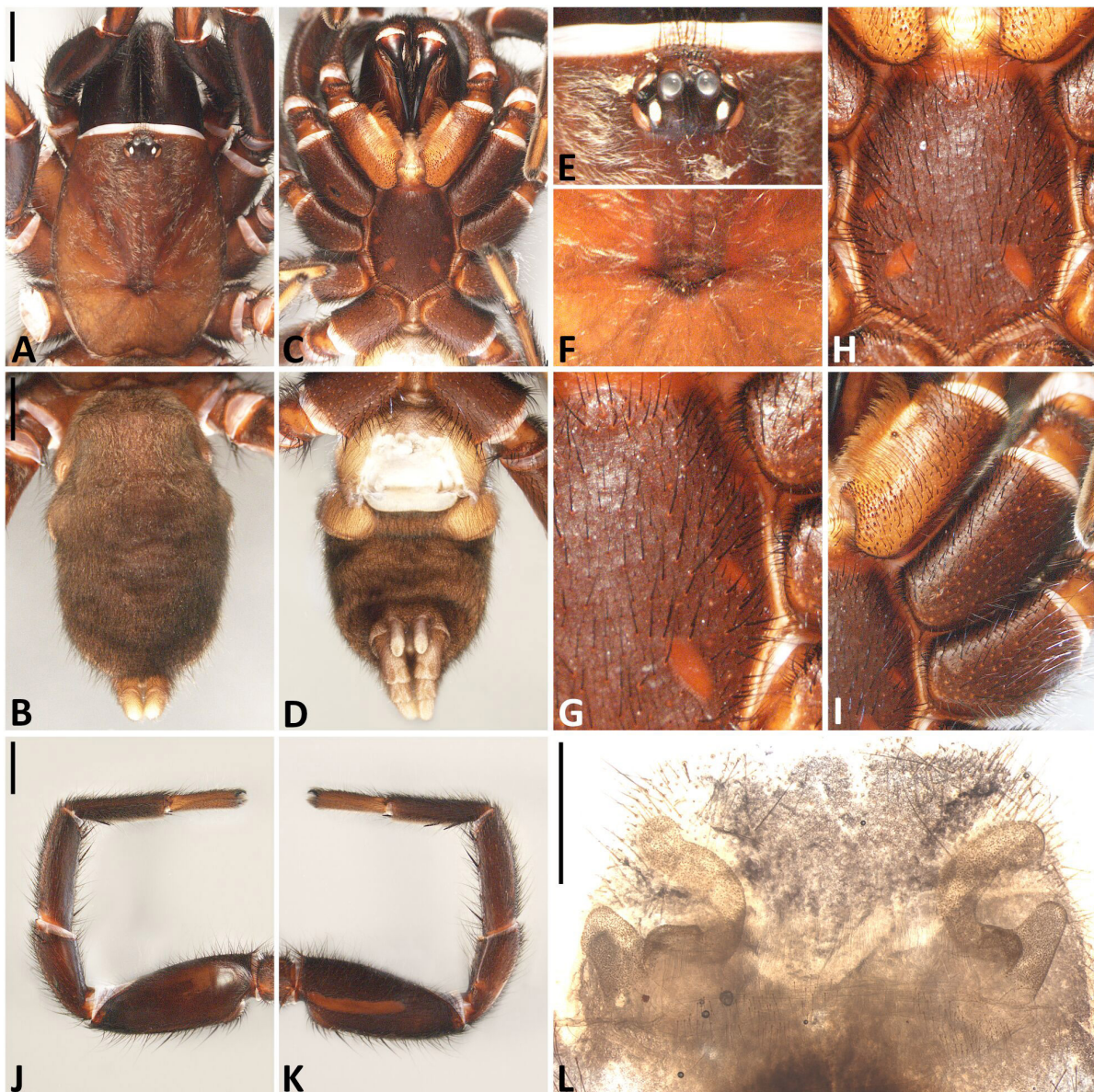


Fig. 30. *Aname intermedia* sp. nov., ♀ (QMB S118353). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J.** Left leg I, prolateral view. **K.** Left leg I, retrolateral view. **L.** Internal genitalia, dorsal view. Scale bars: A–B, J=2 mm; L=1 mm.

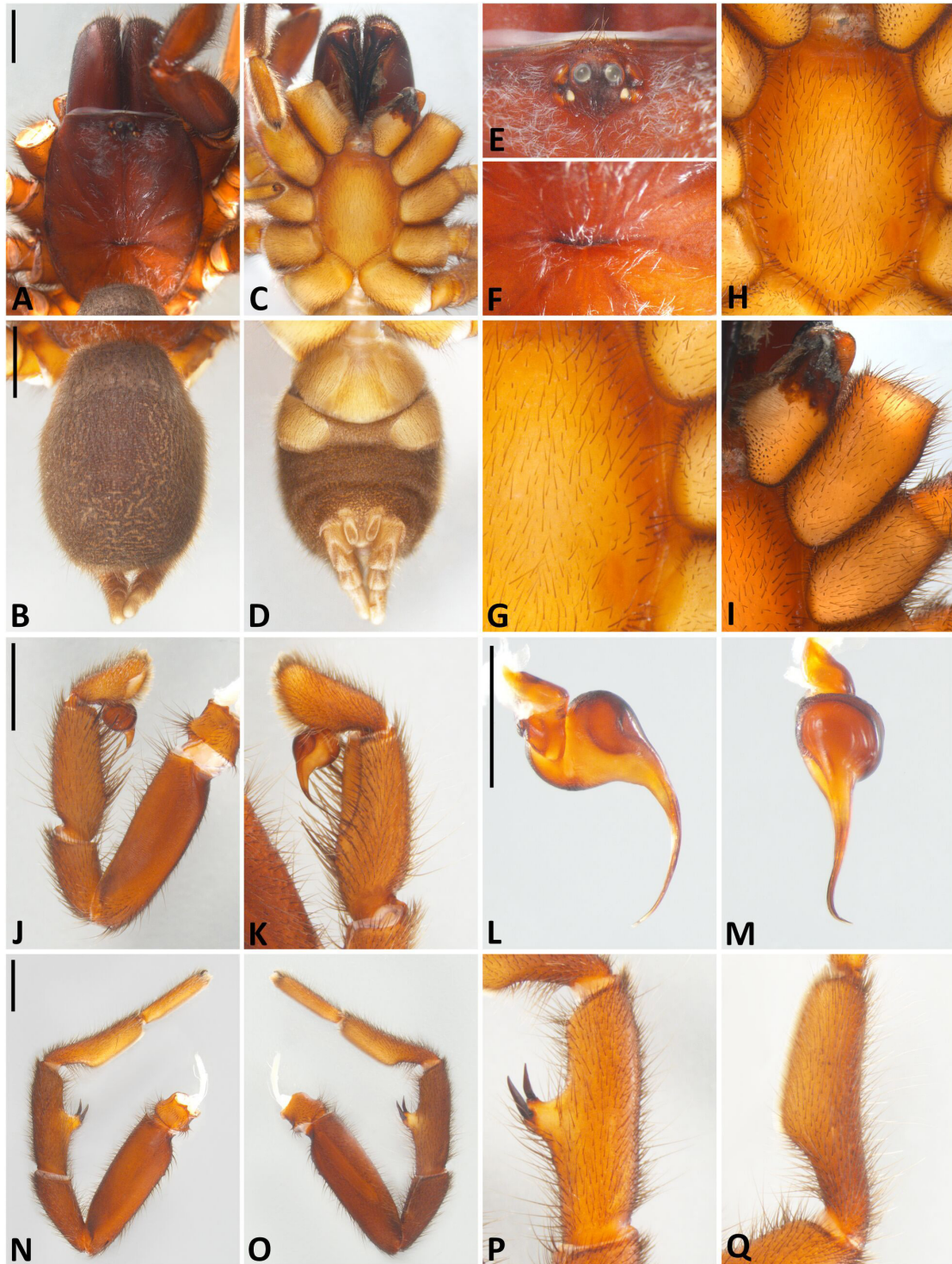


Fig. 31. *Aname platensis* sp. nov., holotype, ♂ (QMB S40807). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J–K.** Right pedipalp (images reflected), full prolateral view (J), partial retrolateral view (K). **L–M.** Right bulb, prolateral view (L), dorsal view (M). **N–Q.** Left leg I, full prolateral view (N), full retrolateral view (O), retrolateral view of tibia (P), retrolateral view of metatarsus (Q). Scale bars: A–B, J, N=2 mm; L=1 mm.

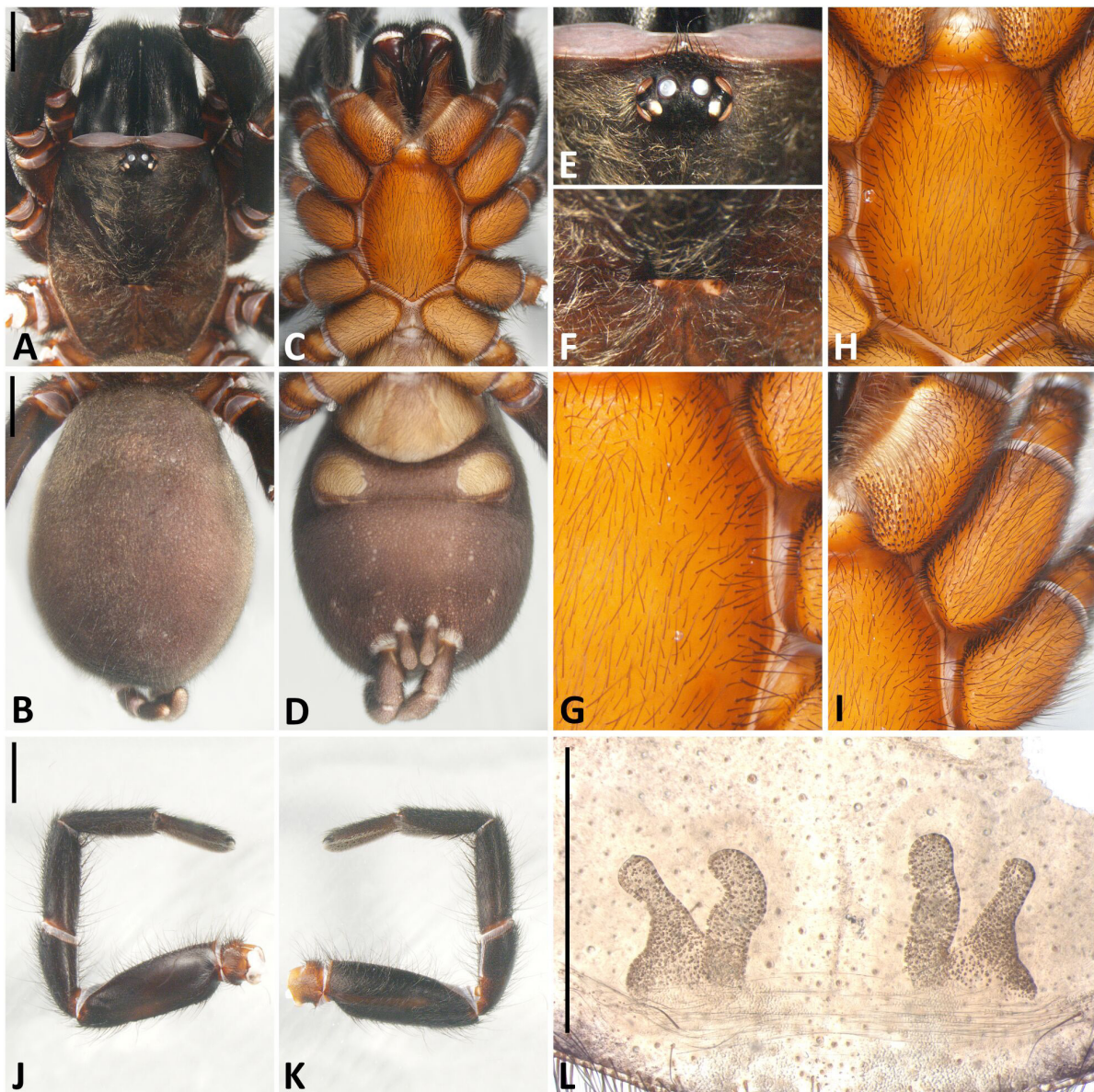


Fig. 32. *Aname platensis* sp. nov., paratype, ♀ (QMB S118225). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J.** Left leg I, prolateral view. **K.** Left leg I, retrolateral view. **L.** Internal genitalia, dorsal view. Scale bars: A–B, J=2 mm; L=1 mm.



Fig. 33. *Aname vigilata* sp. nov., holotype, ♂ (QMB S20019). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J–K.** Left pedipalp, full prolateral view (J), partial retrolateral view (K). **L–M.** Right bulb, prolateral view (L), dorsal view (M). **N–Q.** Left leg I, full prolateral view (N), full retrolateral view (O), retrolateral view of tibia (P), retrolateral view of metatarsus (Q). Scale bars: A–B, J, N=2 mm; L=1 mm.



Fig. 34. *Aname aurensis* sp. nov., holotype, ♂ (QMB S61200). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J–K.** Left pedipalp, full prolateral view (J), partial retrolateral view (K). **L–M.** Right bulb, prolateral view (L), dorsal view (M). **N–Q.** Left leg I, full prolateral view (N), full retrolateral view (O), retrolateral view of tibia (P), retrolateral view of metatarsus (Q). Scale bars: A–B, J, N=2 mm; L=1 mm.

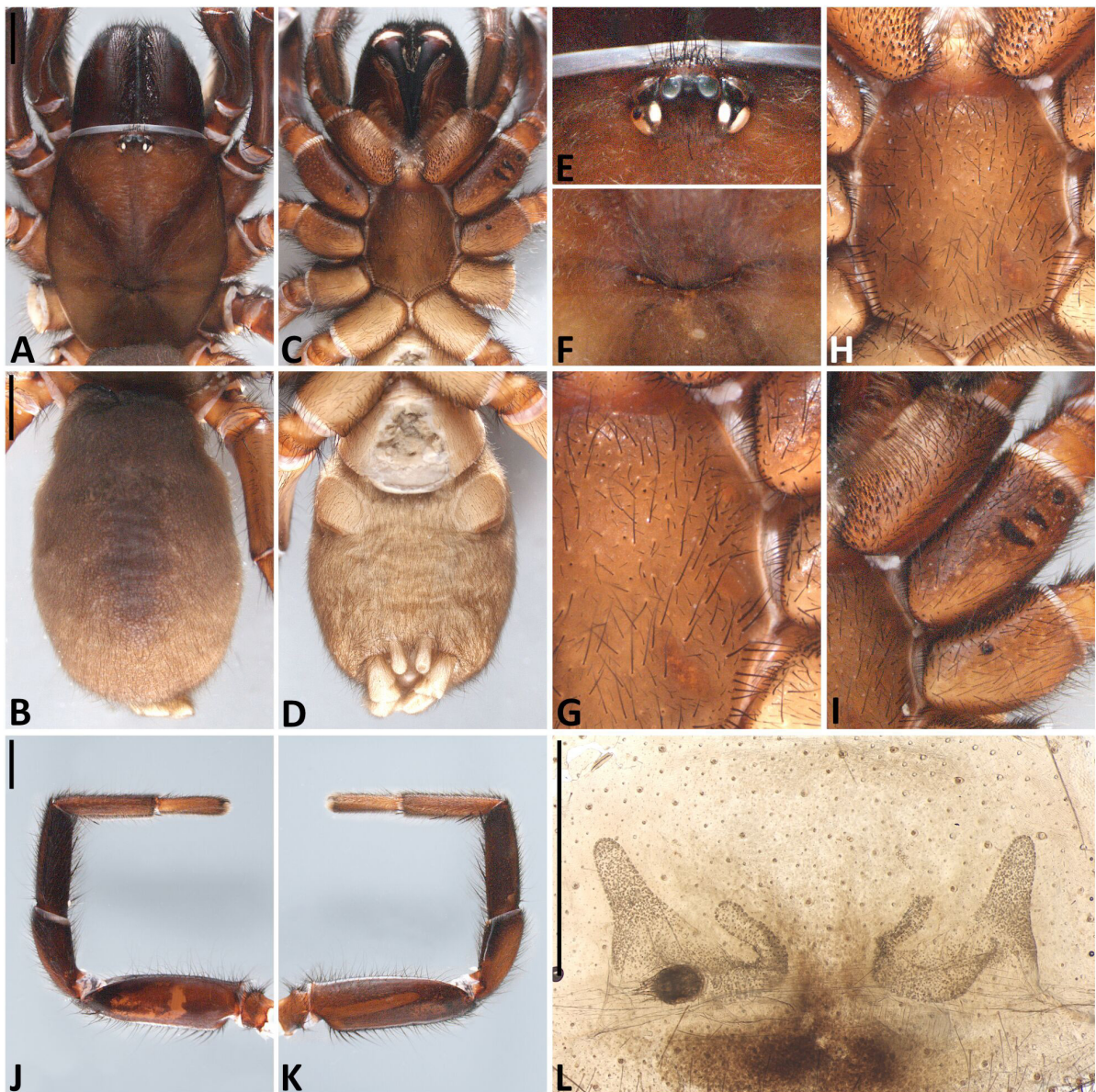


Fig. 35. *Aname aurensis* sp. nov., paratype, ♀ (QMB S118347). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J.** Right leg I, prolateral view (image reflected). **K.** Right leg I, retrolateral view (image reflected). **L.** Internal genitalia, dorsal view. Scale bars: A–B, J=2 mm; L=1 mm.

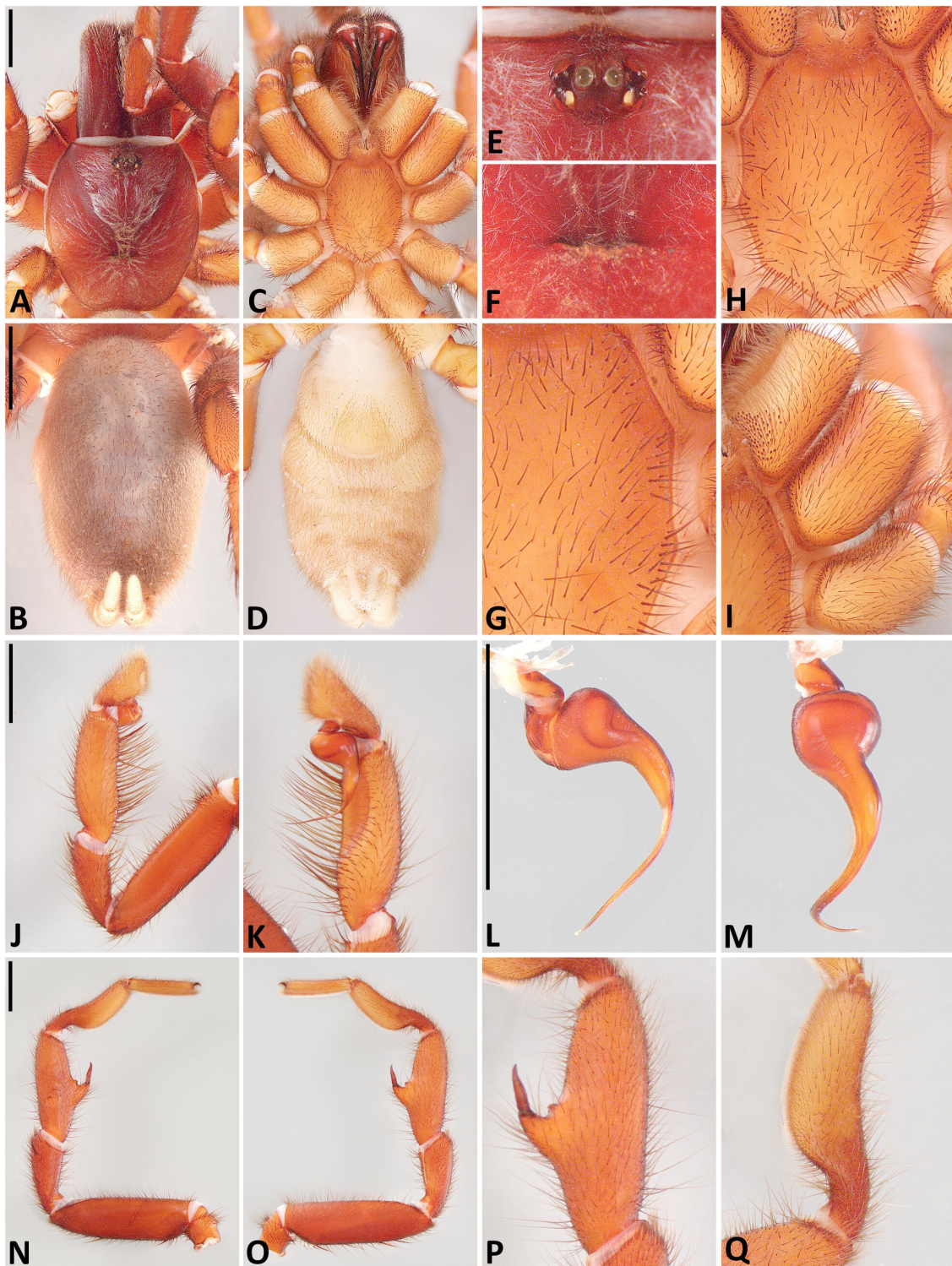


Fig. 36. *Aname briggsi* sp. nov., holotype, ♂ (QMB S63053). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J–K.** Left pedipalp, full prolateral view (J), partial retrolateral view (K). **L–M.** Right bulb, prolateral view (L), dorsal view (M). **N–Q.** Left leg I, full prolateral view (N), full retrolateral view (O), retrolateral view of tibia (P), retrolateral view of metatarsus (Q). Scale bars: A–B, J, L, N=2 mm.

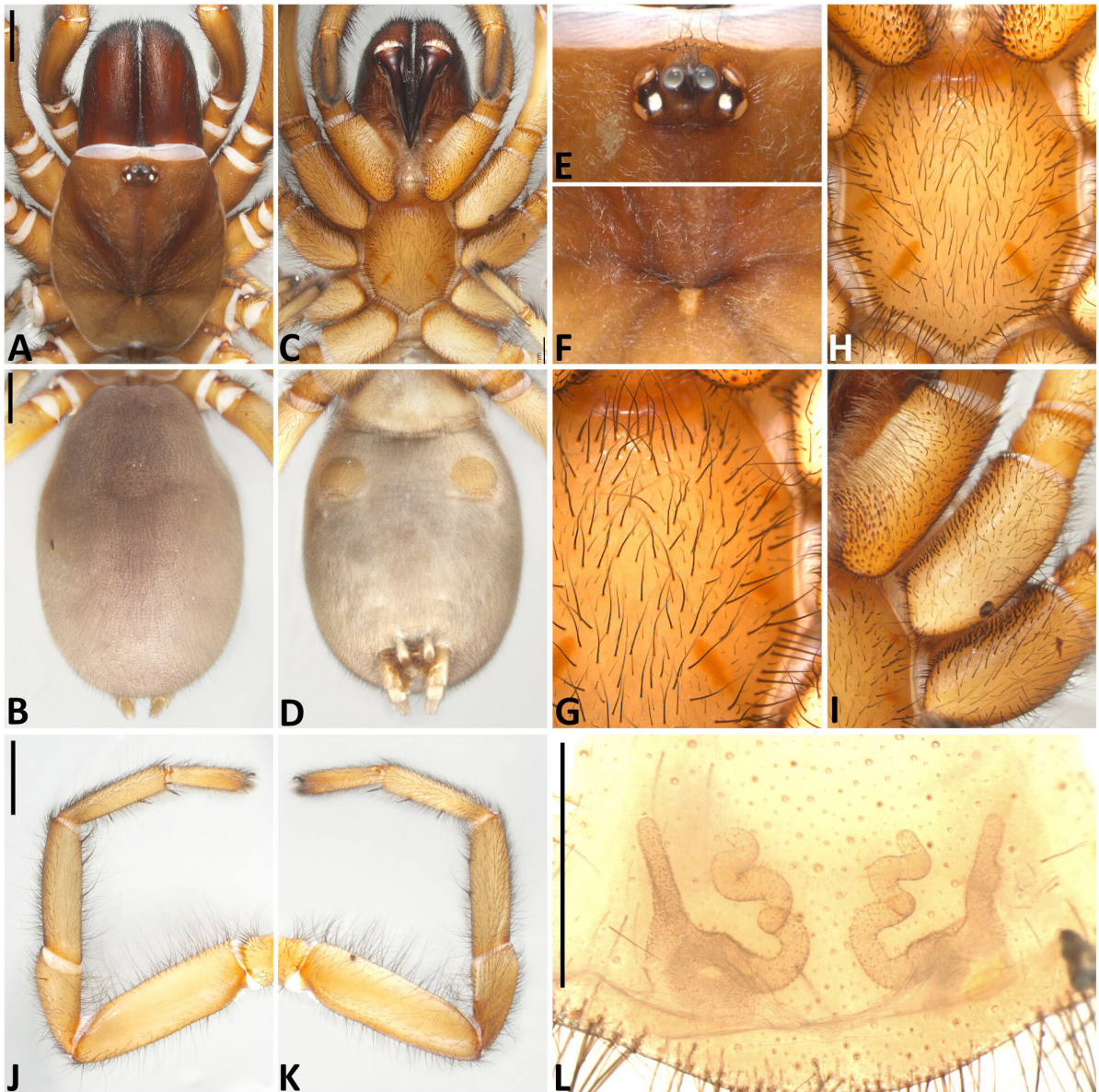


Fig. 37. *Aname briggsi* sp. nov., ♀ (QMB S118276). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I-II, left view. **J.** Left leg I, prolateral view. **K.** Left leg I, retrolateral view. **L.** Internal genitalia, dorsal view. Scale bars: A–B, J=2 mm; L=1 mm.

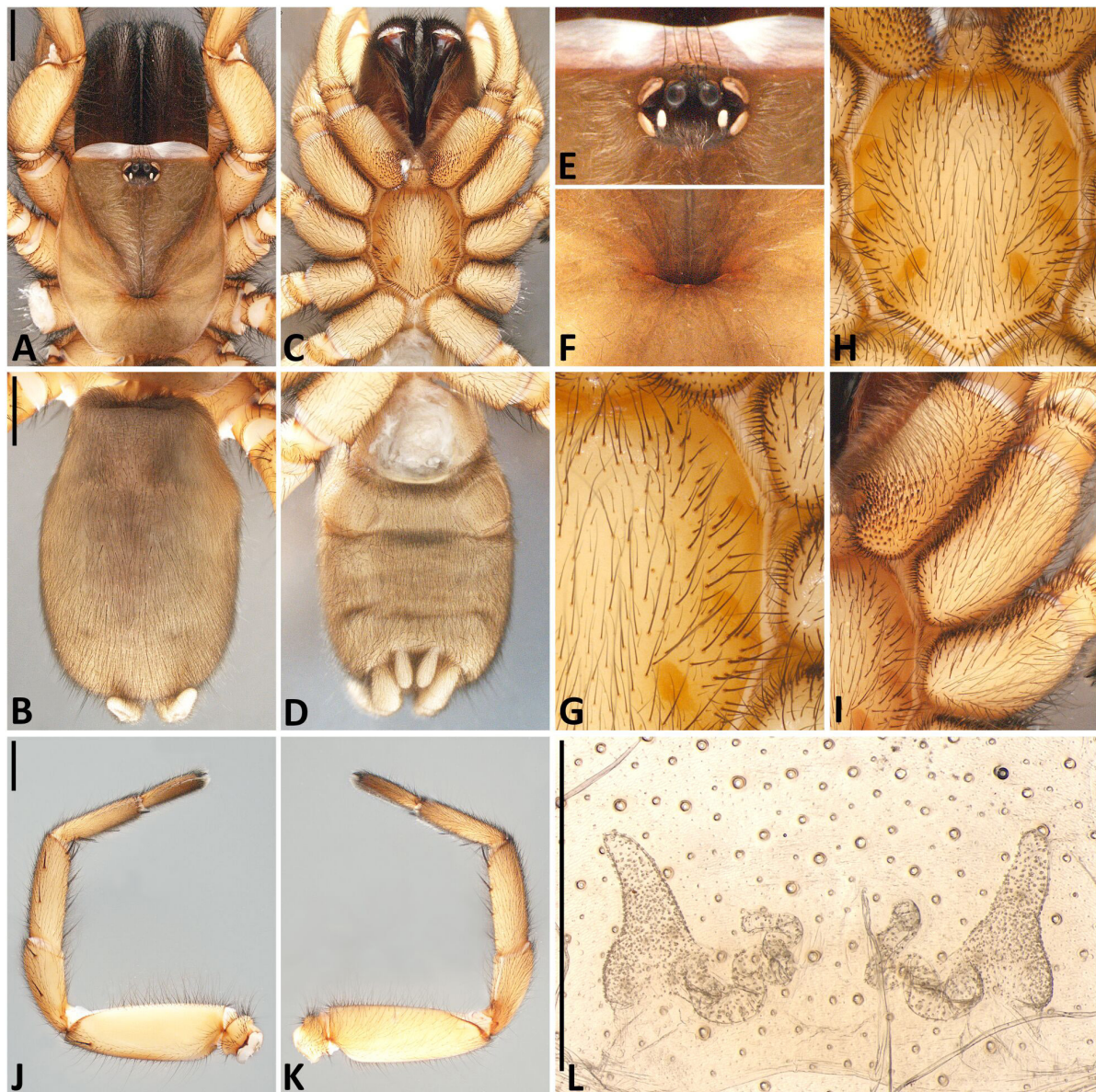


Fig. 38. *Aname dingo* sp. nov., holotype, ♀ (QMB S118297). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J.** Left leg I, prolateral view. **K.** Left leg I, retrolateral view. **L.** Internal genitalia, dorsal view. Scale bars: A–B, J=2 mm; L=1 mm.



Fig. 39. *Aname eddieorum* sp. nov., holotype, ♂ (QMB S111185). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J–K.** Left pedipalp, full prolateral view (**J**), partial retrolateral view (**K**). **L–M.** Right bulb, prolateral view (**L**), dorsal view (**M**). **N–Q.** Left leg I, full prolateral view (**N**), full retrolateral view (**O**), retrolateral view of tibia (**P**), retrolateral view of metatarsus (**Q**). Scale bars: **A–B**, **J**, **N**=2 mm; **L**=1 mm.

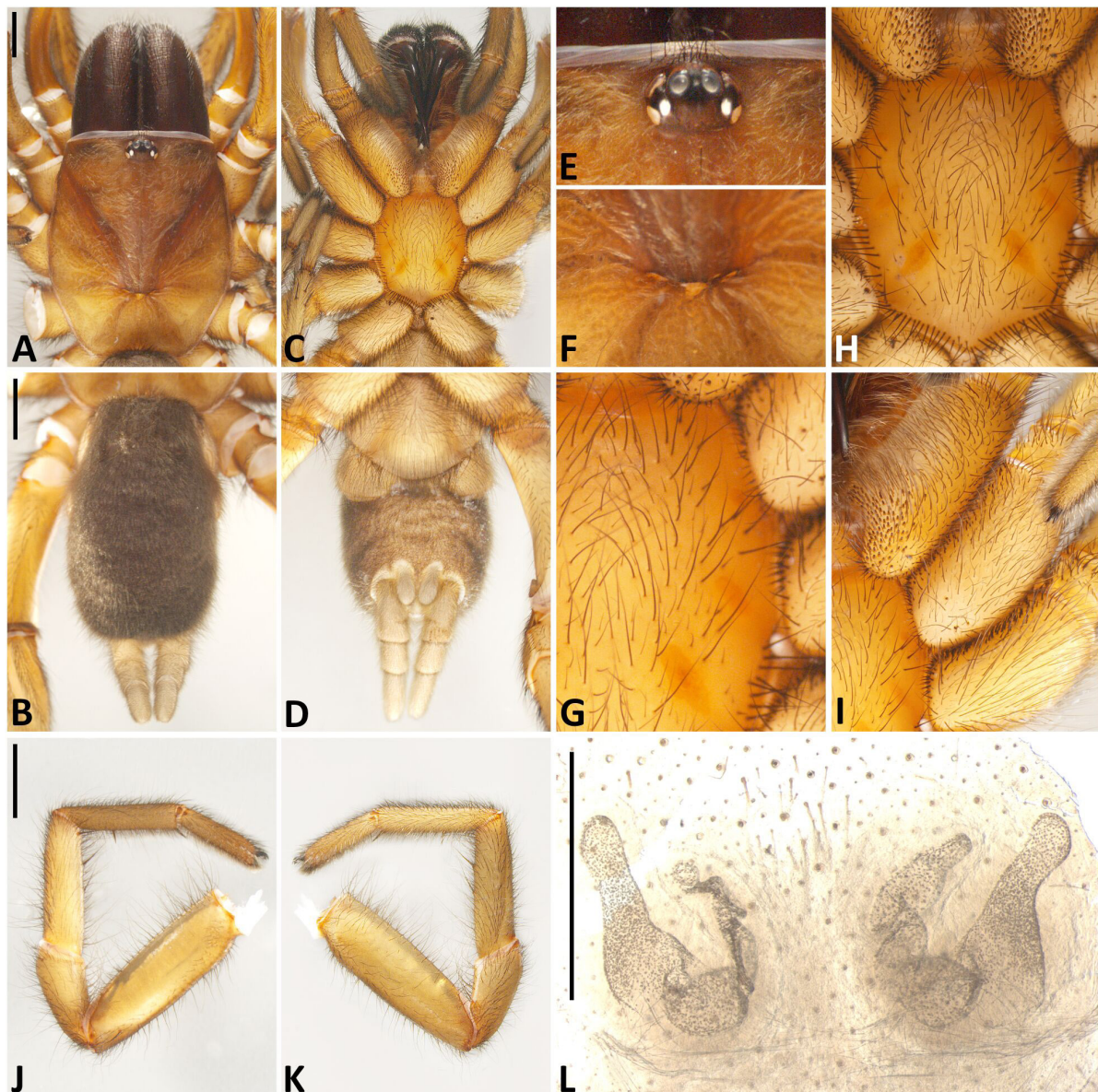


Fig. 40. *Aname eddieorum* sp. nov., ♀ (QMB S118238). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J.** Left leg I, prolateral view. **K.** Left leg I, retrolateral view. **L.** Internal genitalia, dorsal view. Scale bars: A–B, J=2 mm; L=1 mm.

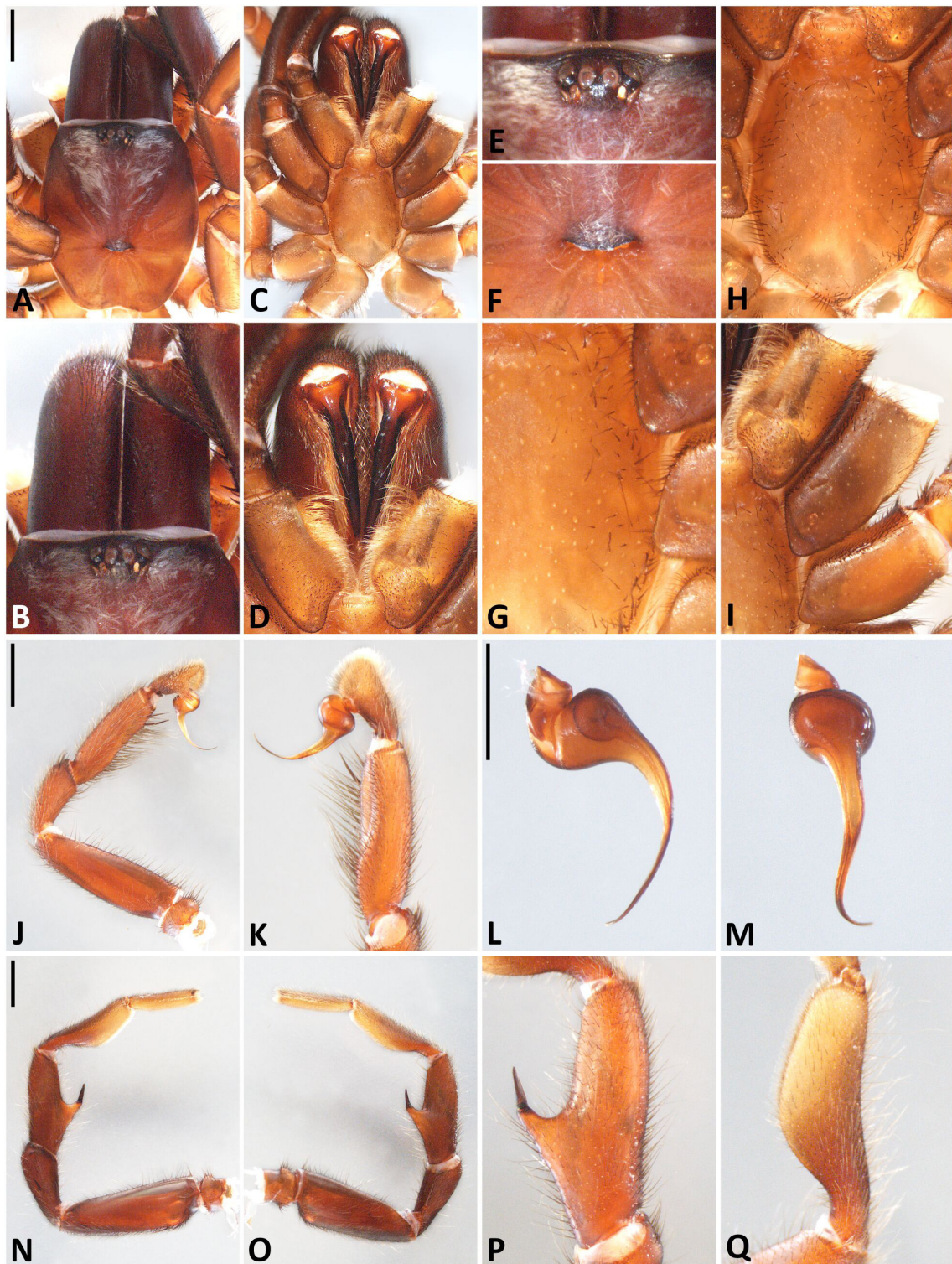


Fig. 41. *Aname hughenden* sp. nov., holotype, ♂ (AMS KS16307). **A.** Cephalothorax, dorsal view. **B.** Chelicerae, dorsal view. **C.** Cephalothorax, ventral view. **D.** Mouthparts, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J–K.** Left pedipalp, full prolateral view (J), partial retrolateral view (K). **L–M.** Right bulb, prolateral view (L), dorsal view (M). **N–Q.** Left leg I, full prolateral view (N), full retrolateral view (O), retrolateral view of tibia (P), retrolateral view of metatarsus (Q). Scale bars: A, J, N=2 mm; L=1 mm.



Fig. 42. *Aname longitheca* Raven, 1985, ♂ (QMB S48246). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J–K.** Left pedipalp, full prolateral view (J), partial retrolateral view (K). **L–M.** Right bulb, prolateral view (L), dorsal view (M). **N–Q.** Left leg I, full prolateral view (N), full retrolateral view (O), retrolateral view of tibia (P), retrolateral view of metatarsus (Q). Scale bars: A–B, J, N=2 mm; L=1 mm.

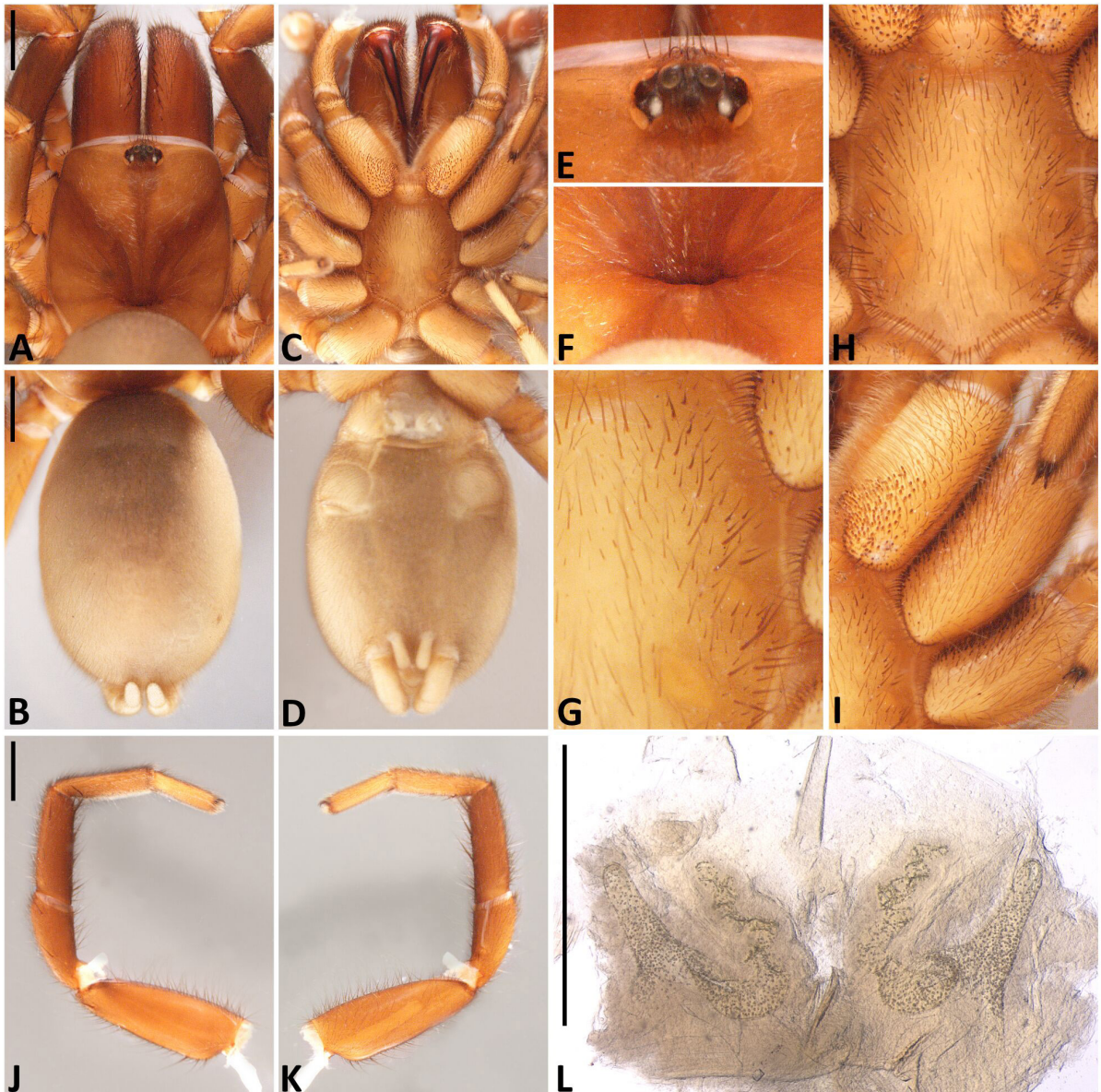


Fig. 43. *Aname longitheca* Raven, 1985, holotype, ♀ (QMB S1283). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J.** Left leg I, prolateral view. **K.** Left leg I, retrolateral view. **L.** Internal genitalia, dorsal view. Scale bars: A–B, J=2 mm; L=1 mm.



Fig. 44. *Aname mulgana* sp. nov., holotype, ♂ (QMB S9769). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J–K.** Left pedipalp, full prolateral view (J), partial retrolateral view (K). **L–M.** Right bulb, prolateral view (L), dorsal view (M). **N–Q.** Left leg I, full prolateral view (N), full retrolateral view (O), retrolateral view of tibia (P), retrolateral view of metatarsus (Q). Scale bars: A–B, J, N=2 mm; L=1 mm.

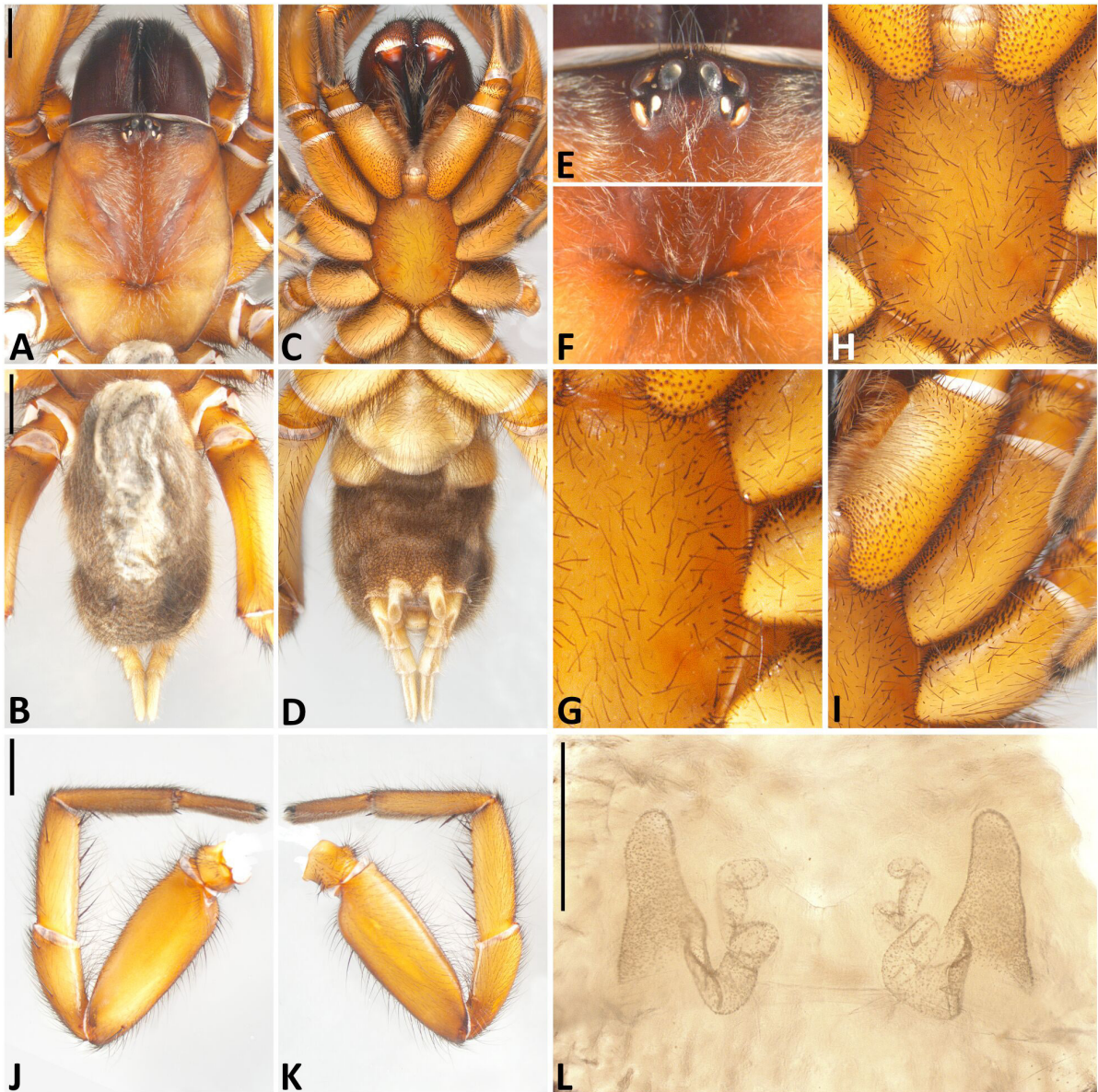


Fig. 45. *Aname mulgana* sp. nov., ♀ (QMB S118217). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J.** Left leg I, prolateral view. **K.** Left leg I, retrolateral view. **L.** Internal genitalia, dorsal view. Scale bars: A–B, J=2 mm; L=1 mm.

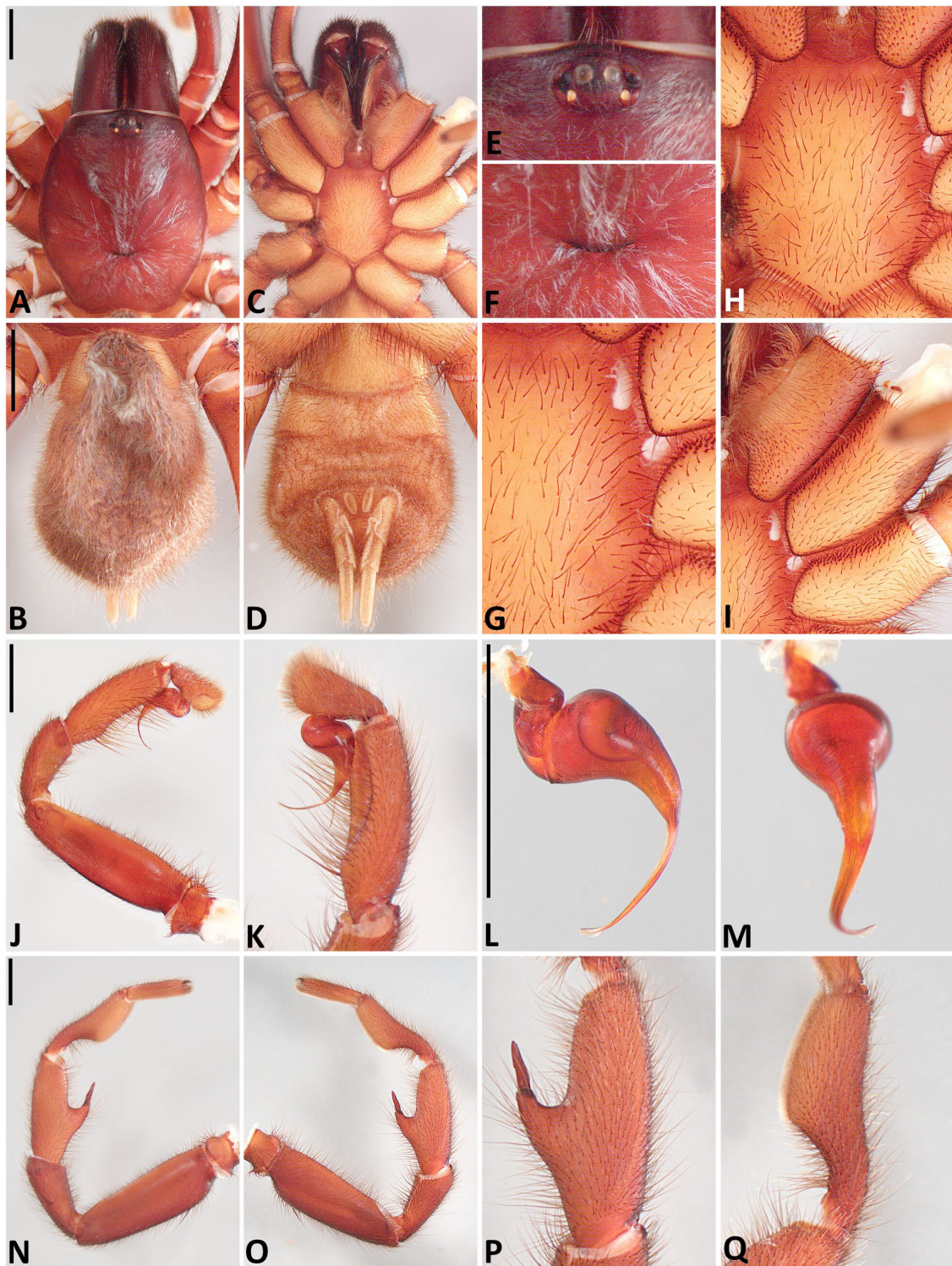


Fig. 46. *Aname rupicola* sp. nov., holotype, ♂ (QMB S54272). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J–K.** Left pedipalp, full prolateral view (J), partial retrolateral view (K). **L–M.** Right bulb, prolateral view (L), dorsal view (M). **N–Q.** Left leg I, full prolateral view (N), full retrolateral view (O), retrolateral view of tibia (P), retrolateral view of metatarsus (Q). Scale bars: A–B, J, L, N=2 mm.

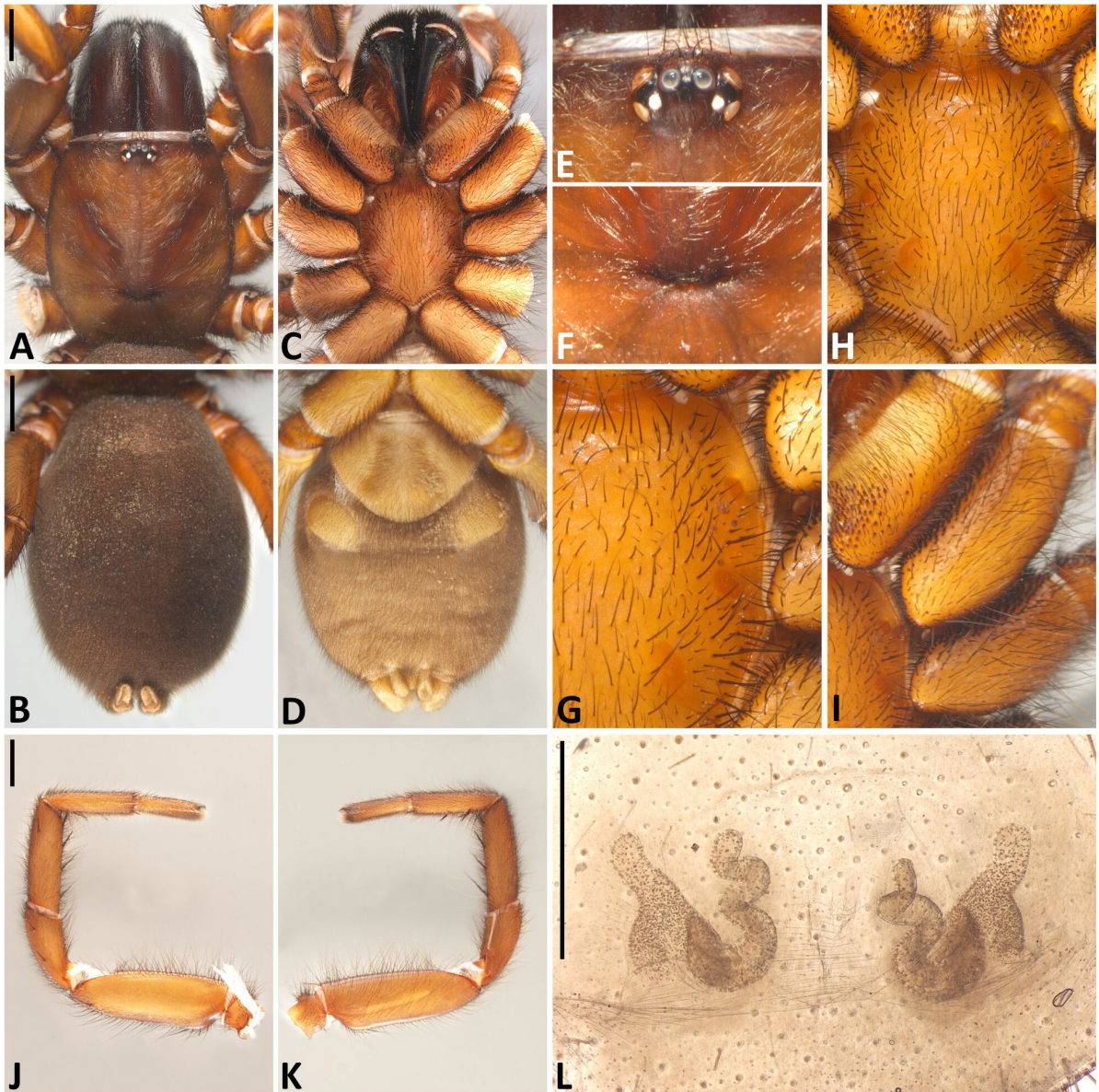


Fig. 47. *Aname rupicola* sp. nov., ♀ (QMB S118268). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J.** Left leg I, prolateral view. **K.** Left leg I, retrolateral view. **L.** Internal genitalia, dorsal view. Scale bars: A–B, J=2 mm; L=1 mm.

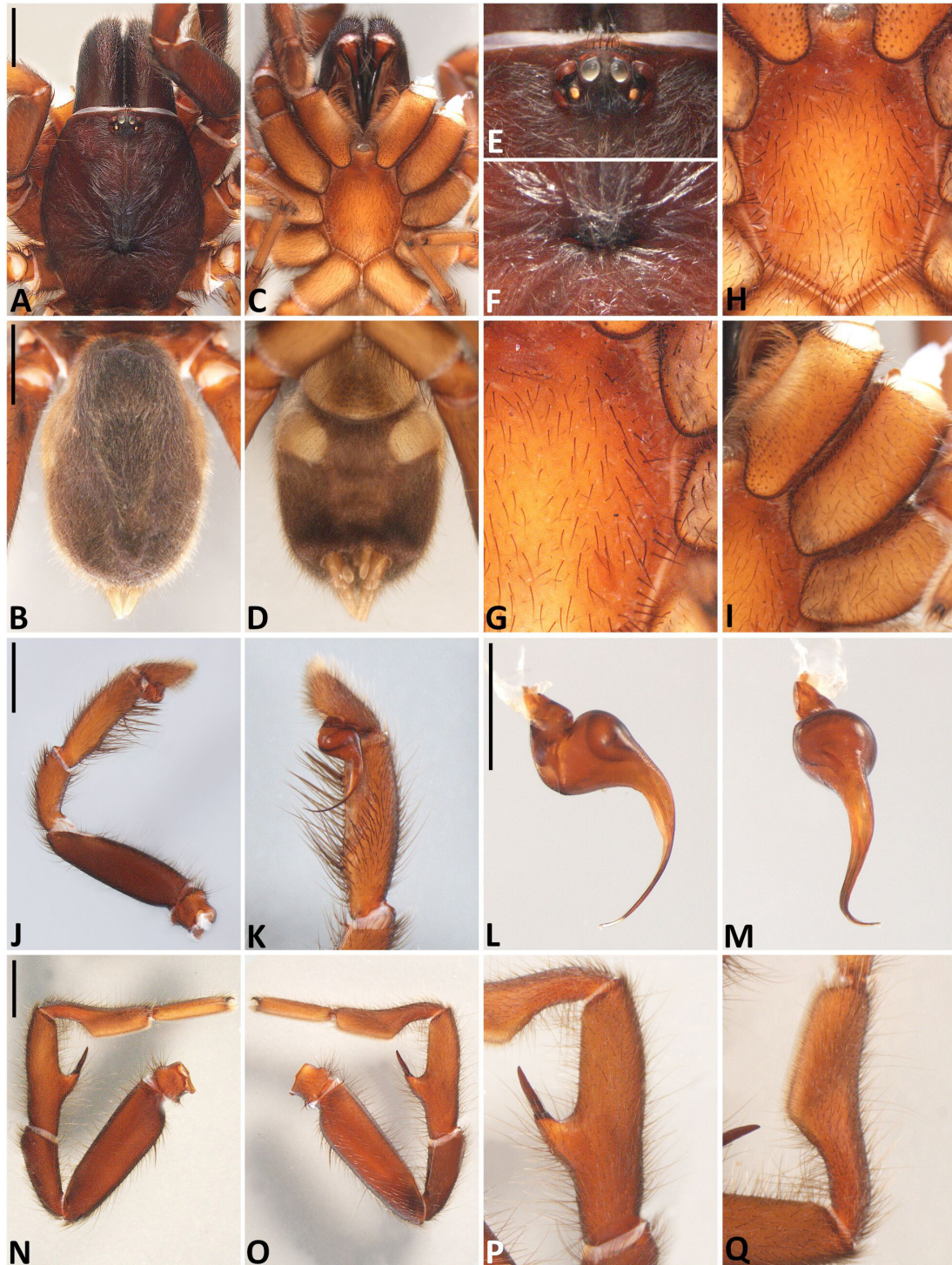


Fig. 48. *Aname warrego* sp. nov., holotype, ♂ (QMB S96932). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J–K.** Left pedipalp, full prolateral view (J), partial retrolateral view (K). **L–M.** Right bulb, prolateral view (L), dorsal view (M). **N–Q.** Left leg I, full prolateral view (N), full retrolateral view (O), retrolateral view of tibia (P), retrolateral view of metatarsus (Q). Scale bars: A–B, J, N=2 mm; L=1 mm.

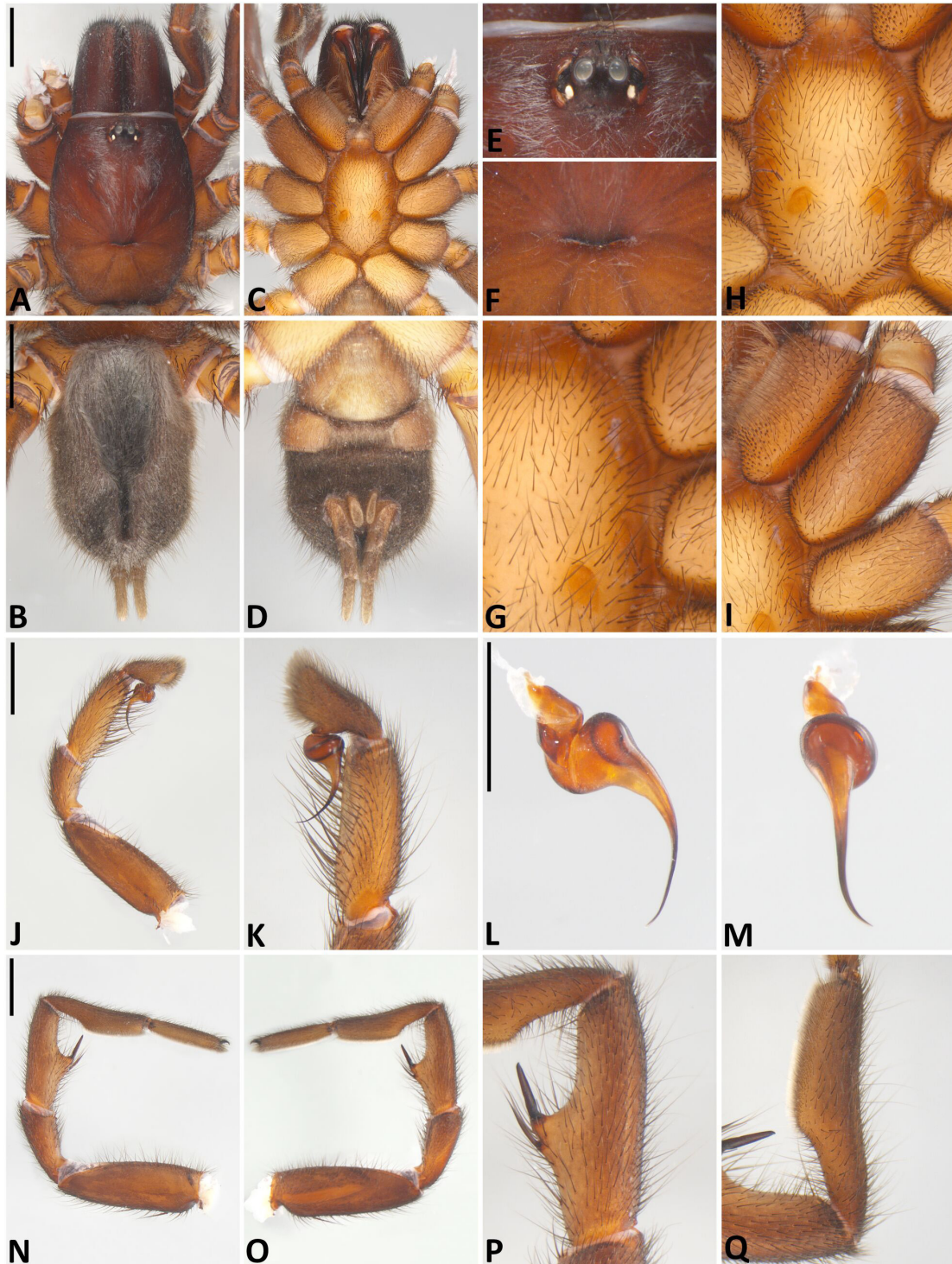


Fig. 49. *Aname ammolithica* sp. nov., holotype, ♂ (QMB S24079). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J–K.** Left pedipalp, full prolateral view (J), partial retrolateral view (K). **L–M.** Right bulb, prolateral view (L), dorsal view (M). **N–Q.** Left leg I, full prolateral view (N), full retrolateral view (O), retrolateral view of tibia (P), retrolateral view of metatarsus (Q). Scale bars: A–B, J, N=2 mm; L=1 mm.



Fig. 50. *Aname barakula* sp. nov., holotype, ♂ (QMB S109544). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J–K.** Left pedipalp, full prolateral view (J), partial retrolateral view (K). **L–M.** Right bulb, prolateral view (L), dorsal view (M). **N–Q.** Left leg I, full prolateral view (N), full retrolateral view (O), retrolateral view of tibia (P), retrolateral view of metatarsus (Q). Scale bars: A–B, J, N=2 mm; L=1 mm.

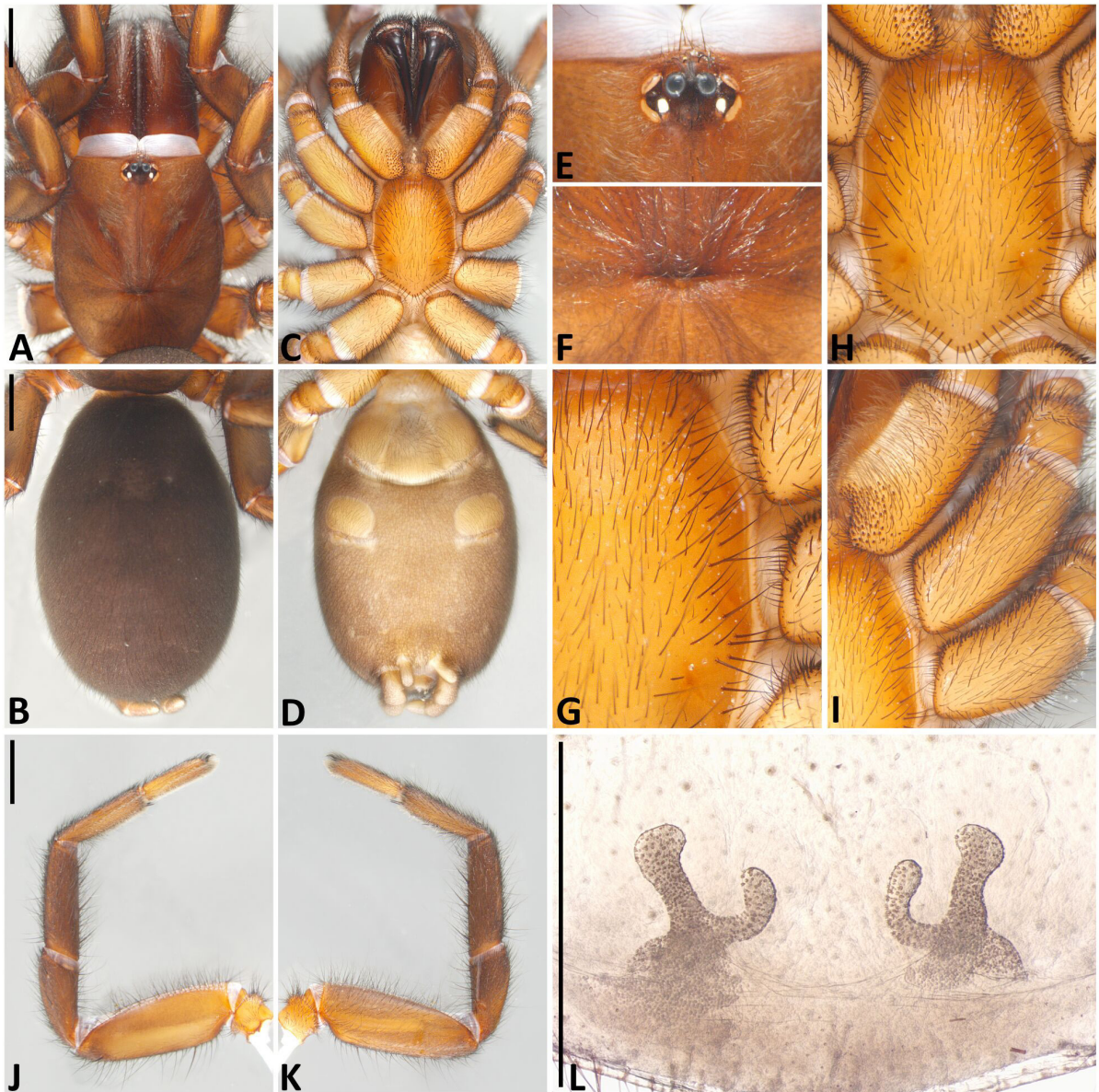


Fig. 51. *Aname barakula* sp. nov., paratype, ♀ (QMB S118249). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J.** Left leg I, prolateral view. **K.** Left leg I, retrolateral view. **L.** Internal genitalia, dorsal view. Scale bars: A–B, J=2 mm; L=1 mm.

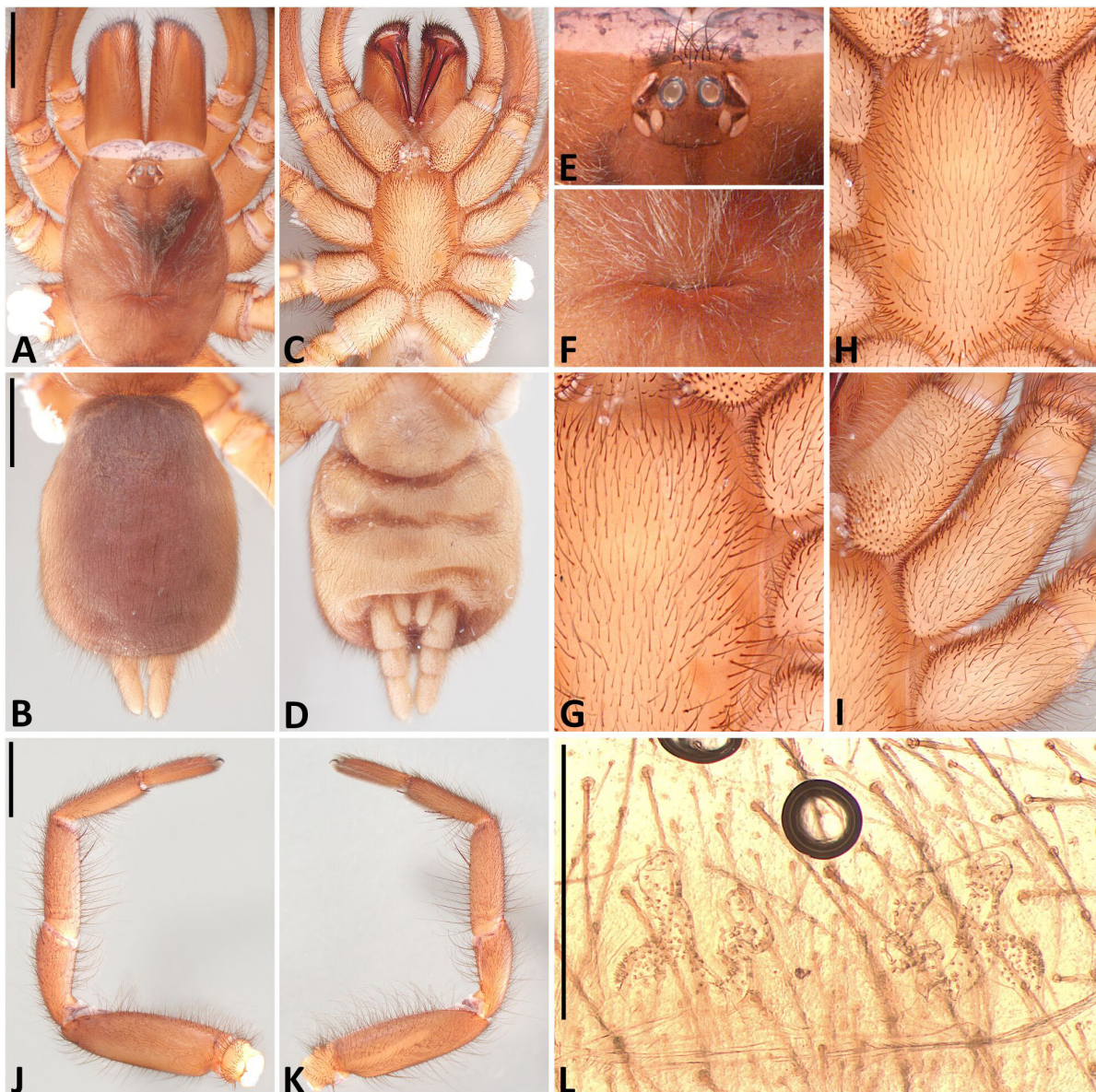


Fig. 52. *Aname braemar* sp. nov., holotype, subadult female (QMB S124055). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J.** Left leg I, prolateral view. **K.** Left leg I, retrolateral view. **L.** Internal genitalia, dorsal view. Scale bars: A–B, J=2 mm; L=0.5 mm.



Fig. 53. *Aname lambkinae* sp. nov., holotype, ♂ (QMB S24949). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J–K.** Left pedipalp, full prolateral view (**J**), partial retrolateral view (**K**). **L–M.** Right bulb, prolateral view (**L**), dorsal view (**M**). **N–Q.** Left leg I, full prolateral view (**N**), full retrolateral view (**O**), retrolateral view of tibia (**P**), retrolateral view of metatarsus (**Q**). Scale bars: A–B, J, N=2 mm; L=1 mm.

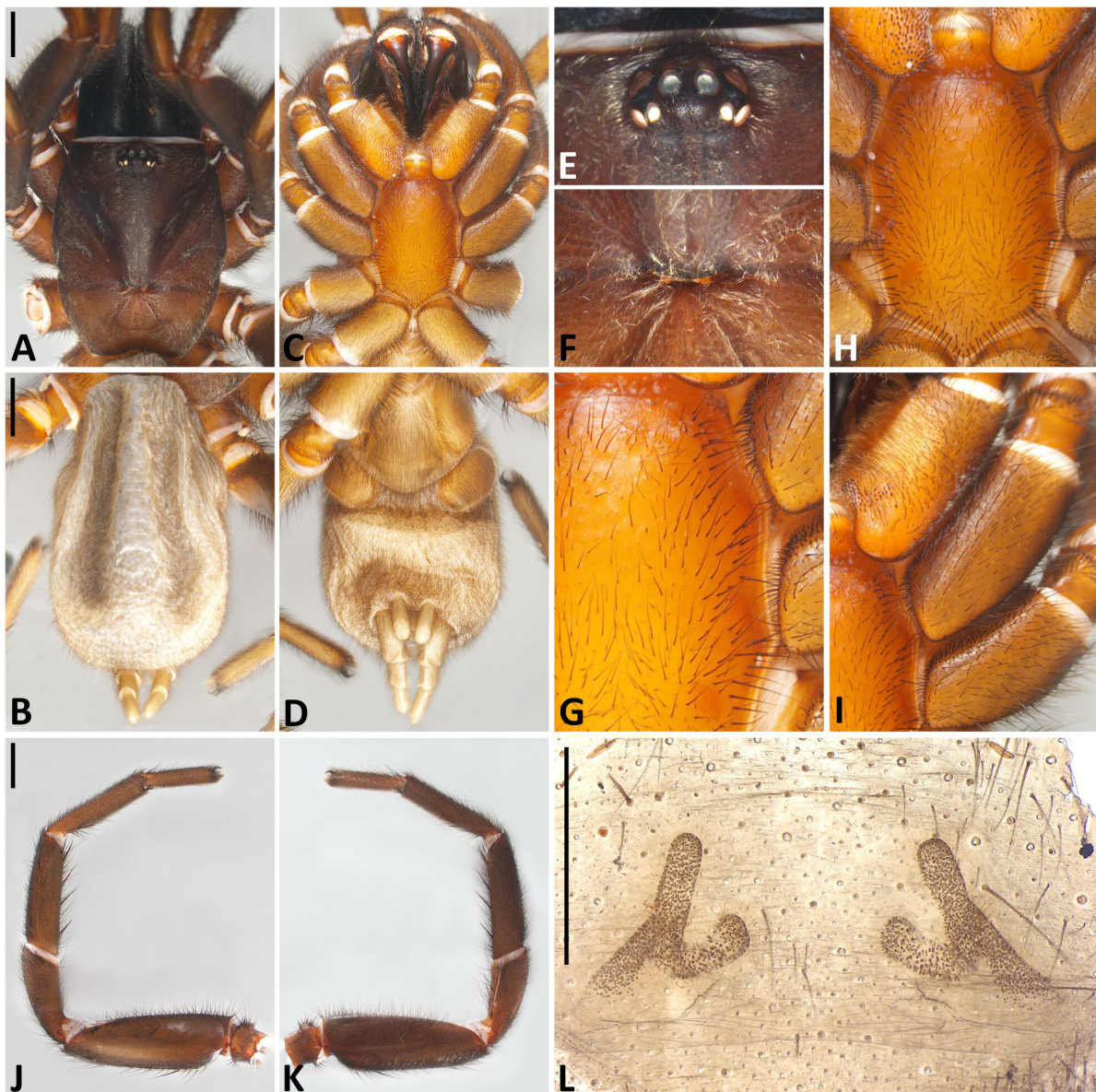


Fig. 54. *Aname lambkinae* sp. nov., ♀ (QMB S118233). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J.** Left leg I, prolateral view. **K.** Left leg I, retrolateral view. **L.** Internal genitalia, dorsal view. Scale bars: A–B, J=2 mm; L=1 mm.

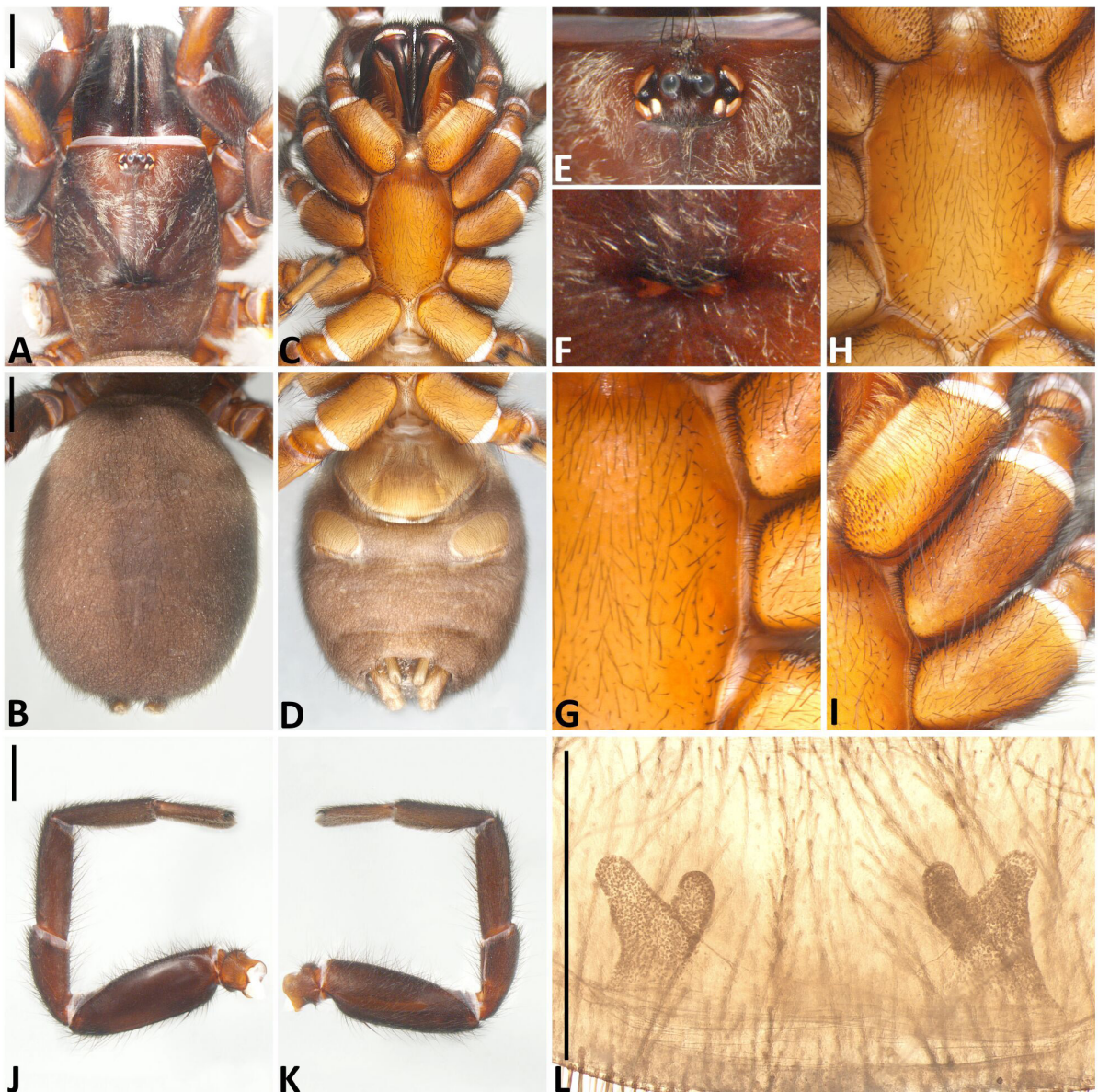


Fig. 55. *Aname truncata* sp. nov., holotype, ♀ (QMB S118253). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J.** Left leg I, prolateral view. **K.** Left leg I, retrolateral view. **L.** Internal genitalia, dorsal view. Scale bars: A–B, J=2 mm; L=1 mm.



Fig. 56. *Aname calida* sp. nov., holotype, ♂ (QMB S95243). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J–K.** Left pedipalp, full prolateral view (J), partial retrolateral view (K). **L–M.** Right bulb, prolateral view (L), dorsal view (M). **N–Q.** Left leg I, full prolateral view (N), full retrolateral view (O), retrolateral view of tibia (P), retrolateral view of metatarsus (Q). Scale bars: A–B, J, N=2 mm; L=1 mm.



Fig. 57. *Aname carina* Raven, 1985, ♂ (QMB S95241). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J–K.** Left pedipalp, full prolateral view (J), partial retrolateral view (K). **L–M.** Right bulb, prolateral view (L), dorsal view (M). **N–Q.** Right leg I (images reflected), full prolateral view (N), full retrolateral view (O), retrolateral view of tibia (P), retrolateral view of metatarsus (Q). Scale bars: A–B, J, N=2 mm; L=1 mm.

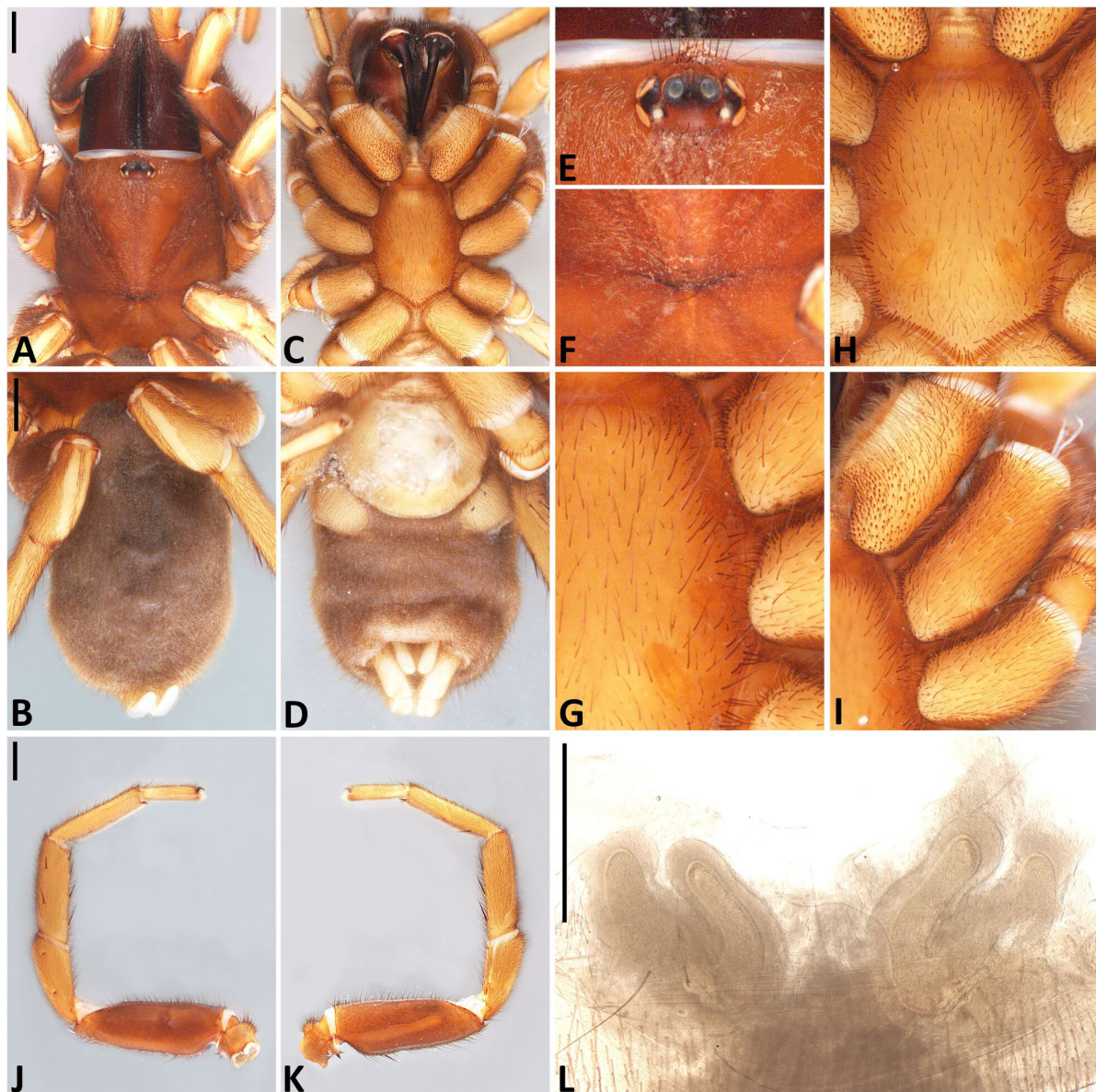


Fig. 58. *Aname carina* Raven, 1985, holotype, ♀ (QMB S1253). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J.** Left leg I, prolateral view. **K.** Left leg I, retrolateral view. **L.** Internal genitalia, dorsal view. Scale bars: A–B, J=2 mm; L=1 mm.

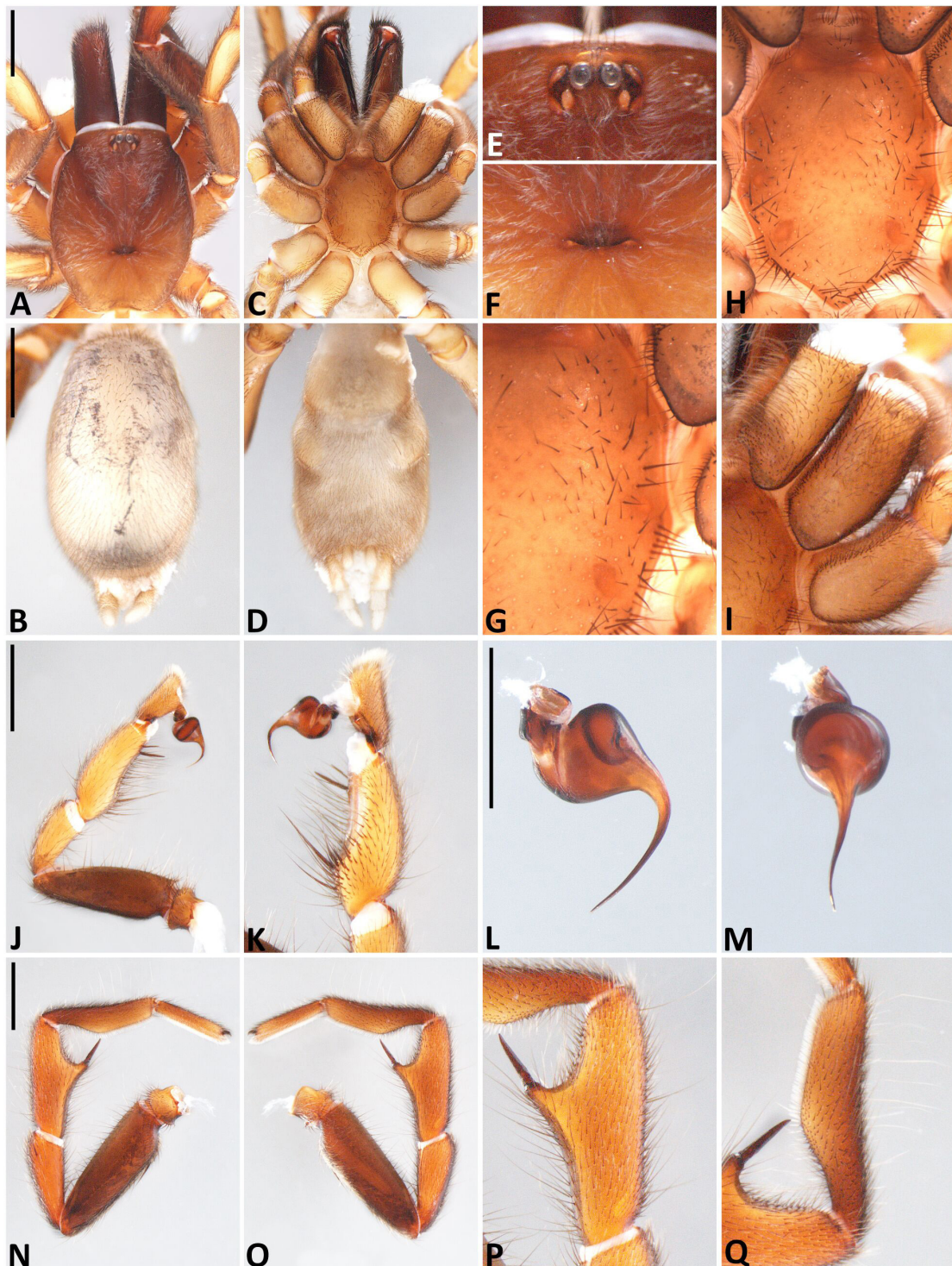


Fig. 59. *Aname cassowariensis* sp. nov., holotype, ♂ (QMB S63052). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J–K.** Left pedipalp, full prolateral view (**J**), partial retrolateral view (**K**). **L–M.** Right bulb, prolateral view (**L**), dorsal view (**M**). **N–Q.** Left leg I, full prolateral view (**N**), full retrolateral view (**O**), retrolateral view of tibia (**P**), retrolateral view of metatarsus (**Q**). Scale bars: **A–B**, **J**, **N**=2 mm; **L**=1 mm.

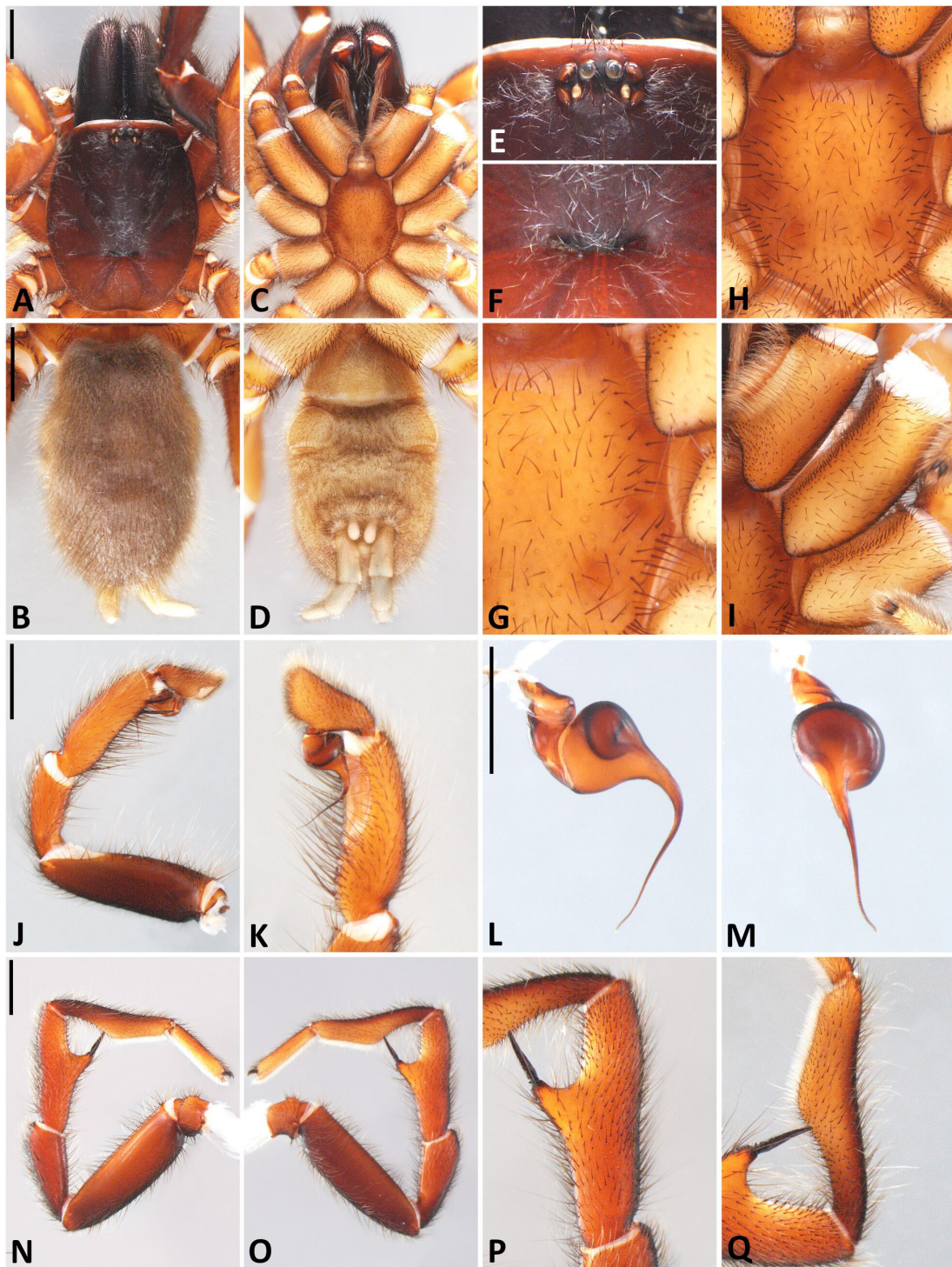


Fig. 60. *Aname harmoniosa* sp. nov., holotype, ♂ (QMB S40518). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J–K.** Left pedipalp, full prolateral view (J), partial retrolateral view (K). **L–M.** Right bulb, prolateral view (L), dorsal view (M). **N–Q.** Left leg I, full prolateral view (N), full retrolateral view (O), retrolateral view of tibia (P), retrolateral view of metatarsus (Q). Scale bars: A–B, J, N=2 mm; L=1 mm.

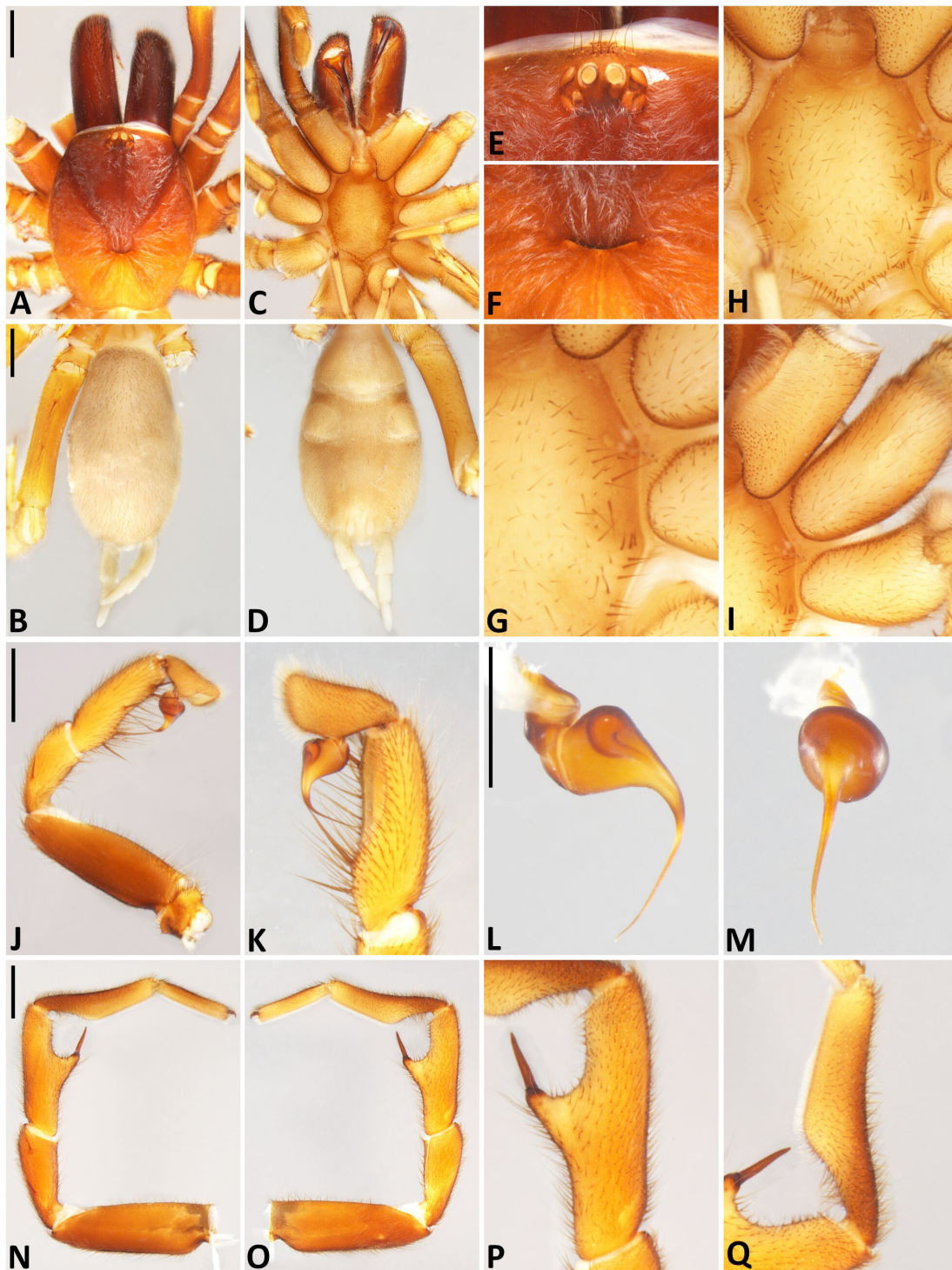


Fig. 61. *Aname robertsorum* Raven, 1985, holotype, ♂ (QMB S1287). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J–K.** Left pedipalp, full prolateral view (J), partial retrolateral view (K). **L–M.** Right bulb, prolateral view (L), dorsal view (M). **N–Q.** Left leg I, full prolateral view (N), full retrolateral view (O), retrolateral view of tibia (P), retrolateral view of metatarsus (Q). Scale bars: A–B, J, N=2 mm; L=1 mm.



Fig. 62. *Aname tropicana* sp. nov., holotype, ♂ (QMB S59009). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J–K.** Left pedipalp, full prolateral view (J), partial retrolateral view (K). **L–M.** Right bulb, prolateral view (L), dorsal view (M). **N–Q.** Left leg I, full prolateral view (N), full retrolateral view (O), retrolateral view of tibia (P), retrolateral view of metatarsus (Q). Scale bars: A–B, J, N=2 mm; L=1 mm.

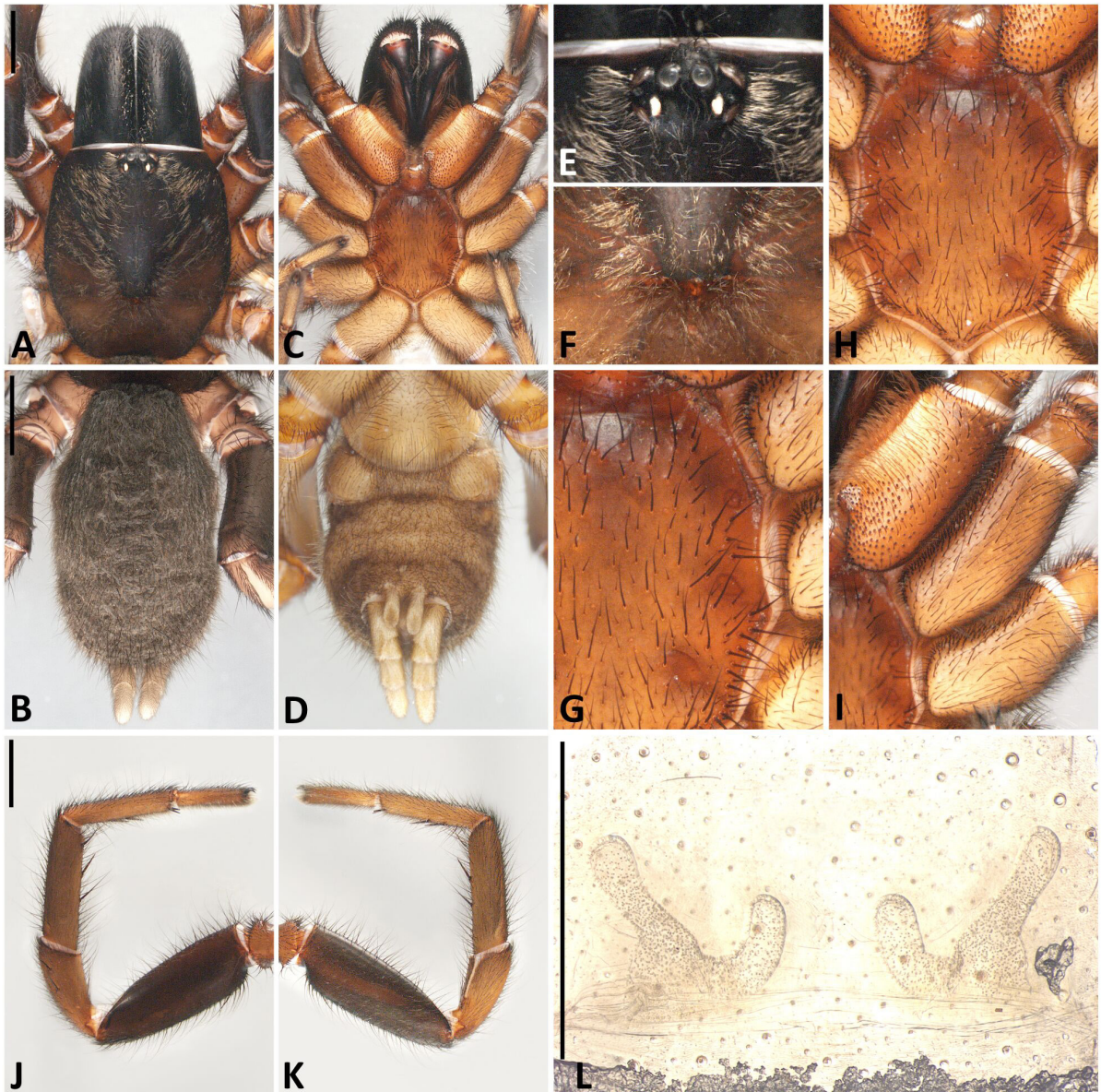


Fig. 63. *Aname tropicana* sp. nov., ♀ (QMBS118310). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J.** Left leg I, prolateral view. **K.** Left leg I, retrolateral view. **L.** Internal genitalia, dorsal view. Scale bars: A–B, J=2 mm; L=1 mm.

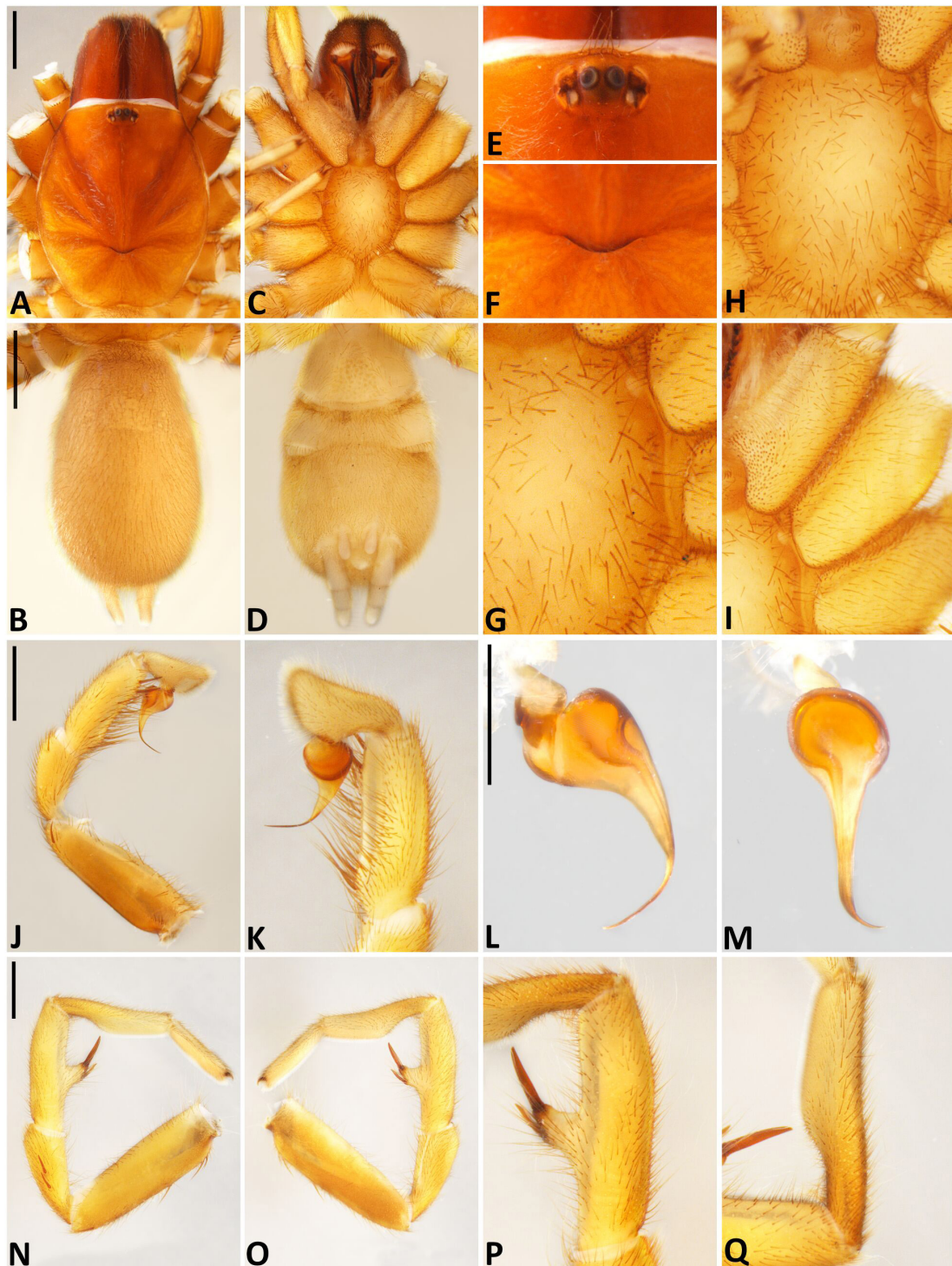


Fig. 64. *Aname barrema* Raven, 1985, holotype, ♂ (QMB S1238). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J–K.** Left pedipalp, full prolateral view (J), partial retrolateral view (K). **L–M.** Right bulb, prolateral view (L), dorsal view (M). **N–Q.** Right leg I (images reflected), full prolateral view (N), full retrolateral view (O), retrolateral view of tibia (P), retrolateral view of metatarsus (Q). Scale bars: A–B, J, N=2 mm; L=1 mm.

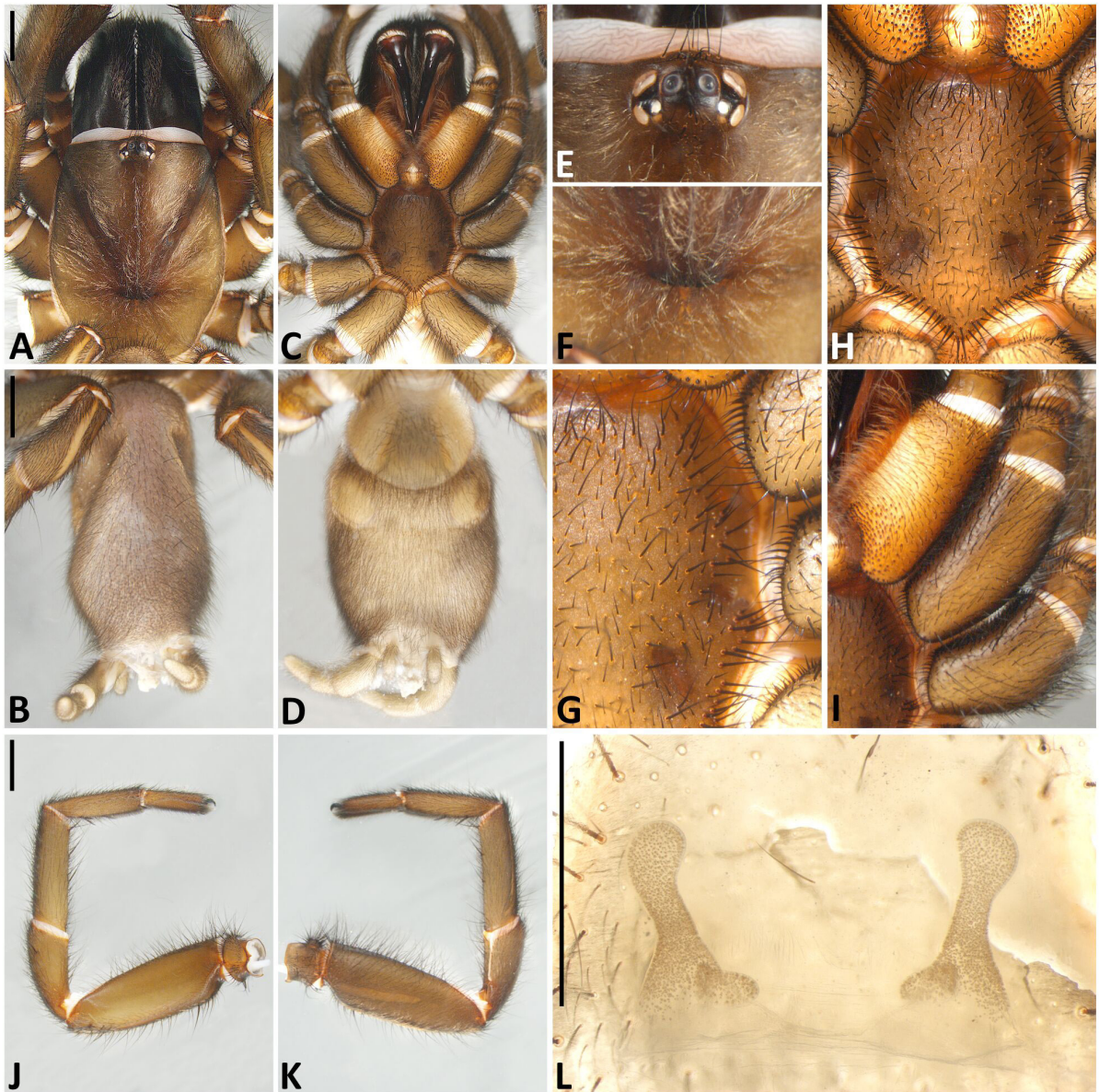


Fig. 65. *Aname barrema* Raven, 1985, ♀ (QMB S118308). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J.** Left leg I, prolateral view. **K.** Left leg I, retrolateral view. **L.** Internal genitalia, dorsal view. Scale bars: A–B, J=2 mm; L=1 mm.

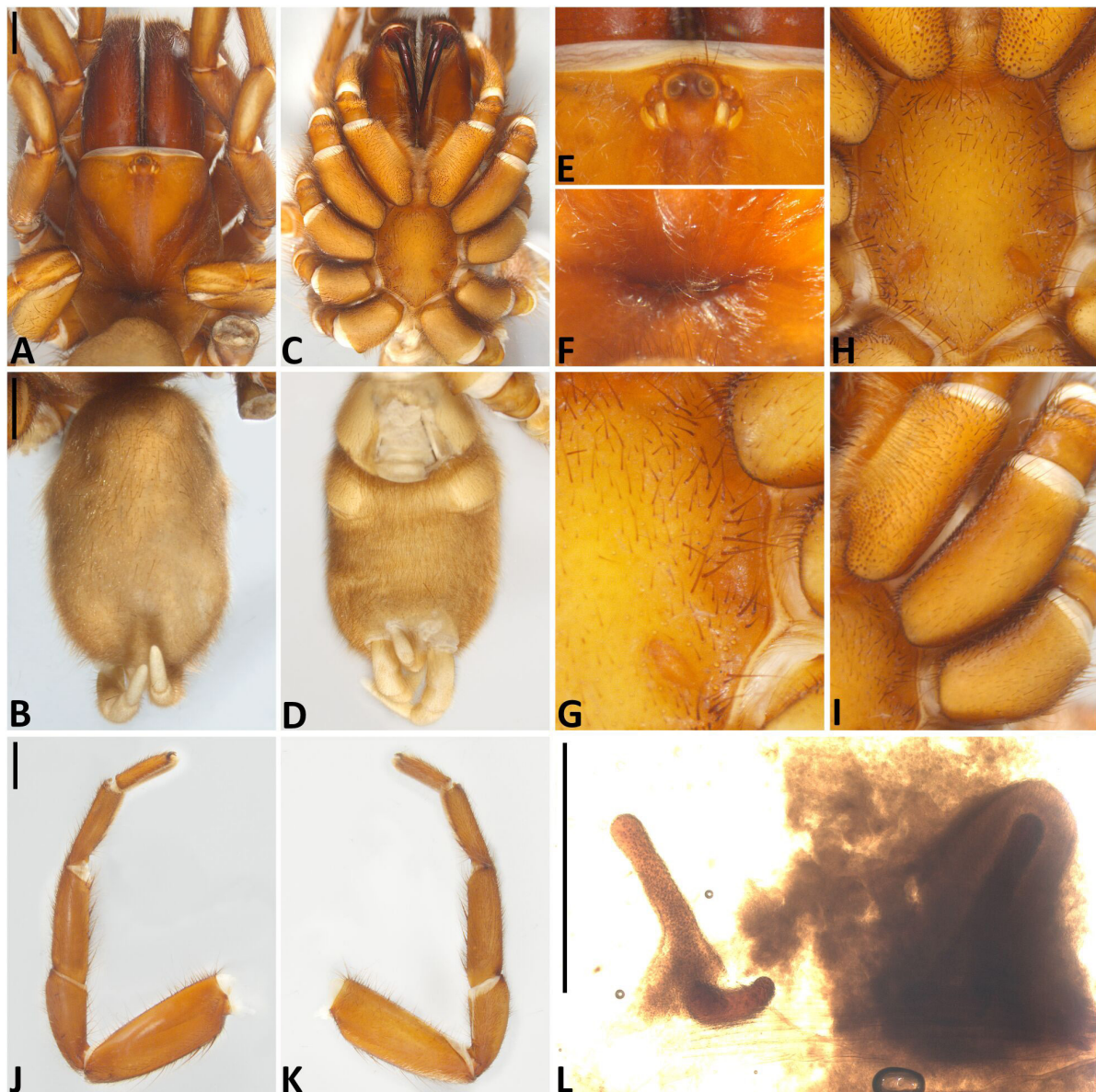


Fig. 66. *Aname distincta* Rainbow, 1914, ♀ syntype (AMS KS8188). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J.** Left leg I, prolateral view. **K.** Left leg I, retrolateral view. **L.** Internal genitalia, dorsal view. Scale bars: A–B, J=2 mm; L=1 mm.

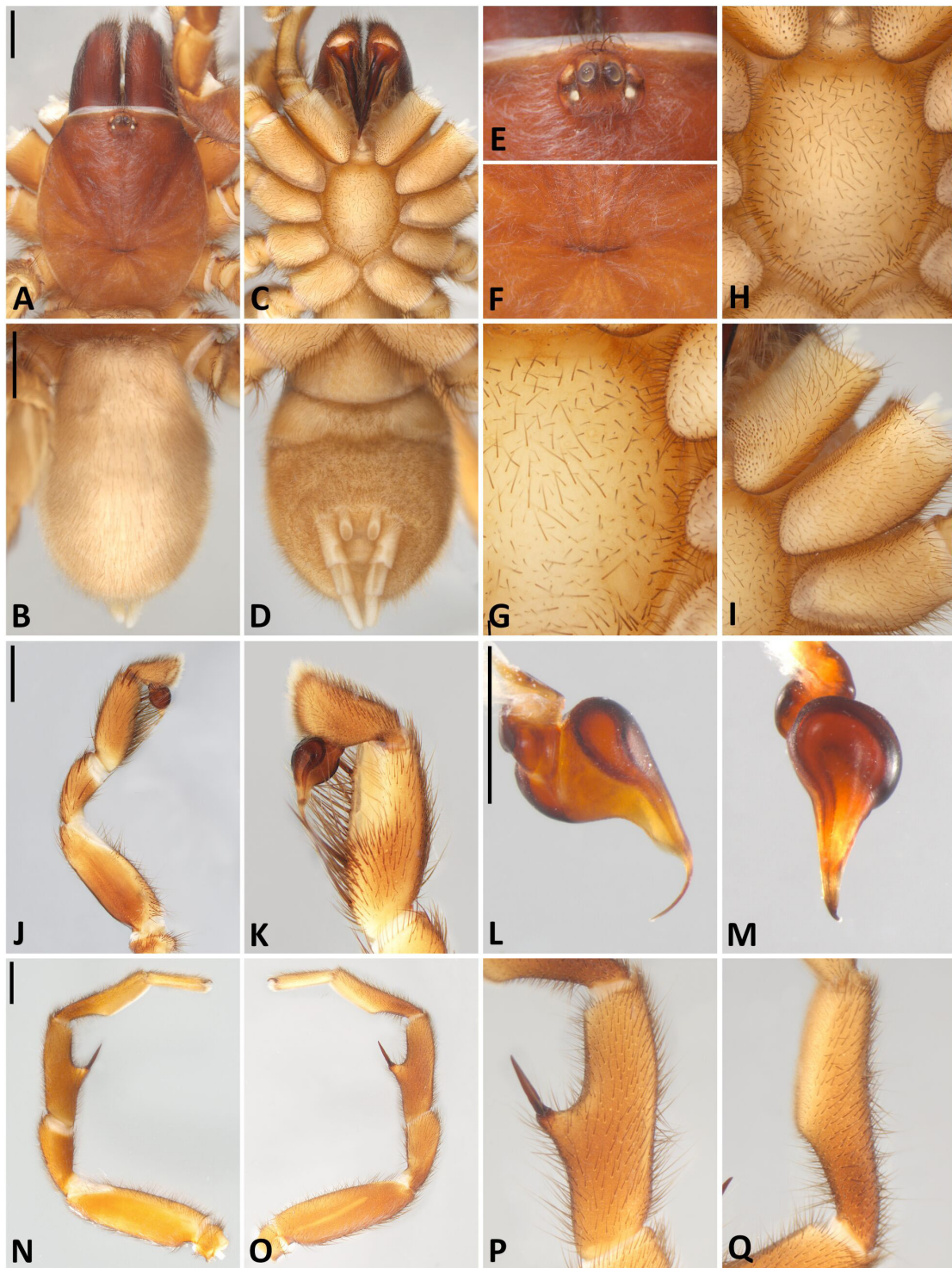


Fig. 67. *Aname inimica* Raven, 1985, holotype, ♂ (QMB S1276). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J–K.** Left pedipalp, full prolateral view (J), partial retrolateral view (K). **L–M.** Right bulb, prolateral view (L), dorsal view (M). **N–Q.** Left leg I, full prolateral view (N), full retrolateral view (O), retrolateral view of tibia (P), retrolateral view of metatarsus (Q). Scale bars: A–B, J, N=2 mm; L=1 mm.

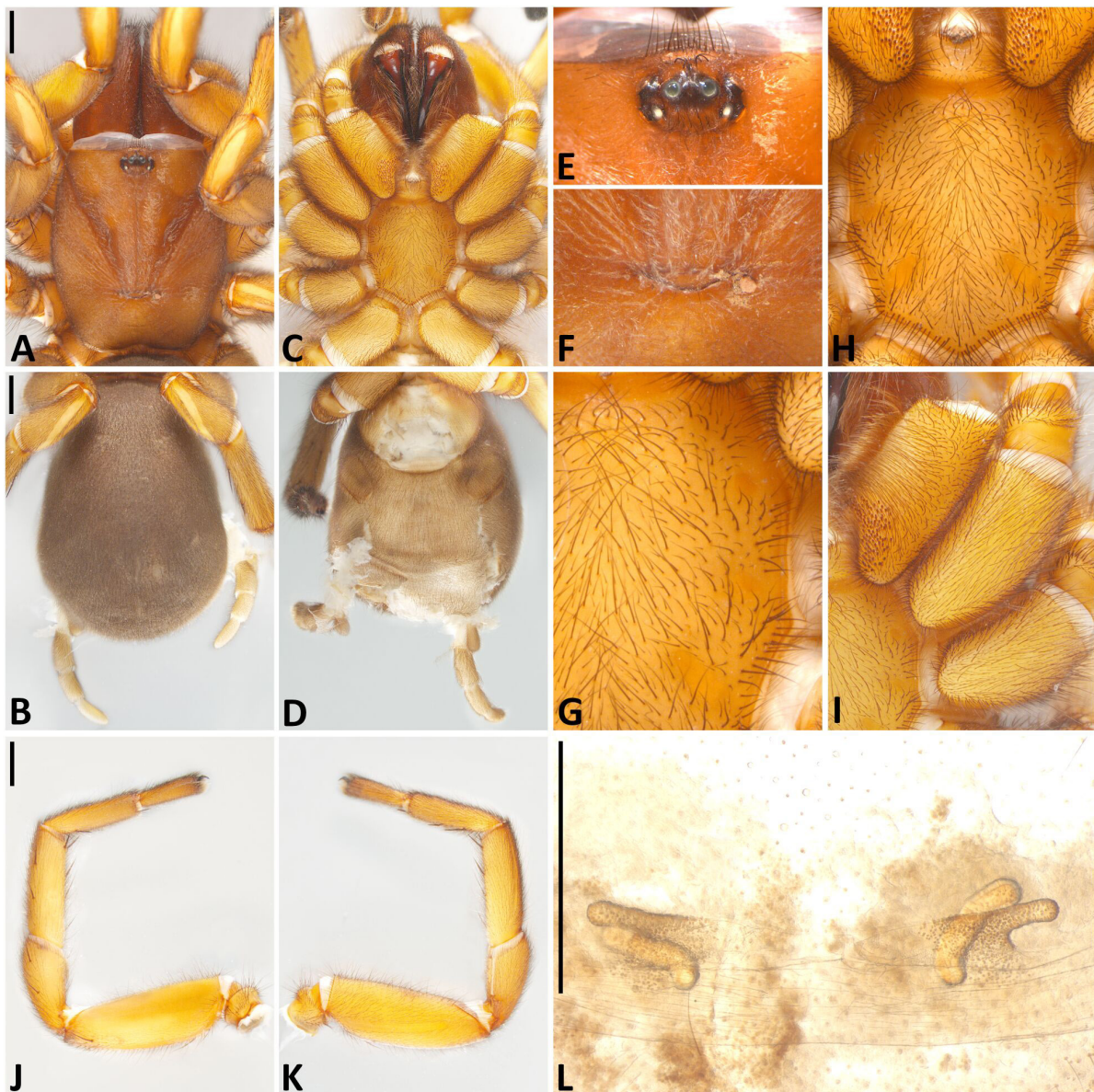


Fig. 68. *Aname inimica* Raven, 1985, ♀ (AMS KS40715). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J.** Left leg I, prolateral view. **K.** Left leg I, retrolateral view. **L.** Internal genitalia, dorsal view. Scale bars: A–B, J=2 mm; L=1 mm.



Fig. 69. *Aname magnifica* sp. nov., holotype, ♂ (AMS KS49693). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J–K.** Left pedipalp, full prolateral view (J), partial retrolateral view (K). **L–M.** Right bulb, prolateral view (L), dorsal view (M). **N–Q.** Left leg I, full prolateral view (N), full retrolateral view (O), retrolateral view of tibia (P), retrolateral view of metatarsus (Q). Scale bars: A–B, J, N=2 mm; L=1 mm.

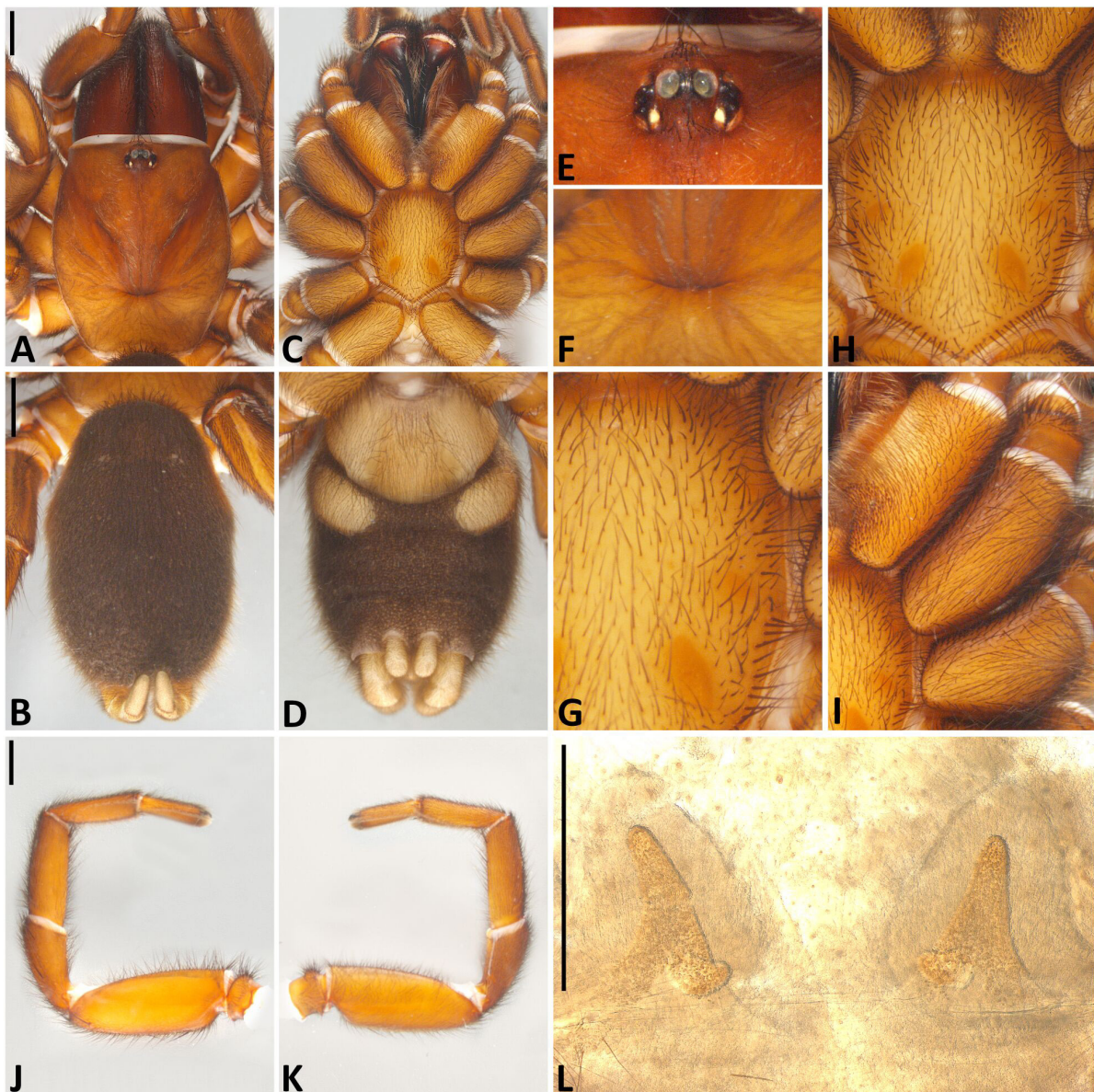


Fig. 70. *Aname magnifica* sp. nov., paratype, ♀ (AMS KS16758). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J.** Left leg I, prolateral view. **K.** Left leg I, retrolateral view. **L.** Internal genitalia, dorsal view. Scale bars: A–B, J=2 mm; L=1 mm.

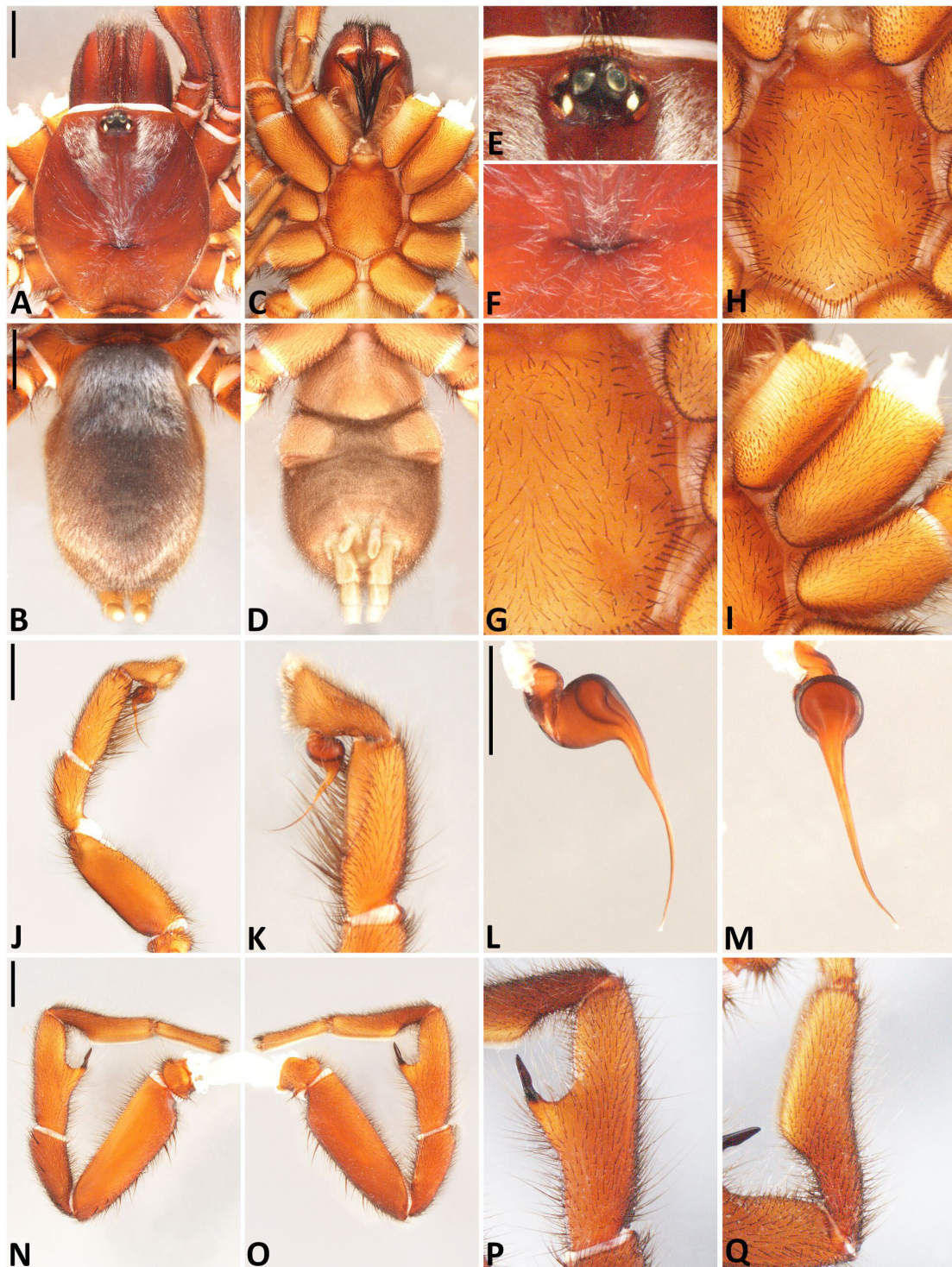


Fig. 71. *Aname bifaceta* sp. nov., holotype, ♂ (QMB S49920). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J–K.** Left pedipalp, full prolateral view (**J**), partial retrolateral view (**K**). **L–M.** Right bulb, prolateral view (**L**), dorsal view (**M**). **N–Q.** Left leg I, full prolateral view (**N**), full retrolateral view (**O**), retrolateral view of tibia (**P**), retrolateral view of metatarsus (**Q**). Scale bars: **A–B, J, N**=2 mm; **L**=1 mm.

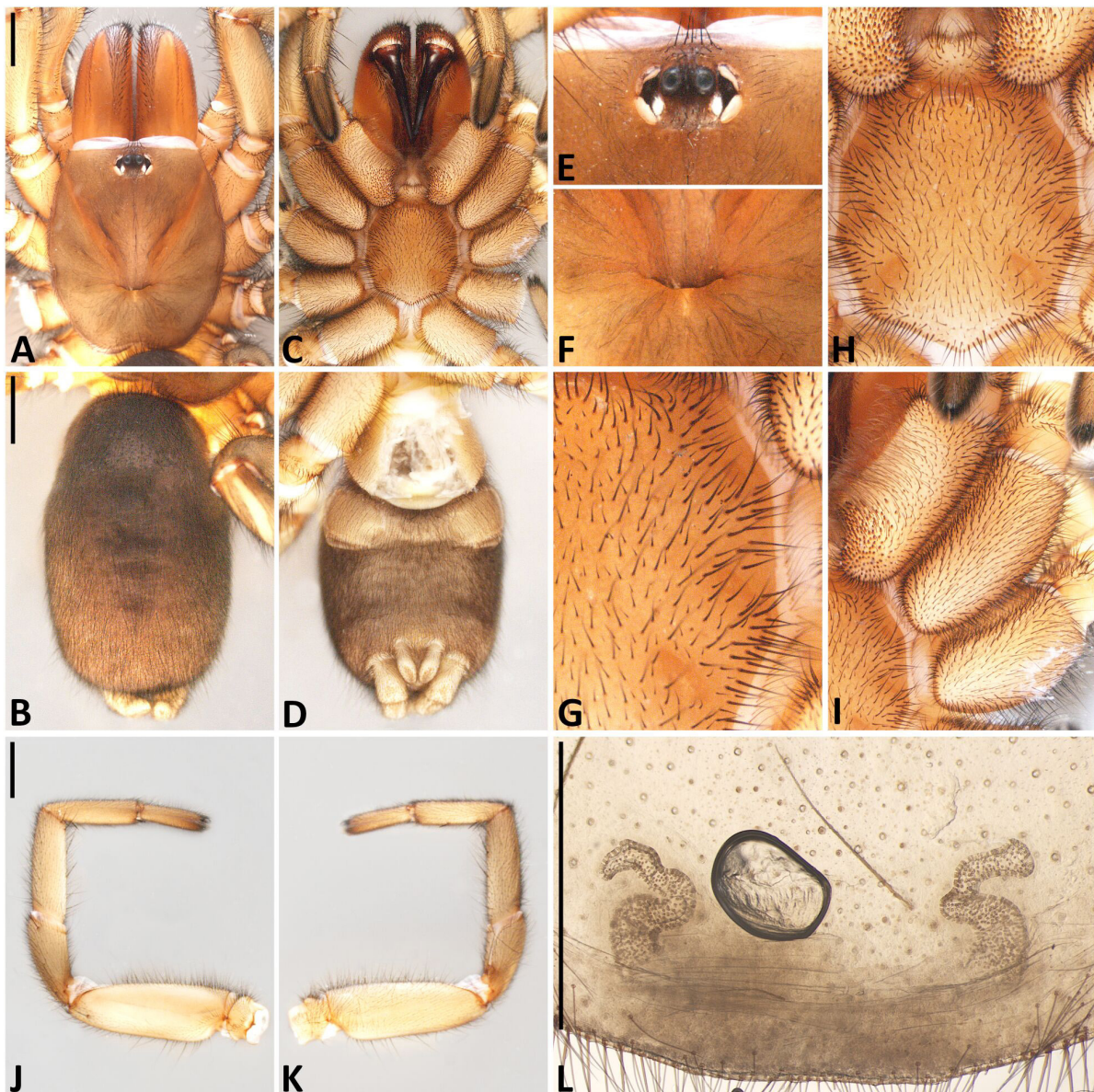


Fig. 72. *Aname bifaceta* sp. nov., ♀ (QMB S118282). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J.** Left leg I, prolateral view. **K.** Left leg I, retrolateral view. **L.** Internal genitalia, dorsal view. Scale bars: A–B, J=2 mm; L=1 mm.

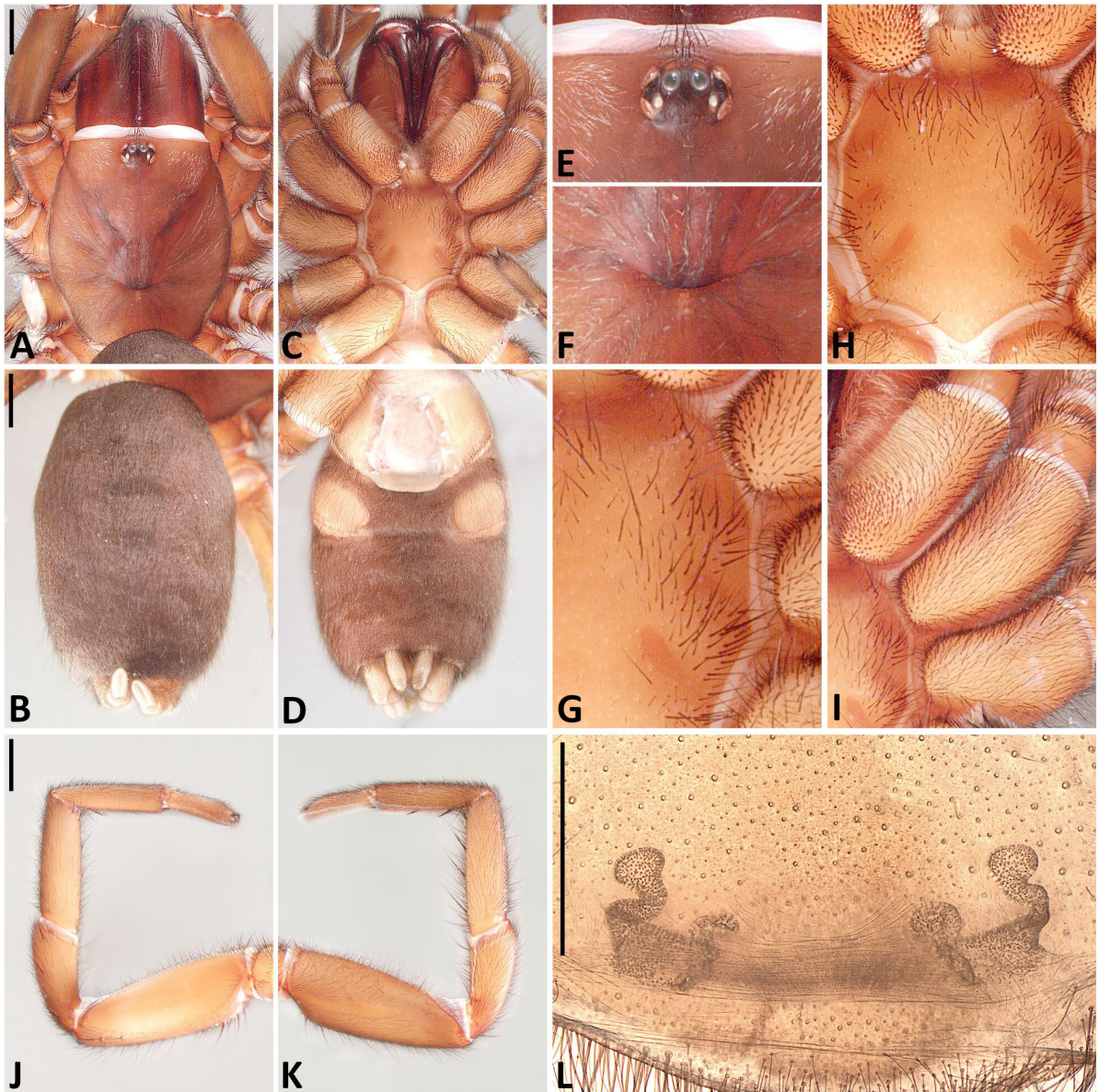


Fig. 73. *Aname boreovillosa* sp. nov., holotype, ♀ (QMB S118291). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J.** Left leg I, prolateral view. **K.** Left leg I, retrolateral view. **L.** Internal genitalia, dorsal view. Scale bars: A–B, J=2 mm; L=1 mm.

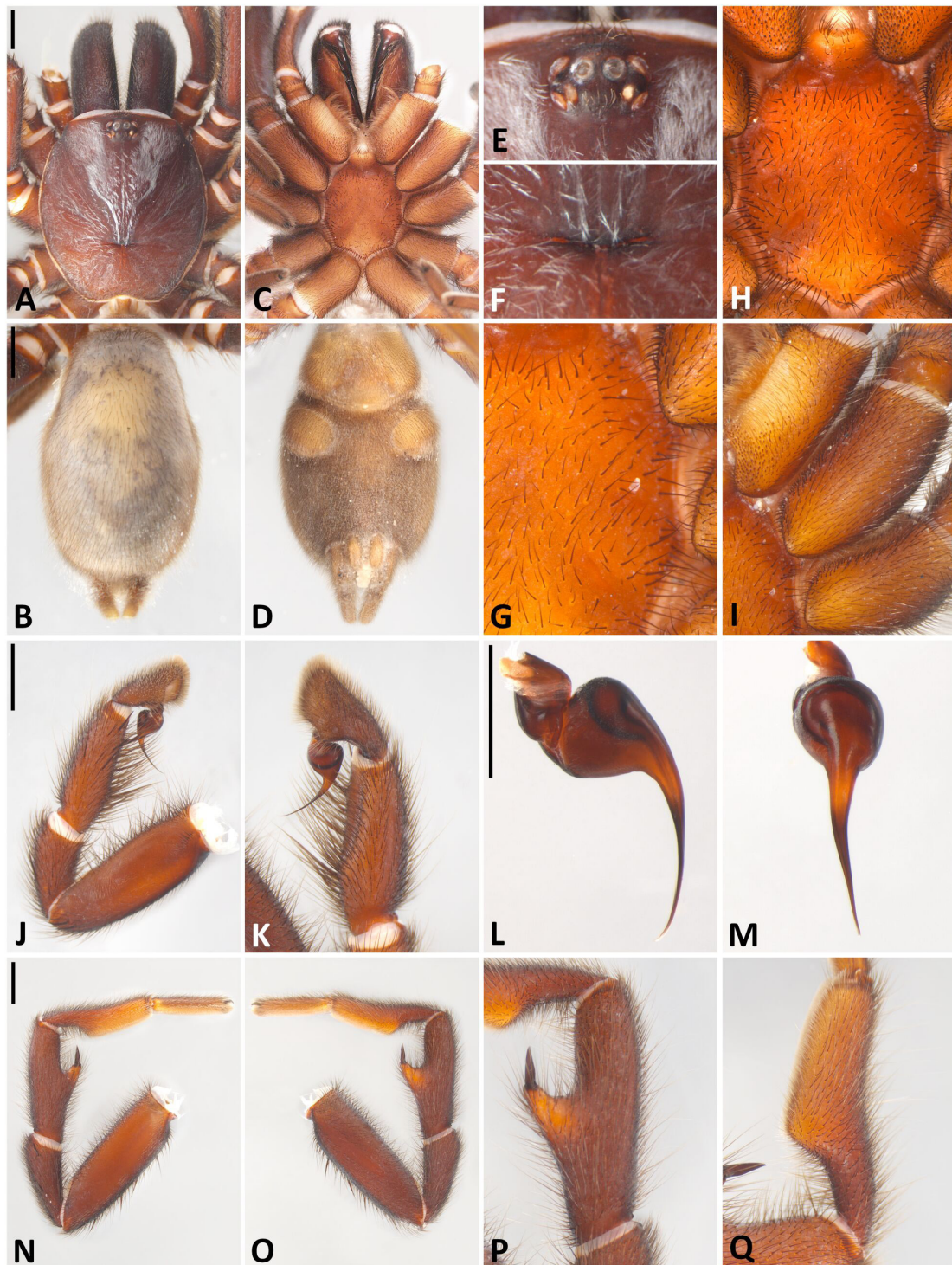


Fig. 74. *Aname occivillosa* sp. nov., holotype, ♂ (QMB S96935). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J–K.** Left pedipalp, full prolateral view (J), partial retrolateral view (K). **L–M.** Right bulb, prolateral view (L), dorsal view (M). **N–Q.** Left leg I, full prolateral view (N), full retrolateral view (O), retrolateral view of tibia (P), retrolateral view of metatarsus (Q). Scale bars: A–B, J, N=2 mm; L=1 mm.

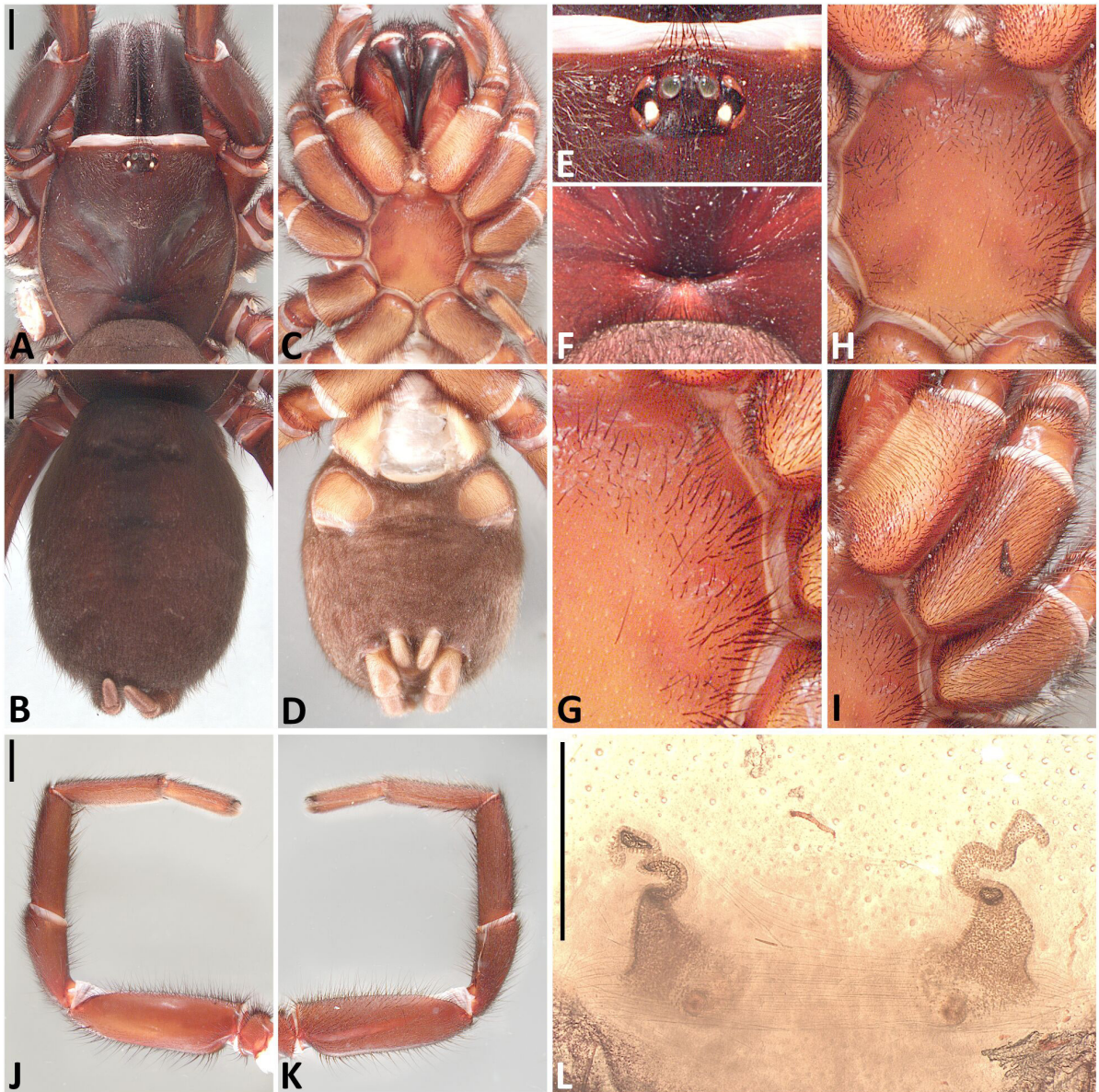


Fig. 75. *Aname occivillosa* sp. nov., ♀ (QMB S118269). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J.** Left leg I, prolateral view. **K.** Left leg I, retrolateral view. **L.** Internal genitalia, dorsal view. Scale bars: A–B, J=2 mm; L=1 mm.

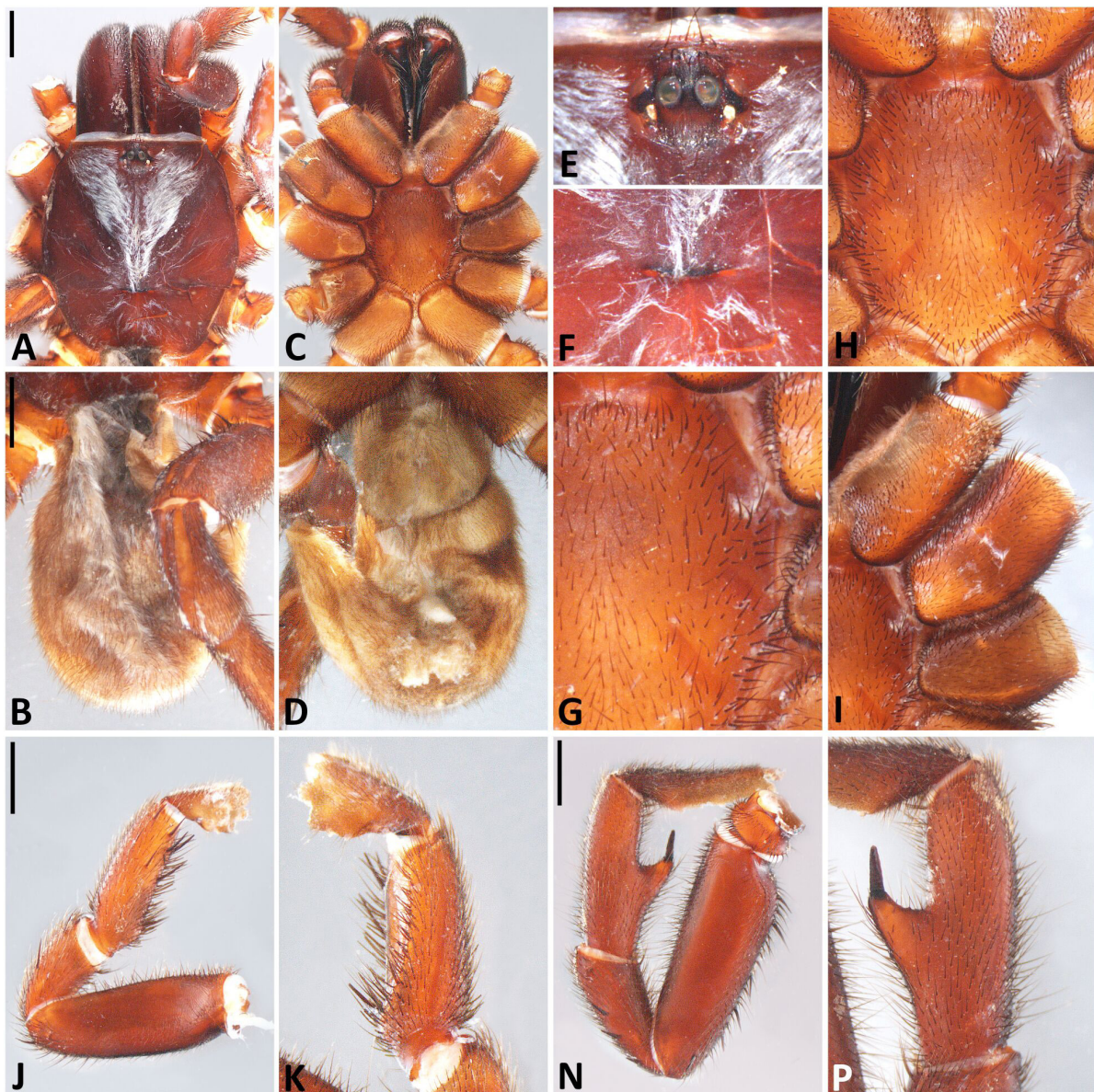


Fig. 76. *Aname scutitheca* sp. nov., ♂ (QMB S722248). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J–K.** Left pedipalp, full prolateral view (J), partial retrolateral view (K). **N.** Left leg I, full prolateral view. **P.** Left tibia I, retrolateral view. Scale bars: A–B, J, N=2 mm.

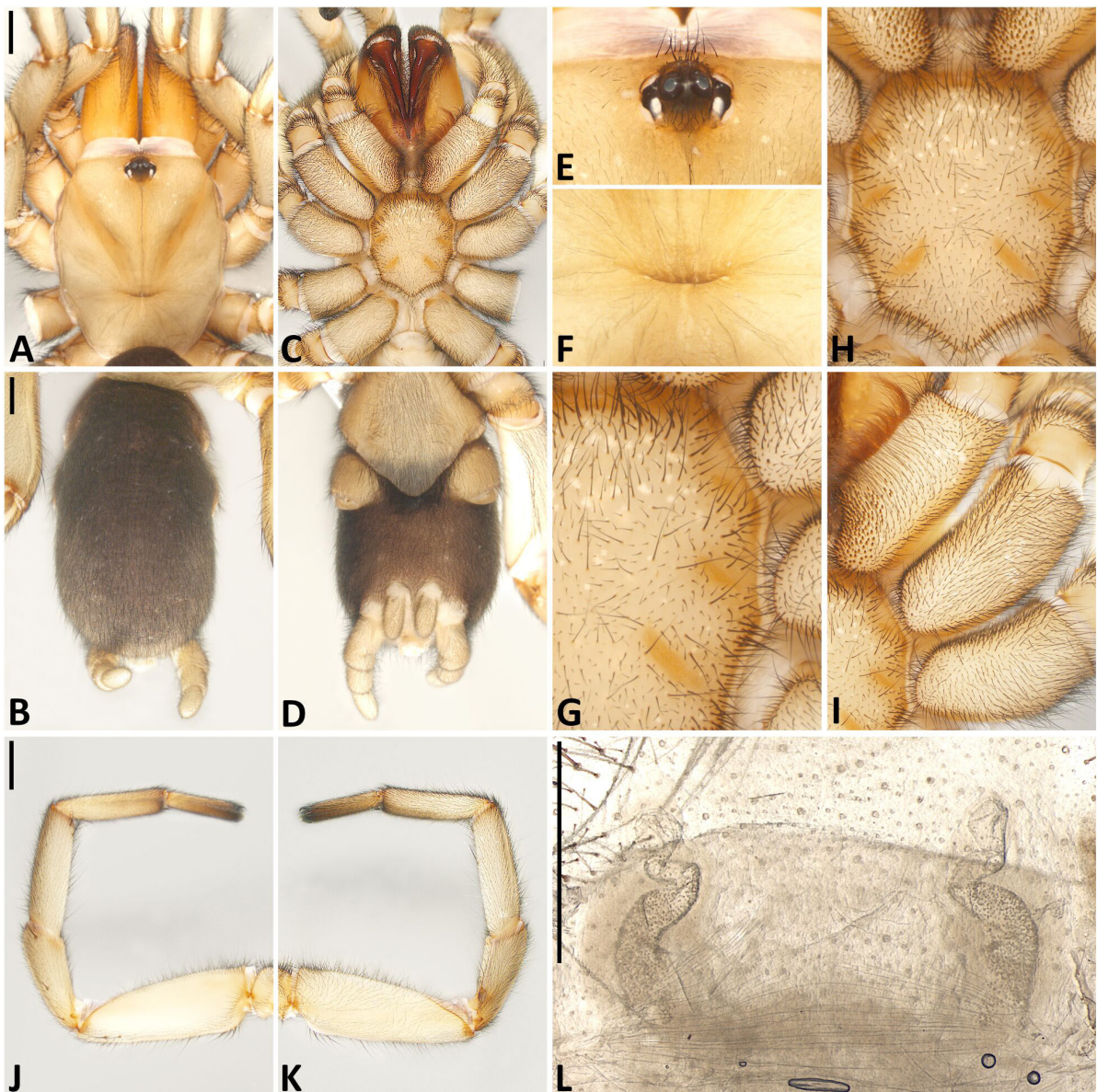


Fig. 77. *Aname scutitheca* sp. nov., holotype, ♀ (QMB S118327). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J.** Left leg I, prolateral view. **K.** Left leg I, retrolateral view. **L.** Internal genitalia, dorsal view. Scale bars: A–B, J=2 mm; L=1 mm.



Fig. 78. *Aname villosa* Rainbow & Pulleine, 1918, ♂ (QMB S102922). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J–K.** Left pedipalp, full prolateral view (J), partial retrolateral view (K). **L–M.** Right bulb, prolateral view (L), dorsal view (M). **N–Q.** Left leg I, full prolateral view (N), full retrolateral view (O), retrolateral view of tibia (P), retrolateral view of metatarsus (Q). Scale bars: A–B, J, N=2 mm; L=1 mm.

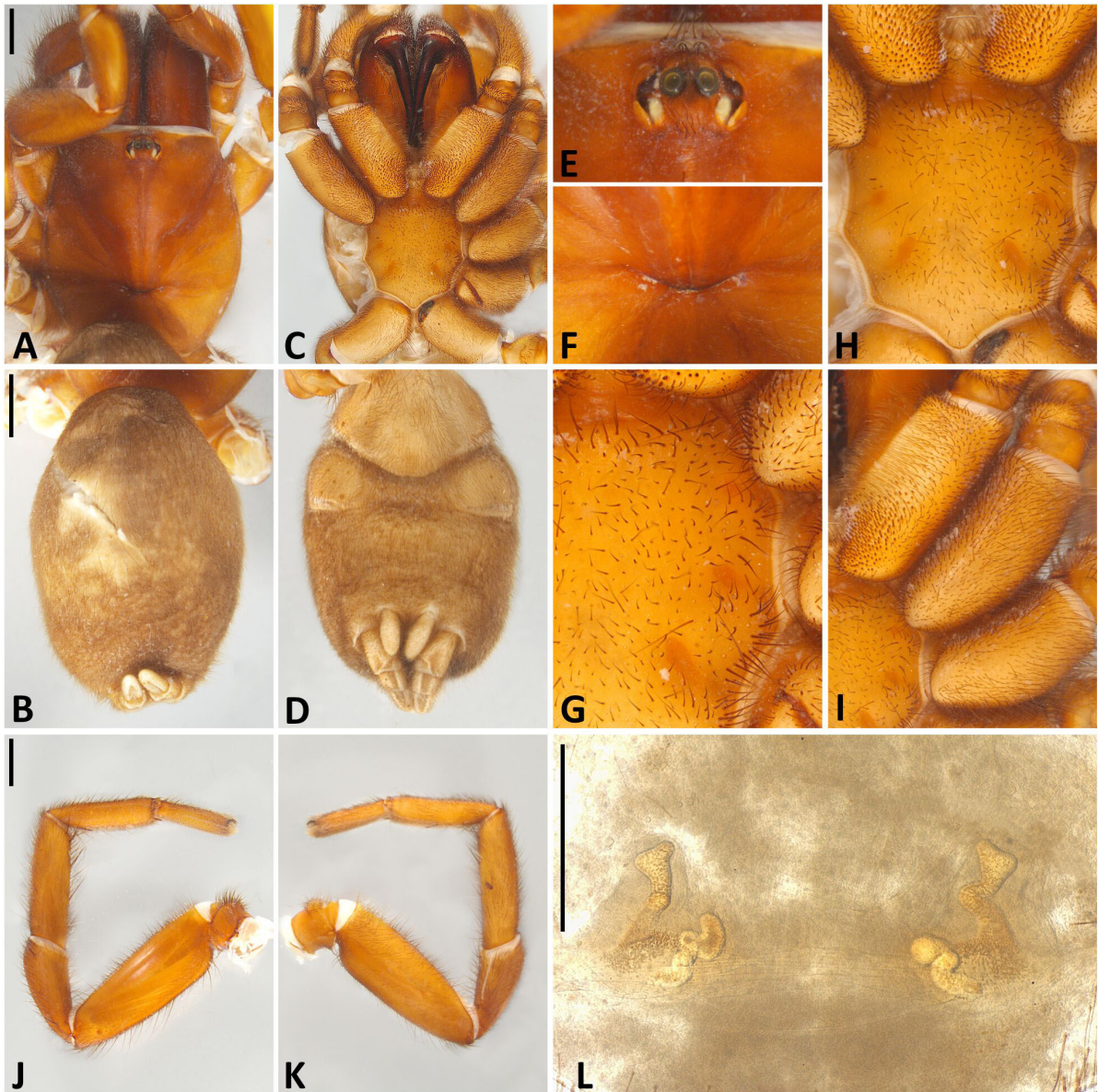


Fig. 79. *Aname villosa* Rainbow & Pulleine, 1918, ♀ syntype (AMS KS131260 [ex. AMS K40935]). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J.** Right leg I, prolateral view (image reflected). **K.** Right leg I, retrolateral view (image reflected). **L.** Internal genitalia, dorsal view. Scale bars: A–B, J=2 mm; L=1 mm.

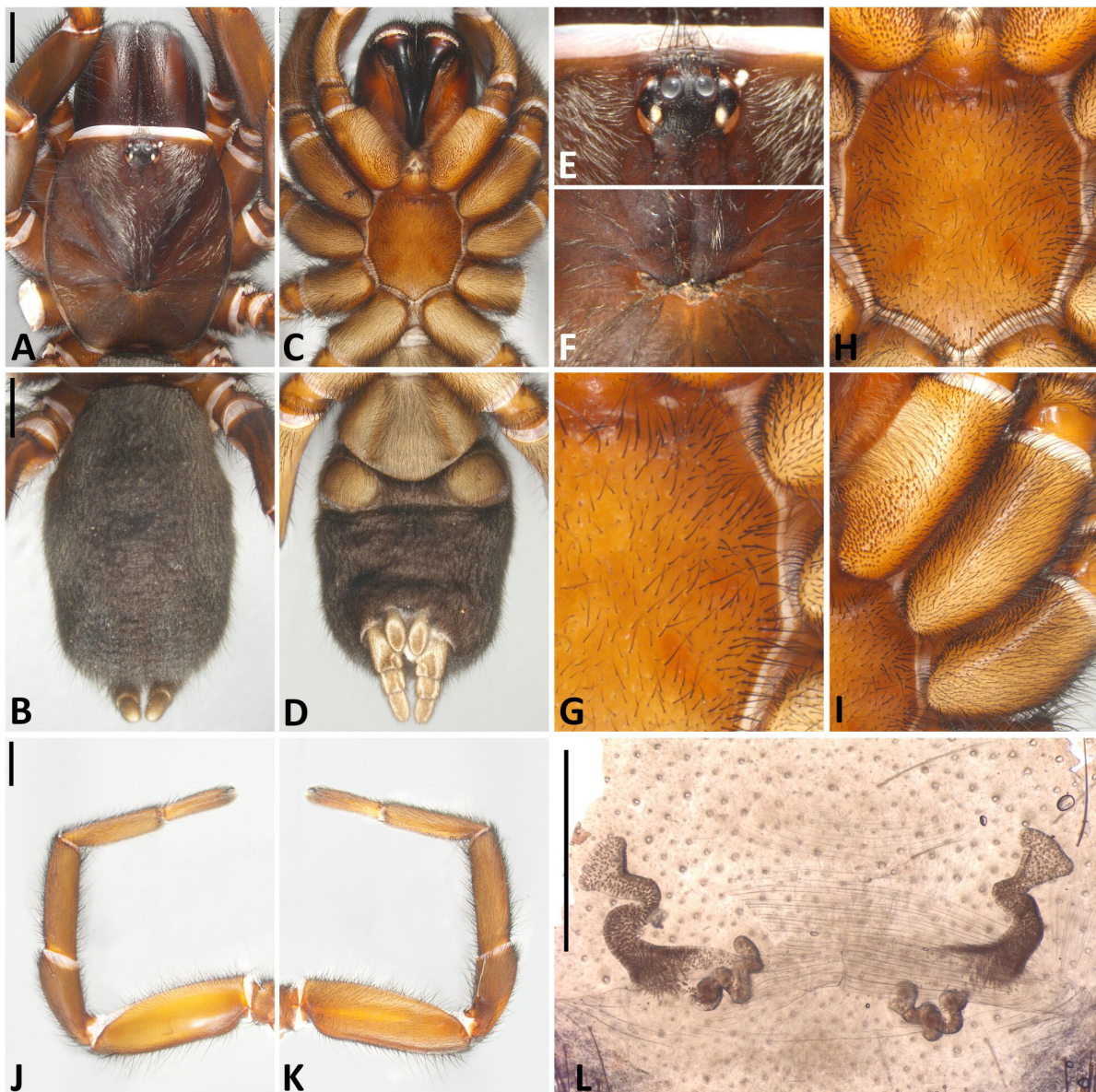


Fig. 80. *Aname villosa* Rainbow & Pulleine, 1918, ♀ (QMB S118302). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J.** Left leg I, prolateral view. **K.** Left leg I, retrolateral view. **L.** Internal genitalia, dorsal view. Scale bars: A–B, J=2 mm; L=1 mm.



Fig. 81. *Aname warialda* Raven, 1985, holotype, ♂ (QMB S1291). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J–K.** Left pedipalp, full prolateral view (J), partial retrolateral view (K). **L–M.** Right bulb, prolateral view (L), dorsal view (M). **N–Q.** Left leg I, full prolateral view (N), full retrolateral view (O), retrolateral view of tibia (P), retrolateral view of metatarsus (Q). Scale bars: A–B, J, N=2 mm; L=1 mm.

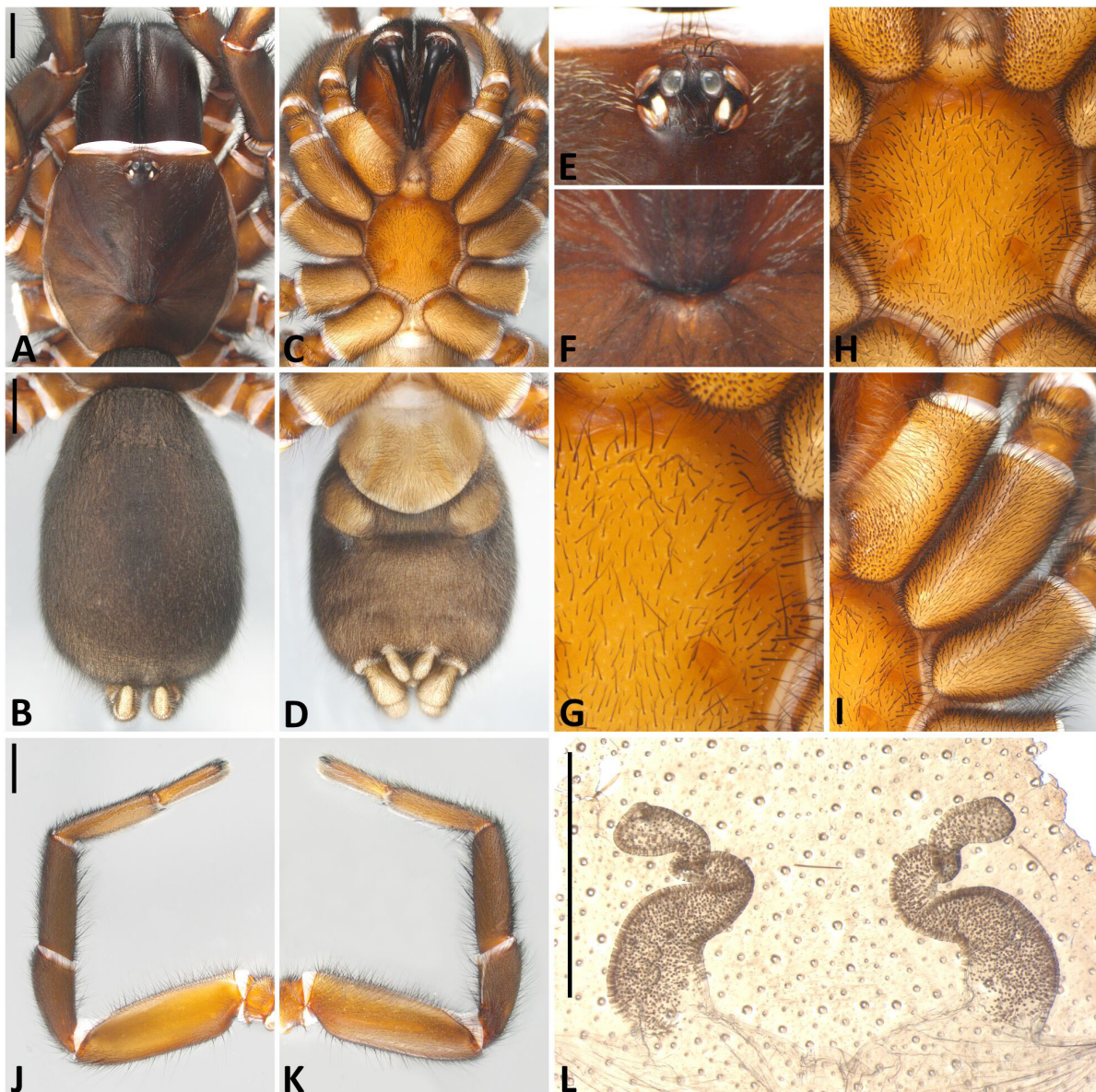


Fig. 82. *Aname warialda* Raven, 1985, ♀ (QMB S118220). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J.** Left leg I, prolateral view. **K.** Left leg I, retrolateral view. **L.** Internal genitalia, dorsal view. Scale bars: A–B, J=2 mm; L=1 mm.

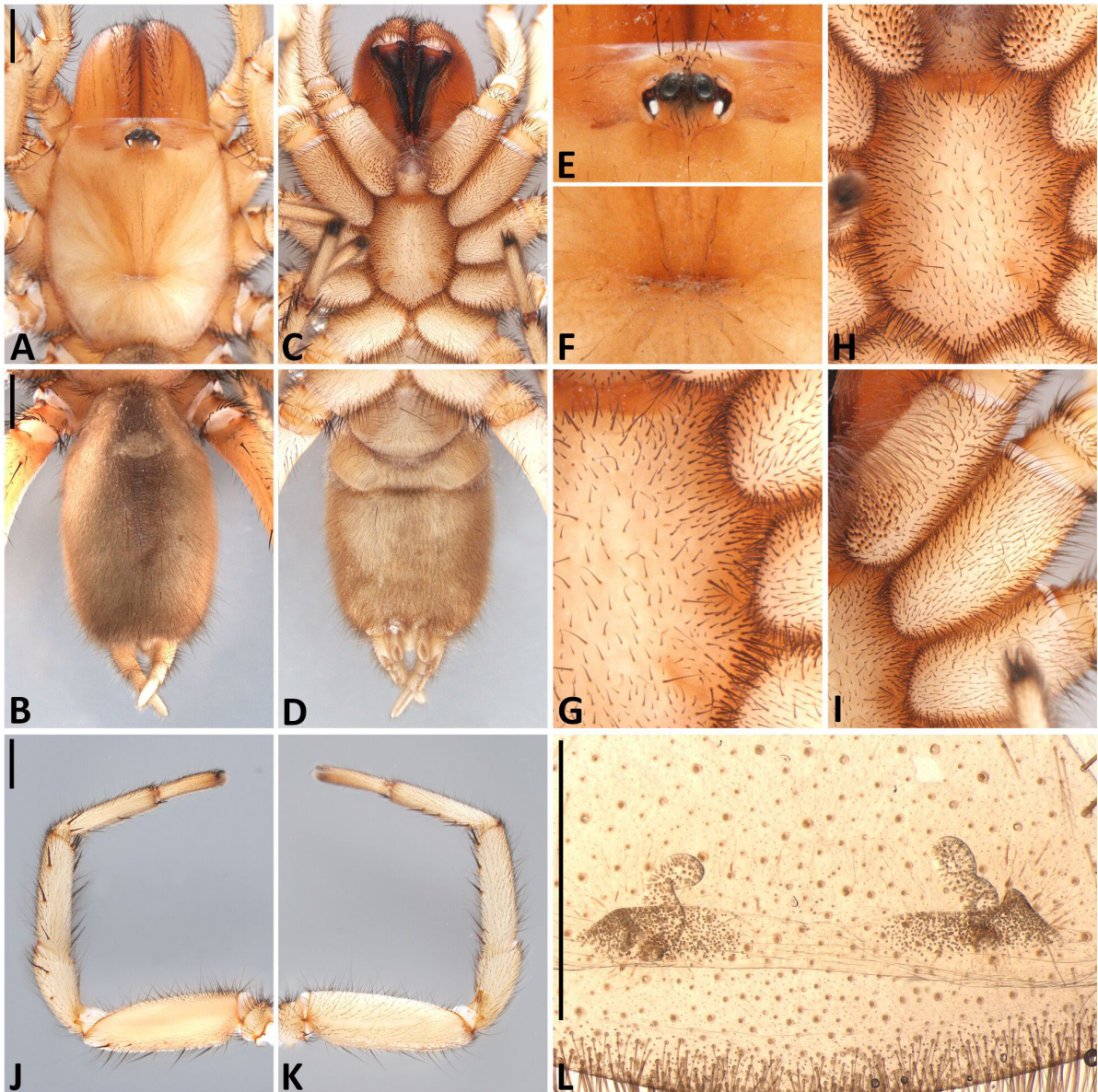


Fig. 83. *Aname fossoria* sp. nov., holotype, ♀ (QMB S118213). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J.** Left leg I, prolateral view. **K.** Left leg I, retrolateral view. **L.** Internal genitalia, dorsal view. Scale bars: A–B, J=2 mm; L=1 mm.

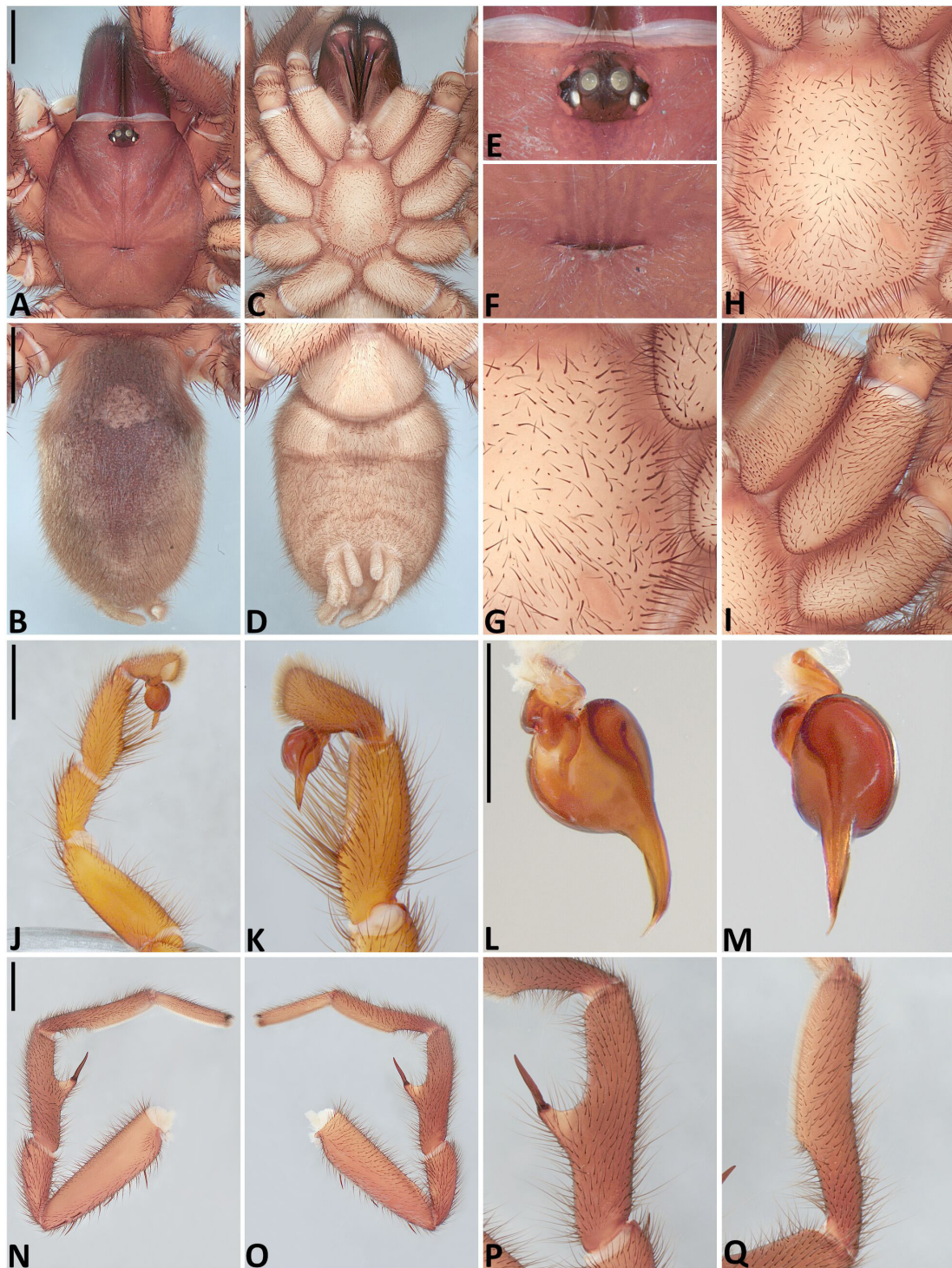


Fig. 84. *Aname fuscochelicera* sp. nov., holotype, ♂ (QMB S9752). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J–K.** Left pedipalp, full prolateral view (J), partial retrolateral view (K). **L–M.** Right bulb, prolateral view (L), dorsal view (M). **N–Q.** Left leg I, full prolateral view (N), full retrolateral view (O), retrolateral view of tibia (P), retrolateral view of metatarsus (Q). Scale bars: A–B, J, N=2 mm; L=1 mm.

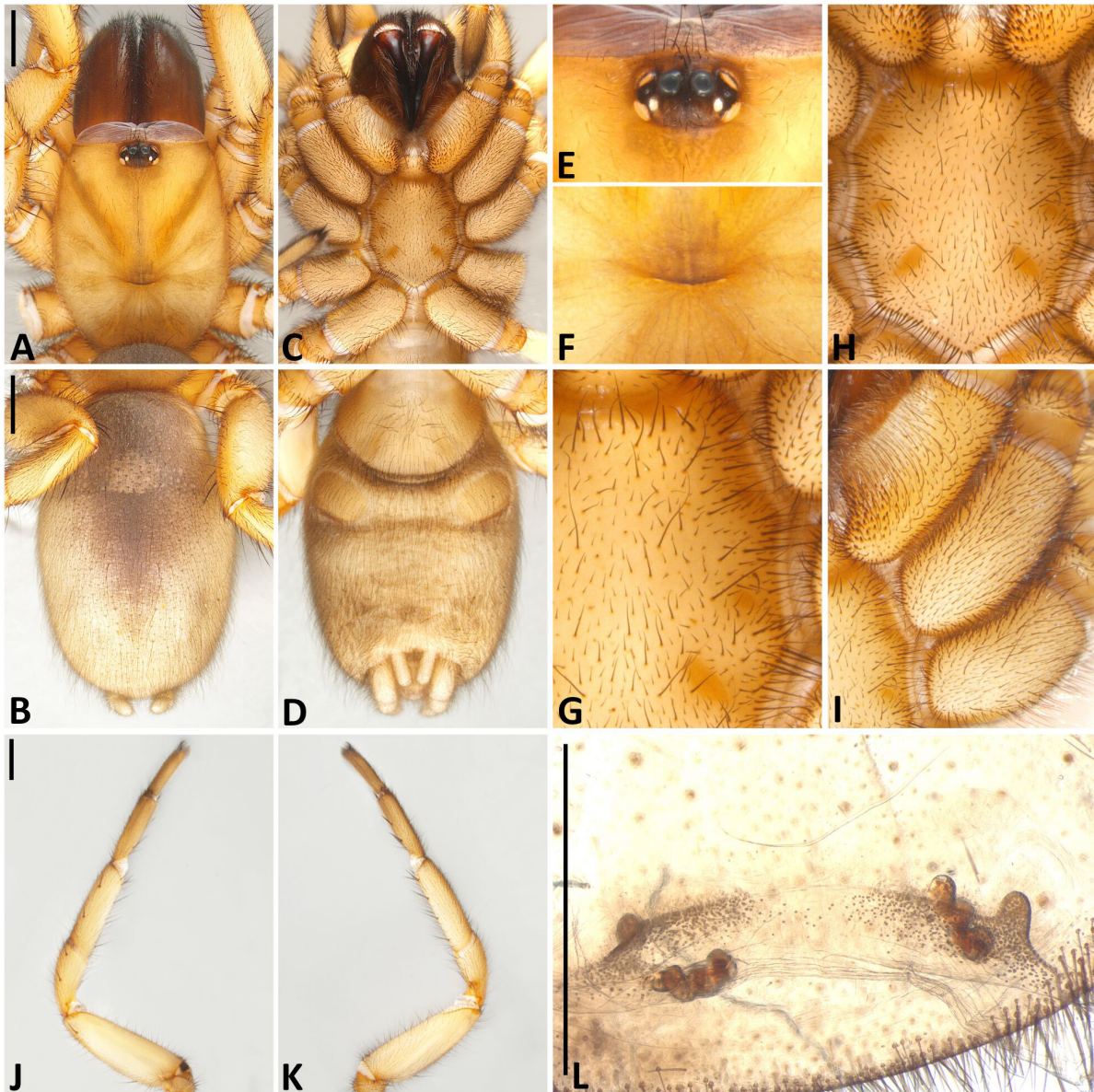


Fig. 85. *Aname fuscochelicera* sp. nov., paratype, ♀ (QMB S118235). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J.** Left leg I, prolateral view. **K.** Left leg I, retrolateral view. **L.** Internal genitalia, dorsal view. Scale bars: A–B, J=2 mm; L=1 mm.

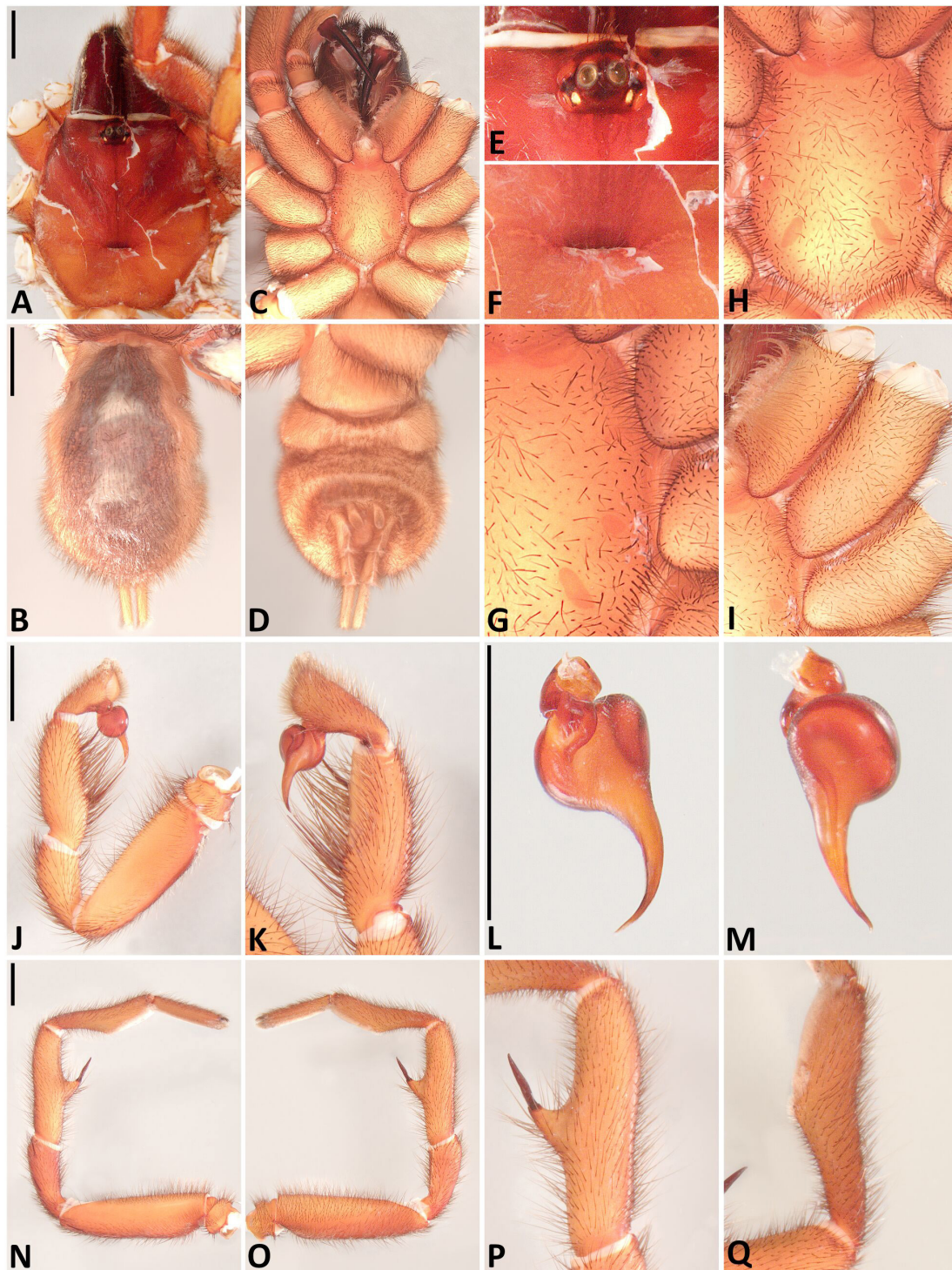


Fig. 86. *Aname inglewood* sp. nov., holotype, ♂ (QMB S34554). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J–K.** Left pedipalp, full prolateral view (**J**), partial retrolateral view (**K**). **L–M.** Left bulb (images reflected), prolateral view (**L**), dorsal view (**M**). **N–Q.** Left leg I, full prolateral view (**N**), full retrolateral view (**O**), retrolateral view of tibia (**P**), retrolateral view of metatarsus (**Q**). Scale bars: **A–B**, **J**, **L**, **N**=2 mm.

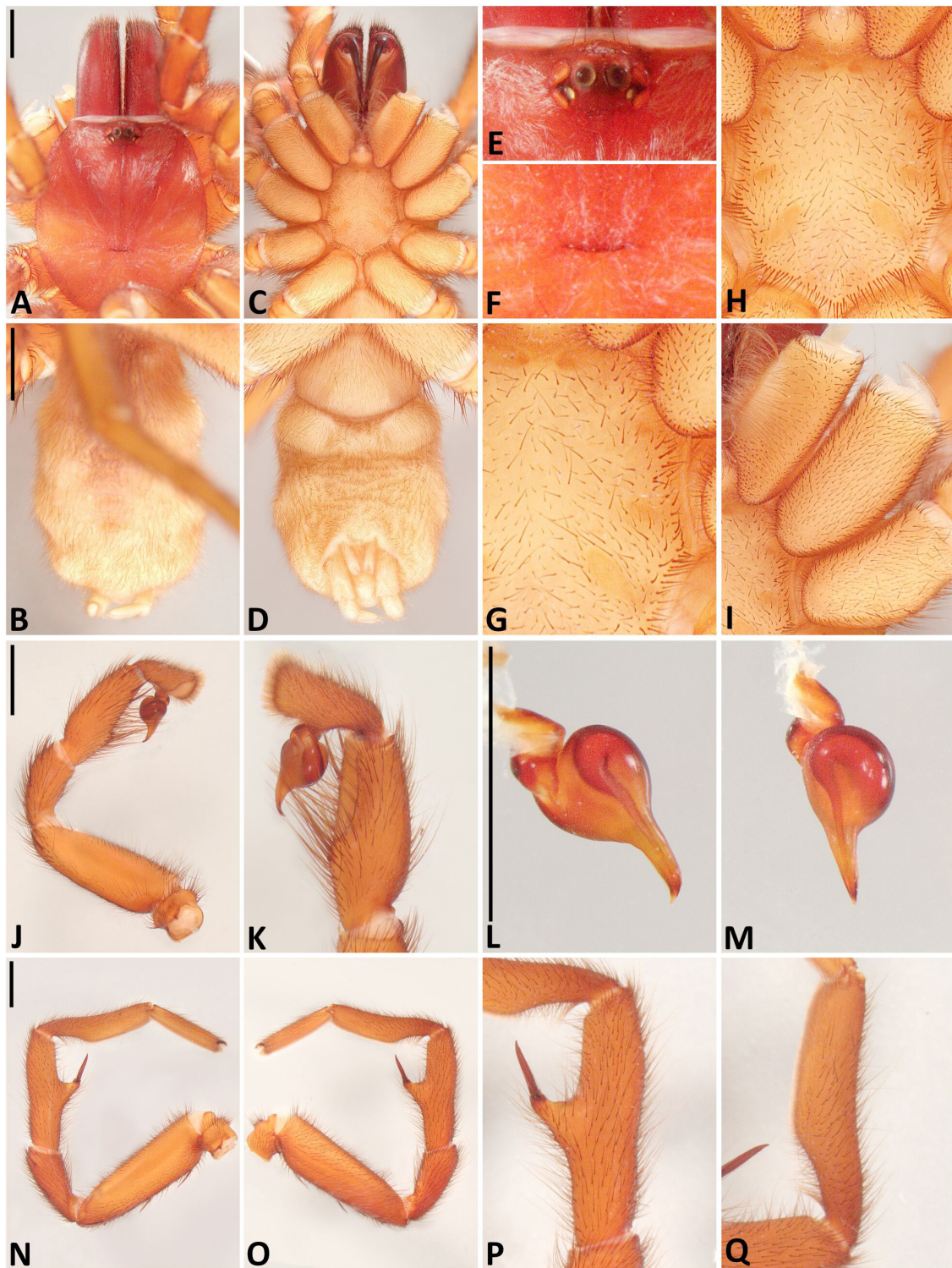


Fig. 87. *Aname nigrochelicera* sp. nov., holotype, ♂ (QMB S96459). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J–K.** Left pedipalp, full prolateral view (J), partial retrolateral view (K). **L–M.** Right bulb, prolateral view (L), dorsal view (M). **N–Q.** Left leg I, full prolateral view (N), full retrolateral view (O), retrolateral view of tibia (P), retrolateral view of metatarsus (Q). Scale bars: A–B, J, L, N=2 mm.

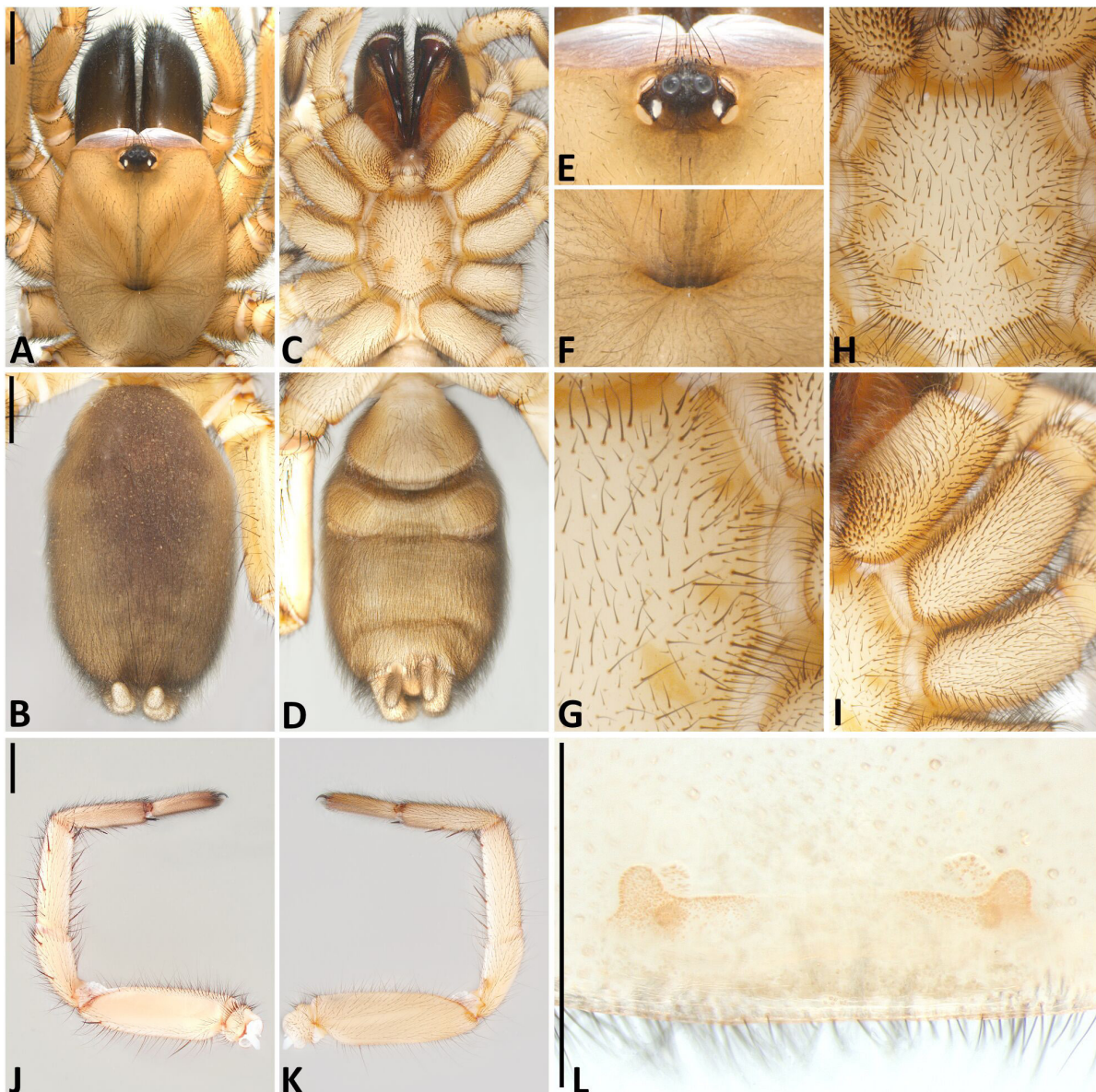


Fig. 88. *Aname nigrochelicera* sp. nov., ♀ (QMB S118300). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J.** Left leg I, prolateral view. **K.** Left leg I, retrolateral view. **L.** Internal genitalia, dorsal view. Scale bars: A–B, J=2 mm; L=1 mm.

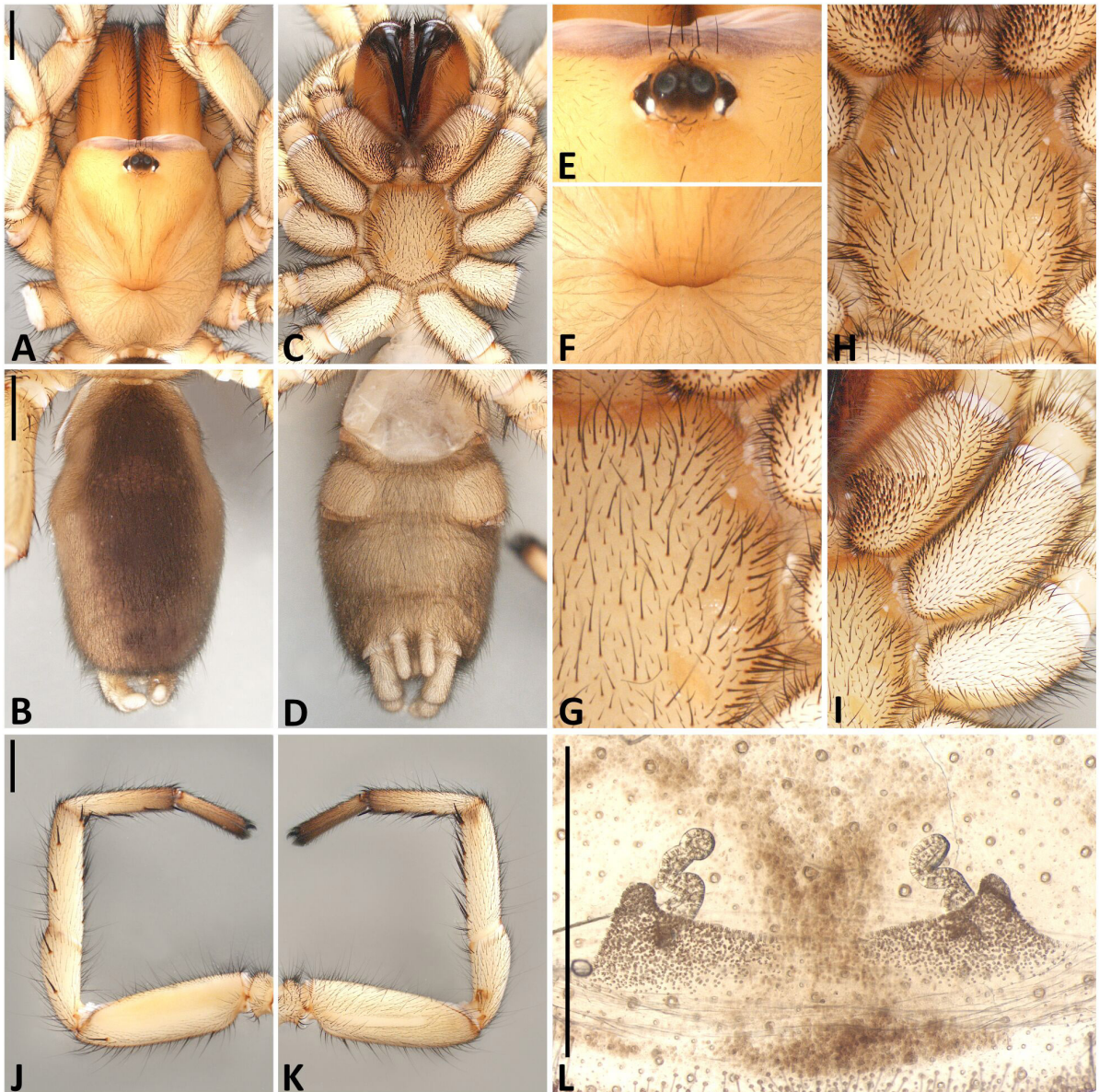


Fig. 89. *Aname nigrotarsa* sp. nov., holotype, ♀ (QMB S118311). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J.** Left leg I, prolateral view. **K.** Left leg I, retrolateral view. **L.** Internal genitalia, dorsal view. Scale bars: A–B, J=2 mm; L=1 mm.

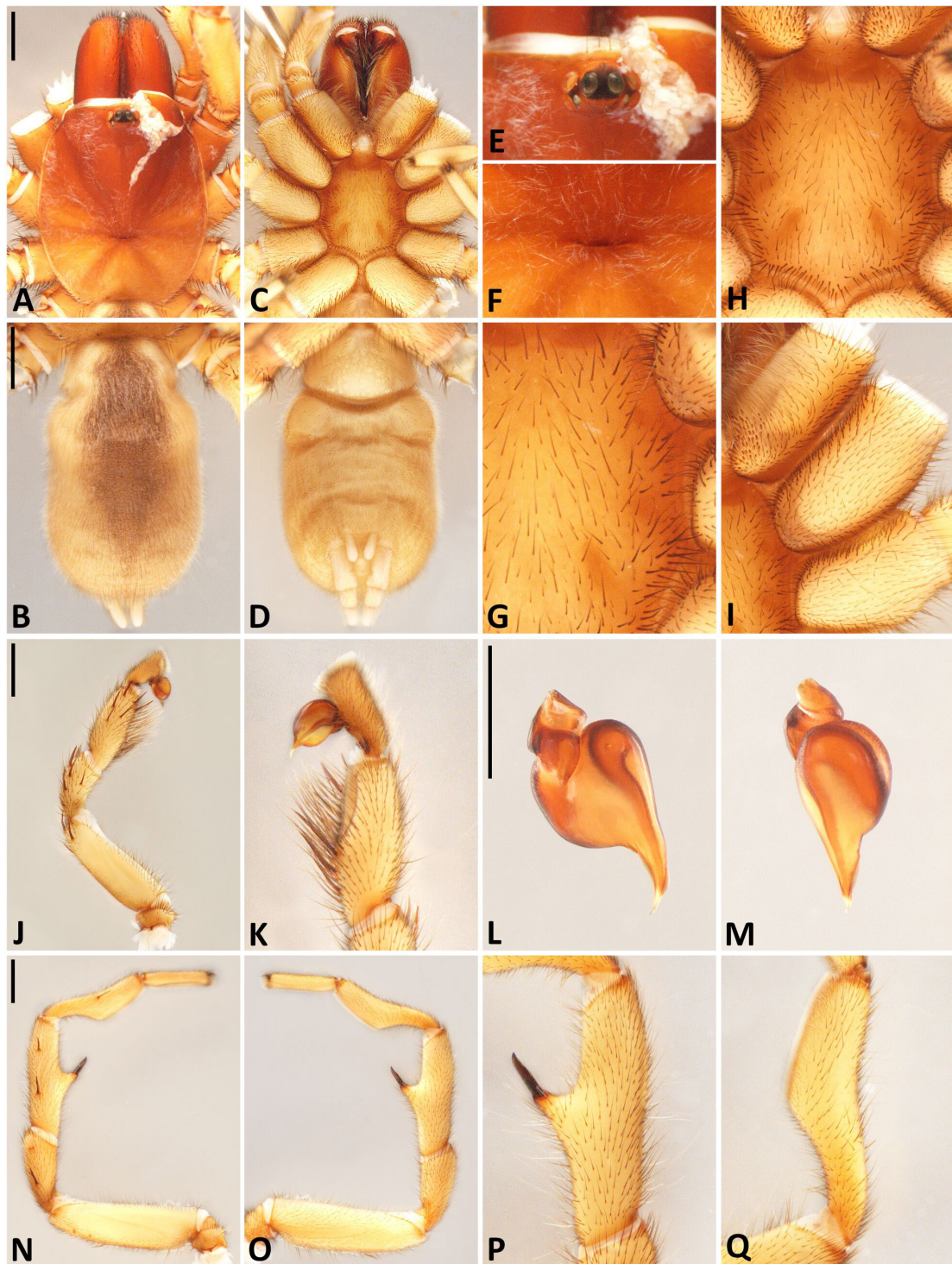


Fig. 90. *Aname rubrochelicera* sp. nov., holotype, ♂ (QMB S25637). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J–K.** Left pedipalp, full prolateral view (J), partial retrolateral view (K). **L–M.** Right bulb, prolateral view (L), dorsal view (M). **N–Q.** Left leg I, full prolateral view (N), full retrolateral view (O), retrolateral view of tibia (P), retrolateral view of metatarsus (Q). Scale bars: A–B, J, N=2 mm; L=1 mm.

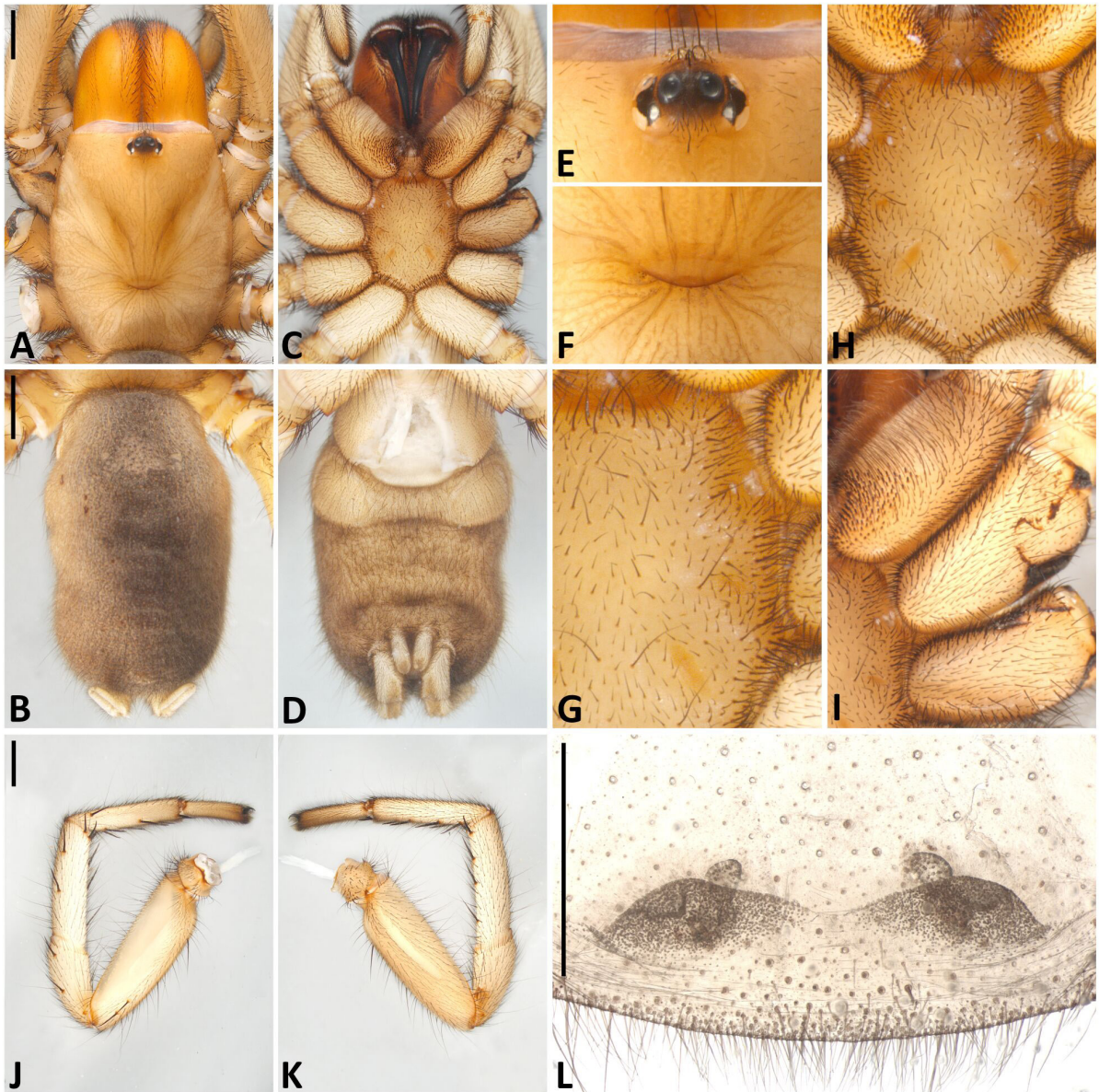


Fig. 91. *Aname rubrochelicera* sp. nov., ♀ (QMB S118285). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J.** Left leg I, prolateral view. **K.** Left leg I, retrolateral view. **L.** Internal genitalia, dorsal view. Scale bars: A–B, J=2 mm; L=1 mm.

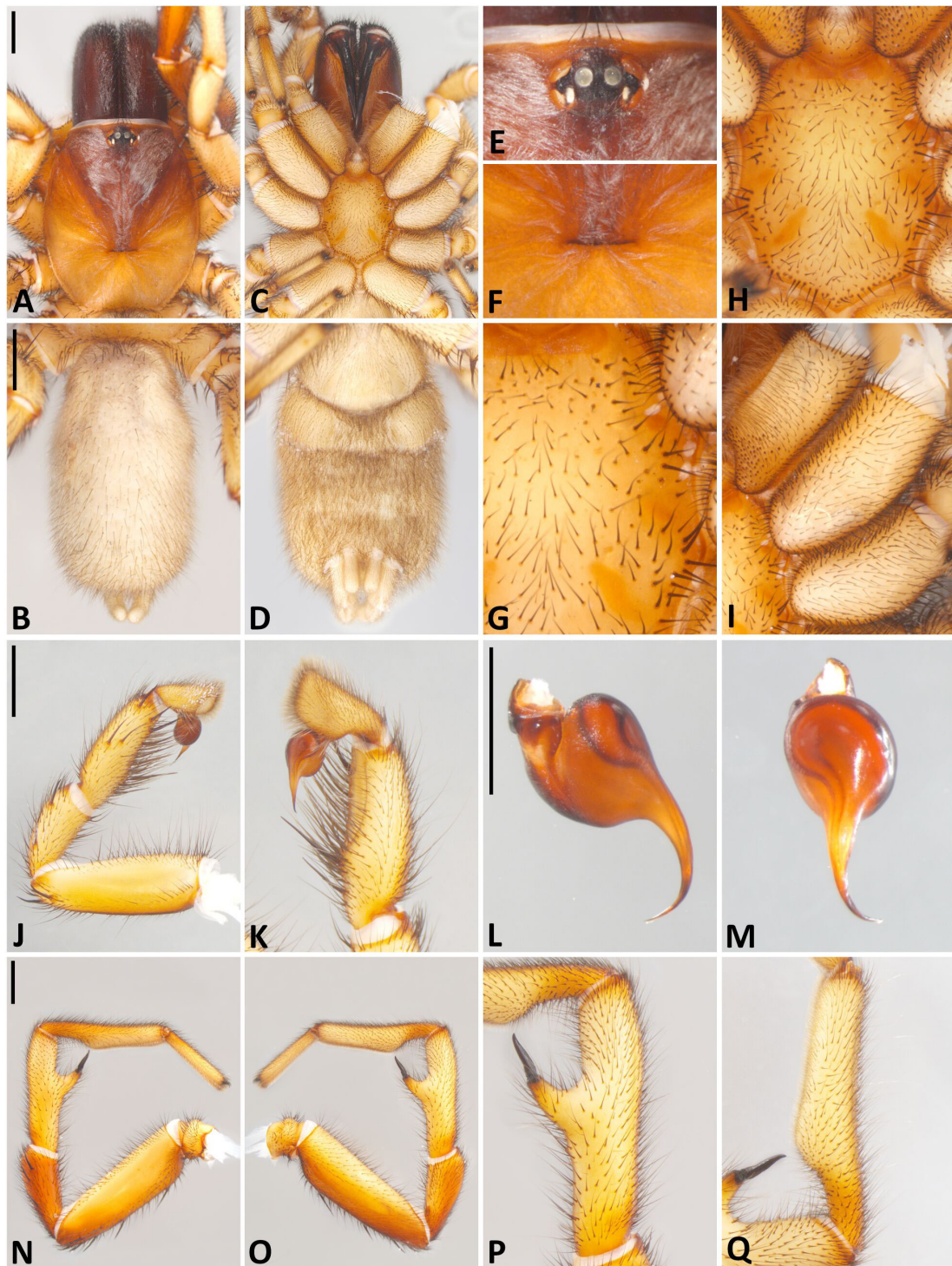


Fig. 92. *Aname savannensis* sp. nov., holotype, ♂ (QMB S22129). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J–K.** Left pedipalp, full prolateral view (J), partial retrolateral view (K). **L–M.** Right bulb, prolateral view (L), dorsal view (M). **N–Q.** Left leg I, full prolateral view (N), full retrolateral view (O), retrolateral view of tibia (P), retrolateral view of metatarsus (Q). Scale bars: A–B, J, N=2 mm; L=1 mm.

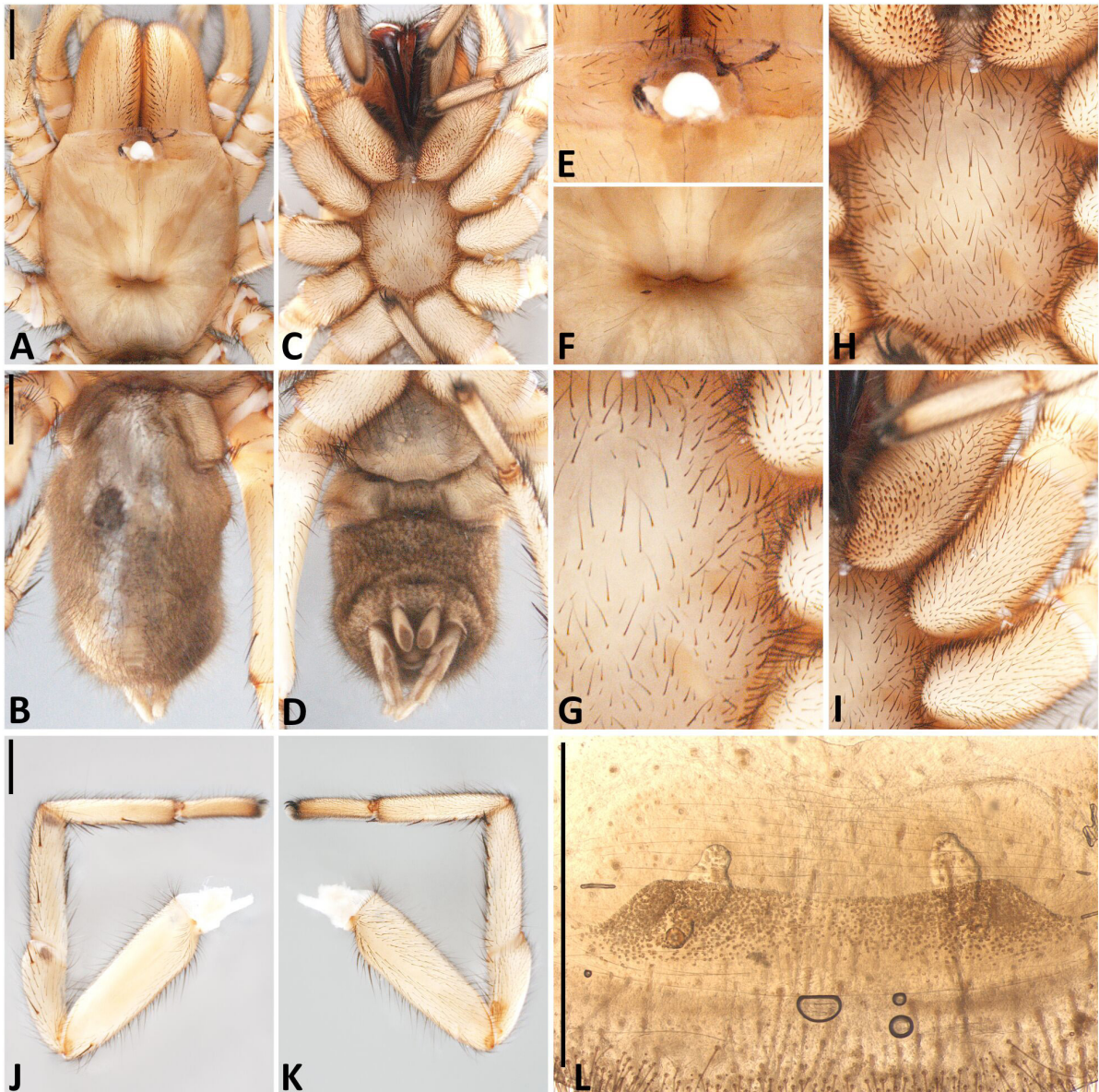


Fig. 93. *Anames savannensis* sp. nov., ♀ (QMBS118211). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I-II, left view. **J.** Right leg I, prolateral view (image reflected). **K.** Right leg I, retrolateral view (image reflected). **L.** Internal genitalia, dorsal view. Scale bars: A–B, J=2 mm; L=1 mm.

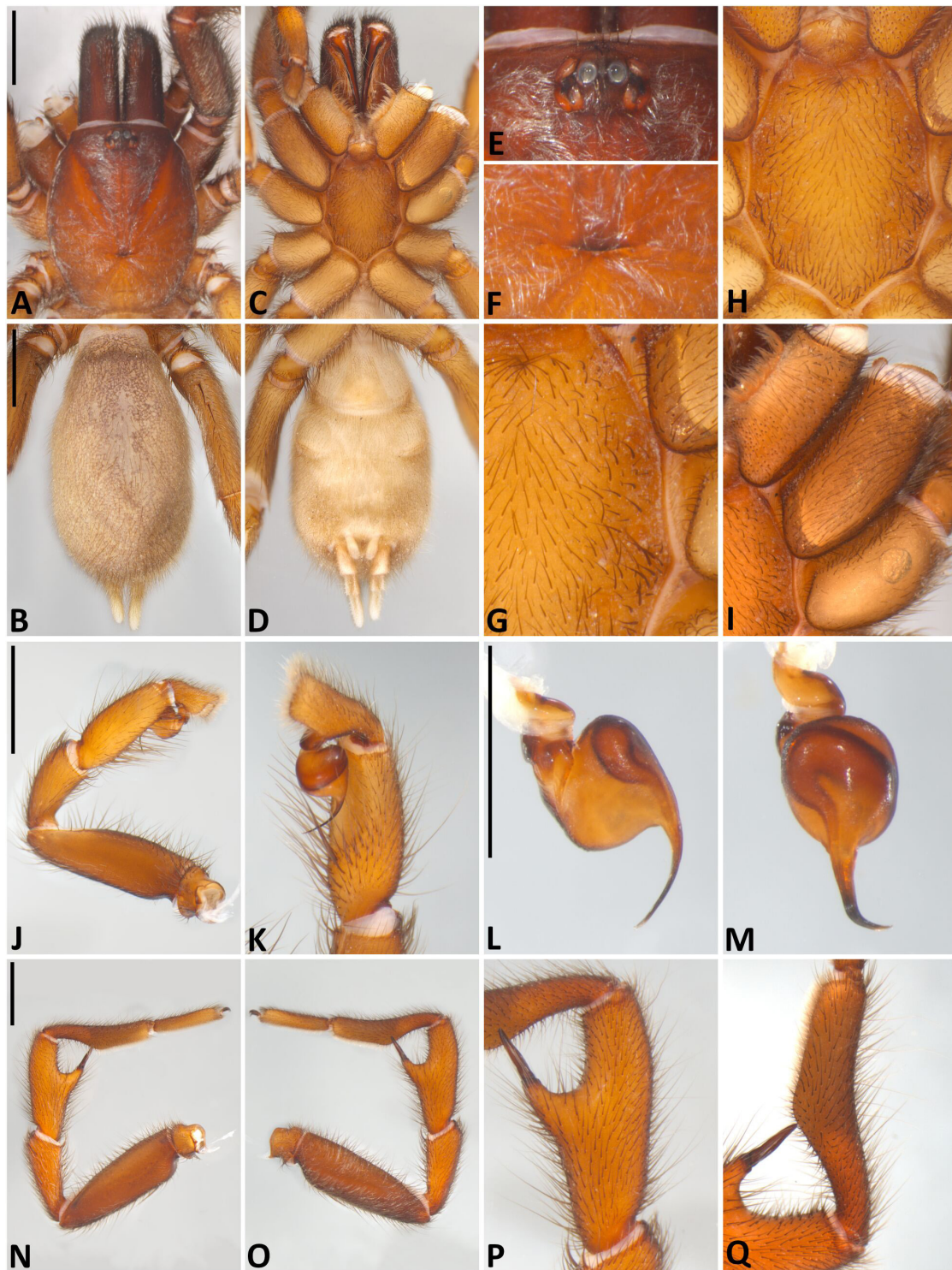


Fig. 94. *Aname callitra* sp. nov., holotype, ♂ (QMB S118363). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J–K.** Left pedipalp, full prolateral view (J), partial retrolateral view (K). **L–M.** Right bulb, prolateral view (L), dorsal view (M). **N–Q.** Left leg I, full prolateral view (N), full retrolateral view (O), retrolateral view of tibia (P), retrolateral view of metatarsus (Q). Scale bars: A–B, J, N=2 mm; L=1 mm.



Fig. 95. *Aname corundaria* sp. nov., holotype, ♂ (QMB S63017). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J–K.** Left pedipalp, full prolateral view (J), partial retrolateral view (K). **L–M.** Right bulb, prolateral view (L), dorsal view (M). **N–Q.** Left leg I, full prolateral view (N), full retrolateral view (O), retrolateral view of tibia (P), retrolateral view of metatarsus (Q). Scale bars: A–B, J, N=2 mm; L=1 mm.

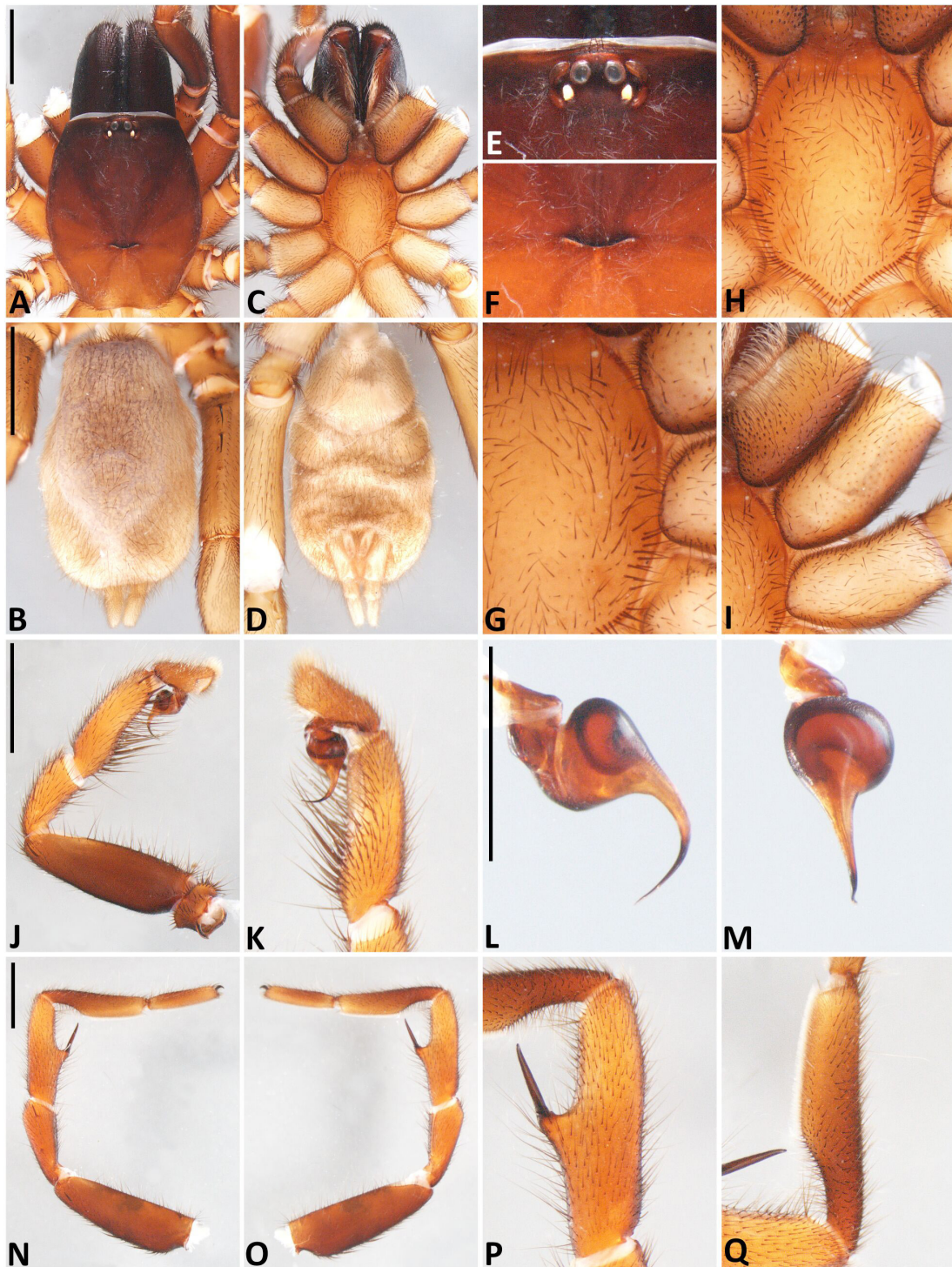


Fig. 96. *Aname aurantella* sp. nov., holotype, ♂ (QMB S76998). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J–K.** Left pedipalp, full prolateral view (J), partial retrolateral view (K). **L–M.** Right bulb, prolateral view (L), dorsal view (M). **N–Q.** Left leg I, full prolateral view (N), full retrolateral view (O), retrolateral view of tibia (P), retrolateral view of metatarsus (Q). Scale bars: A–B, J, N=2 mm; L=1 mm.

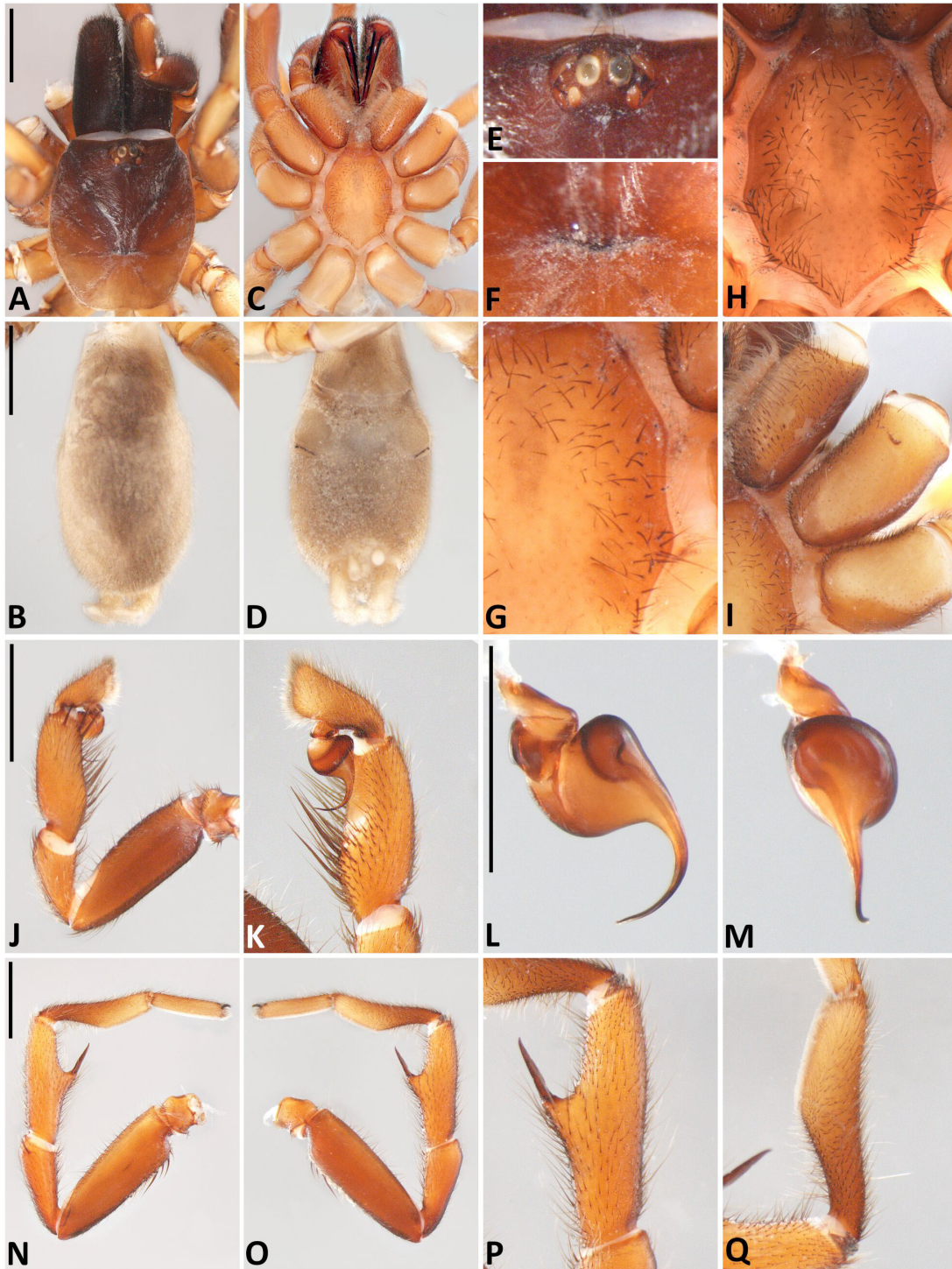


Fig. 97. *Aname gilbertensis* sp. nov., holotype, ♂ (QMB S57129). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J–K.** Left pedipalp, full prolateral view (J), partial retrolateral view (K). **L–M.** Right bulb, prolateral view (L), dorsal view (M). **N–Q.** Left leg I, full prolateral view (N), full retrolateral view (O), retrolateral view of tibia (P), retrolateral view of metatarsus (Q). Scale bars: A–B, J, N=2 mm; L=1 mm.

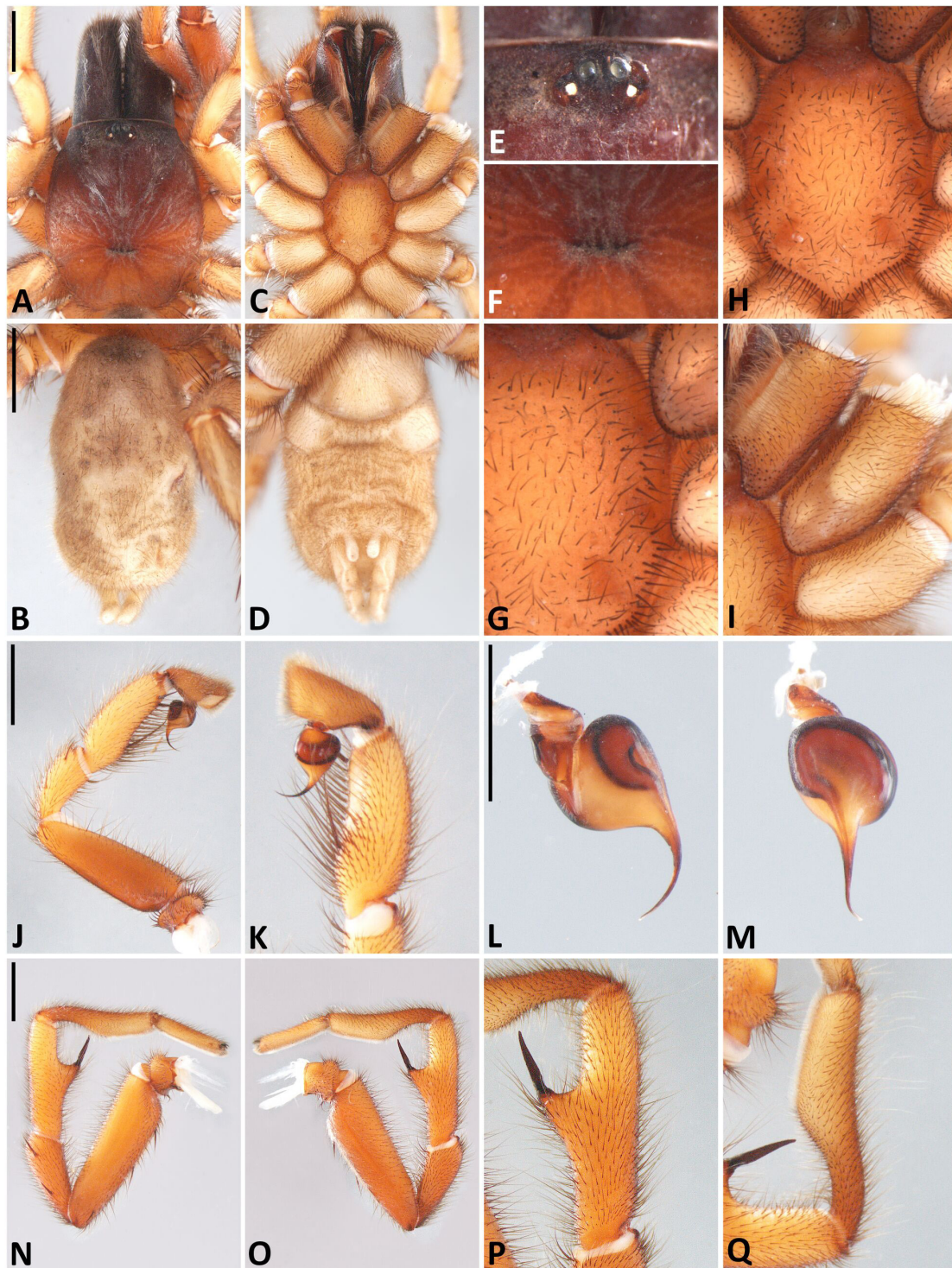


Fig. 98. *Aname pyroensis* sp. nov., holotype, ♂ (QMB S24999). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J–K.** Left pedipalp, full prolateral view (J), partial retrolateral view (K). **L–M.** Right bulb, prolateral view (L), dorsal view (M). **N–Q.** Left leg I, full prolateral view (N), full retrolateral view (O), retrolateral view of tibia (P), retrolateral view of metatarsus (Q). Scale bars: A–B, J, N=2 mm; L=1 mm.

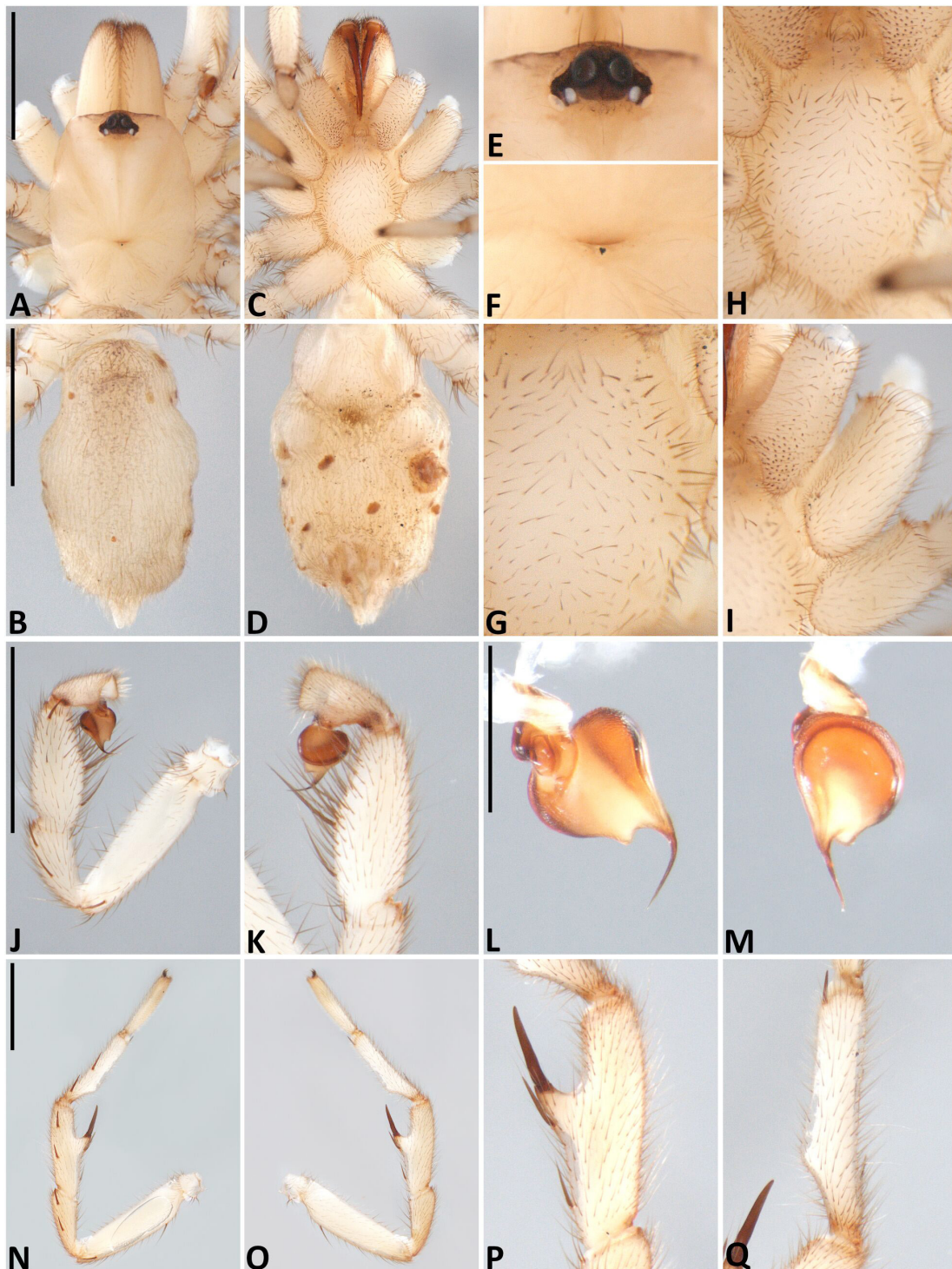


Fig. 99. *Aname albicula* sp. nov., holotype, ♂ (QMB S108632). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J–K.** Left pedipalp, full prolateral view (J), partial retrolateral view (K). **L–M.** Right bulb, prolateral view (L), dorsal view (M). **N–Q.** Left leg I, full prolateral view (N), full retrolateral view (O), retrolateral view of tibia (P), retrolateral view of metatarsus (Q). Scale bars: A–B, J, N=2 mm; L=0.5 mm.

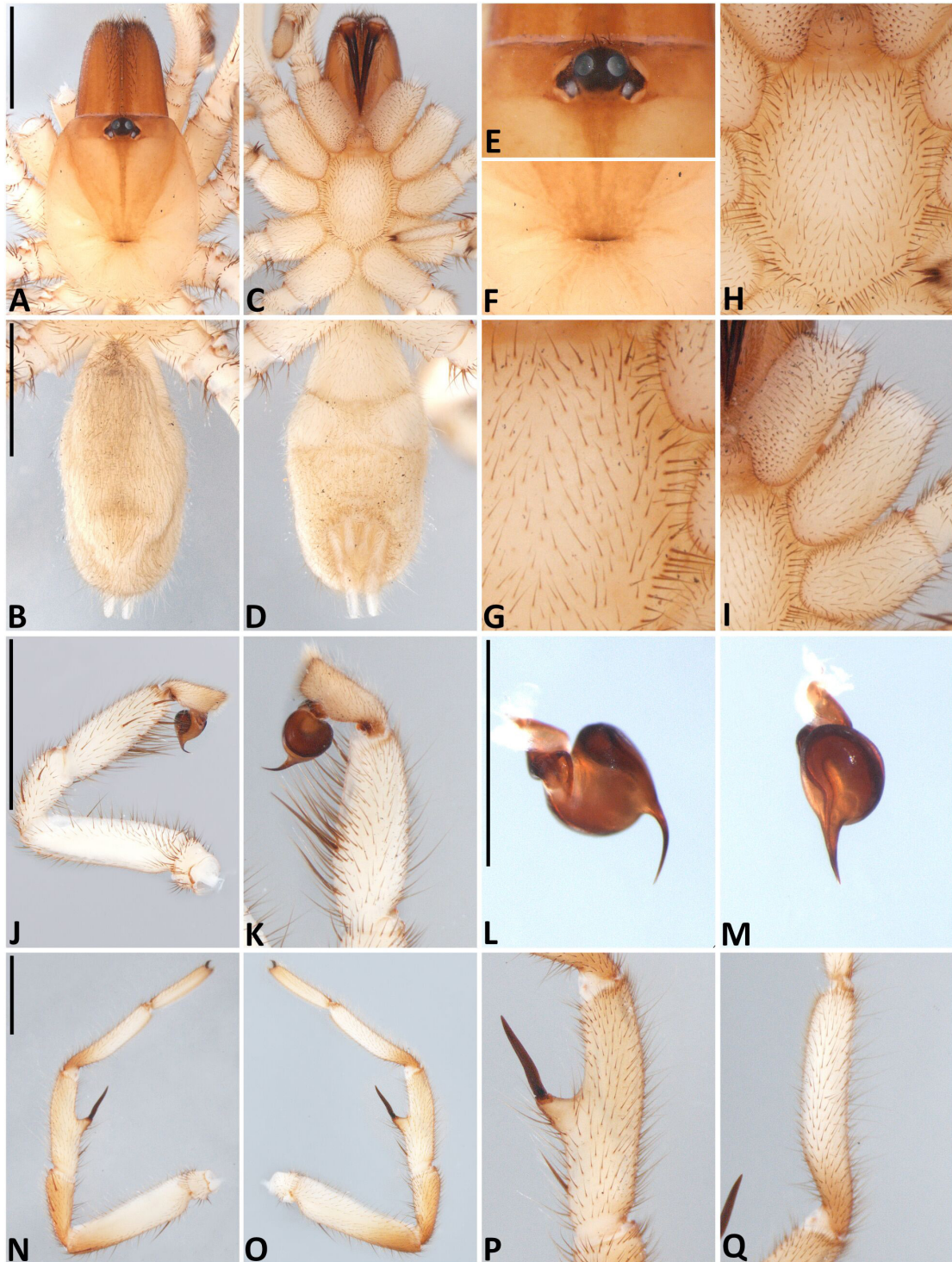


Fig. 100. *Aname mariala* sp. nov., holotype, ♂ (QMB S77354). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J–K.** Left pedipalp, full prolateral view (J), partial retrolateral view (K). **L–M.** Right bulb, prolateral view (L), dorsal view (M). **N–Q.** Left leg I, full prolateral view (N), full retrolateral view (O), retrolateral view of tibia (P), retrolateral view of metatarsus (Q). Scale bars: A–B, J, N=2 mm; L=1 mm.

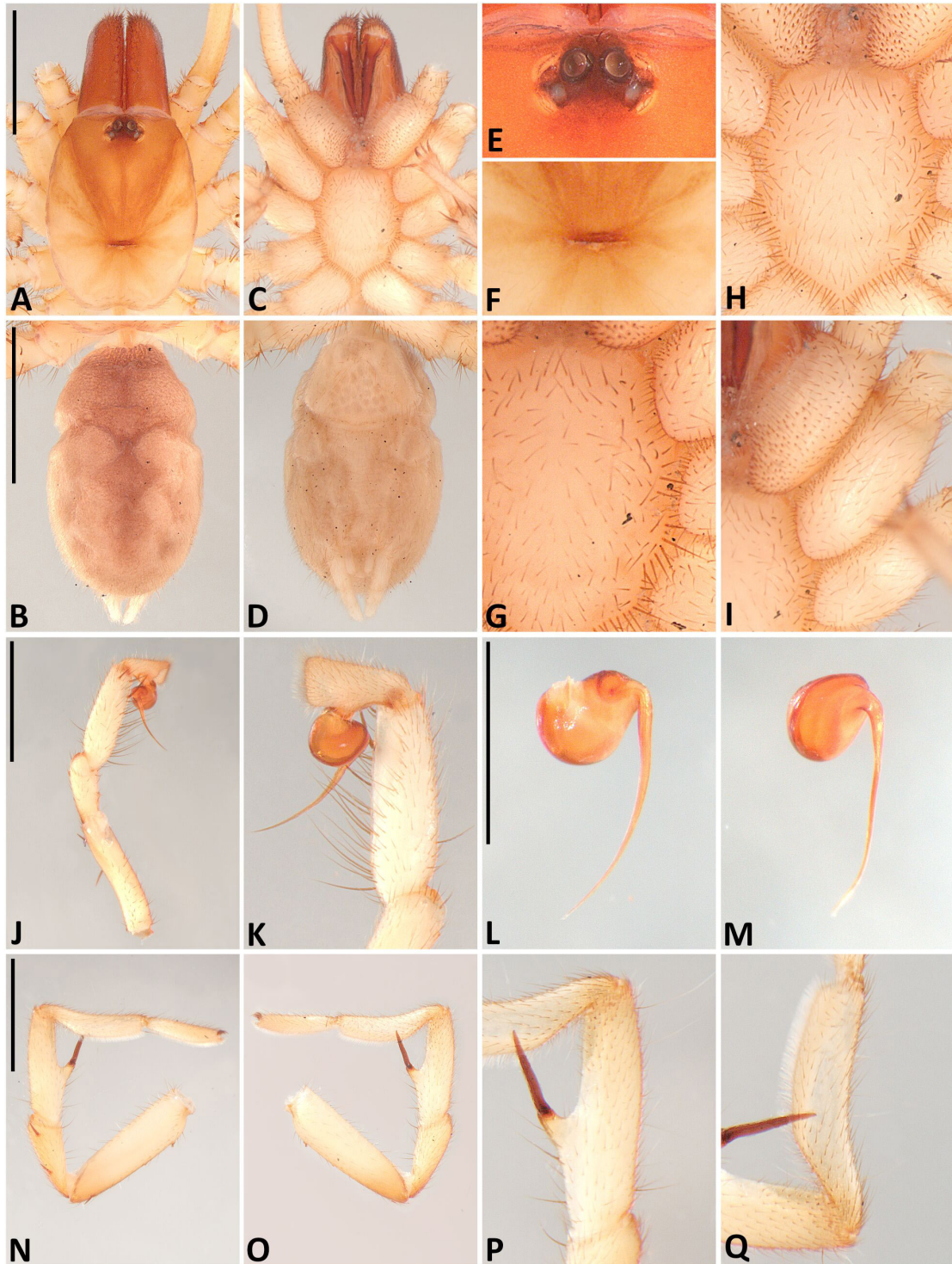


Fig. 101. *Aname broadwater* sp. nov., holotype, ♂ (QMB S3148). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J–K.** Left pedipalp, full prolateral view (J), partial retrolateral view (K). **L–M.** Right bulb, prolateral view (L), dorsal view (M). **N–Q.** Left leg I, full prolateral view (N), full retrolateral view (O), retrolateral view of tibia (P), retrolateral view of metatarsus (Q). Scale bars: A–B, J, N=2 mm; L=1 mm.

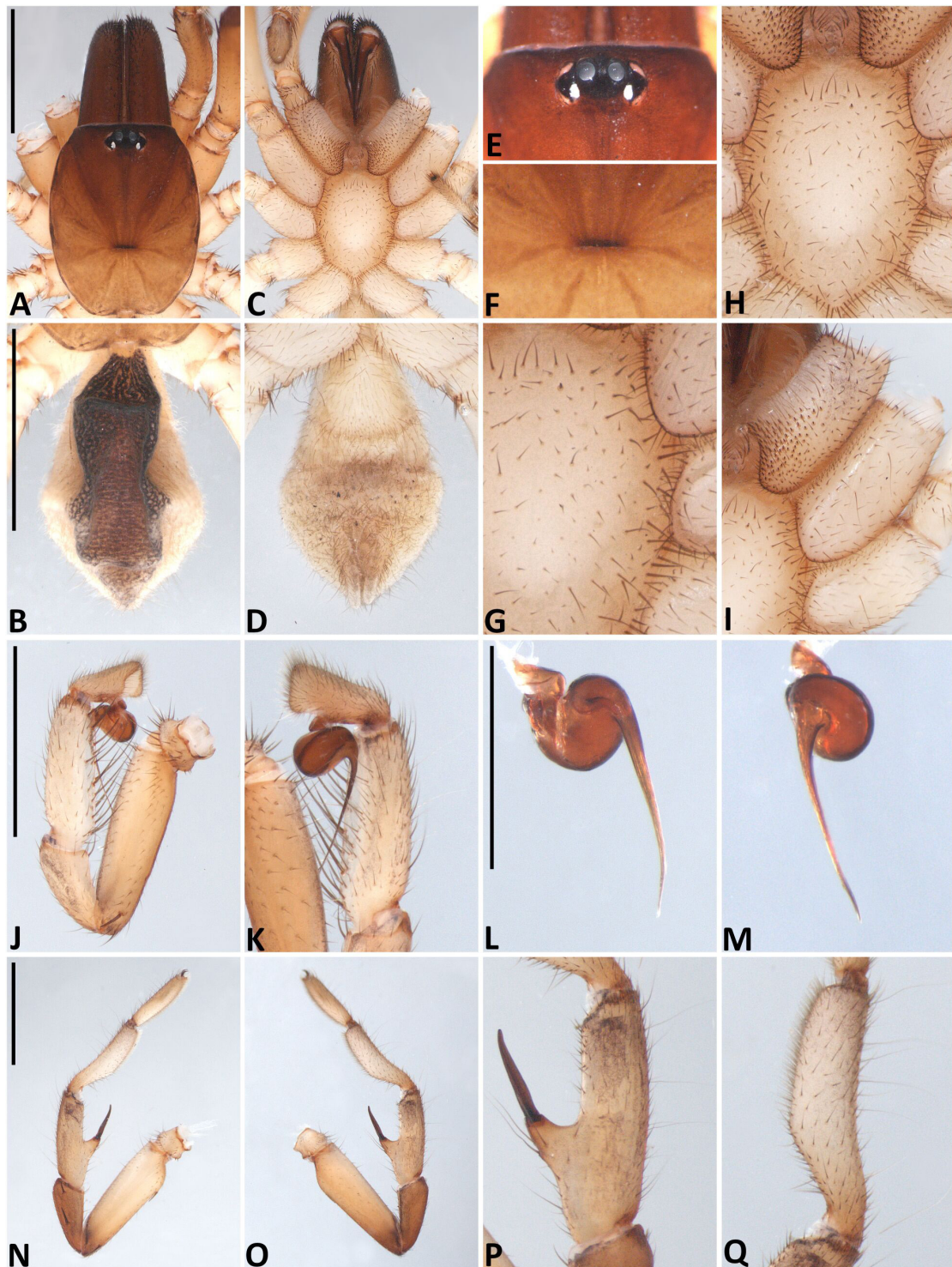


Fig. 102. *Aname flexicaudula* sp. nov., holotype, ♂ (QMB S27992). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J–K.** Left pedipalp, full prolateral view (J), partial retrolateral view (K). **L–M.** Right bulb, prolateral view (L), dorsal view (M). **N–Q.** Left leg I, full prolateral view (N), full retrolateral view (O), retrolateral view of tibia (P), retrolateral view of metatarsus (Q). Scale bars: A–B, J, N=2 mm; L=1 mm.

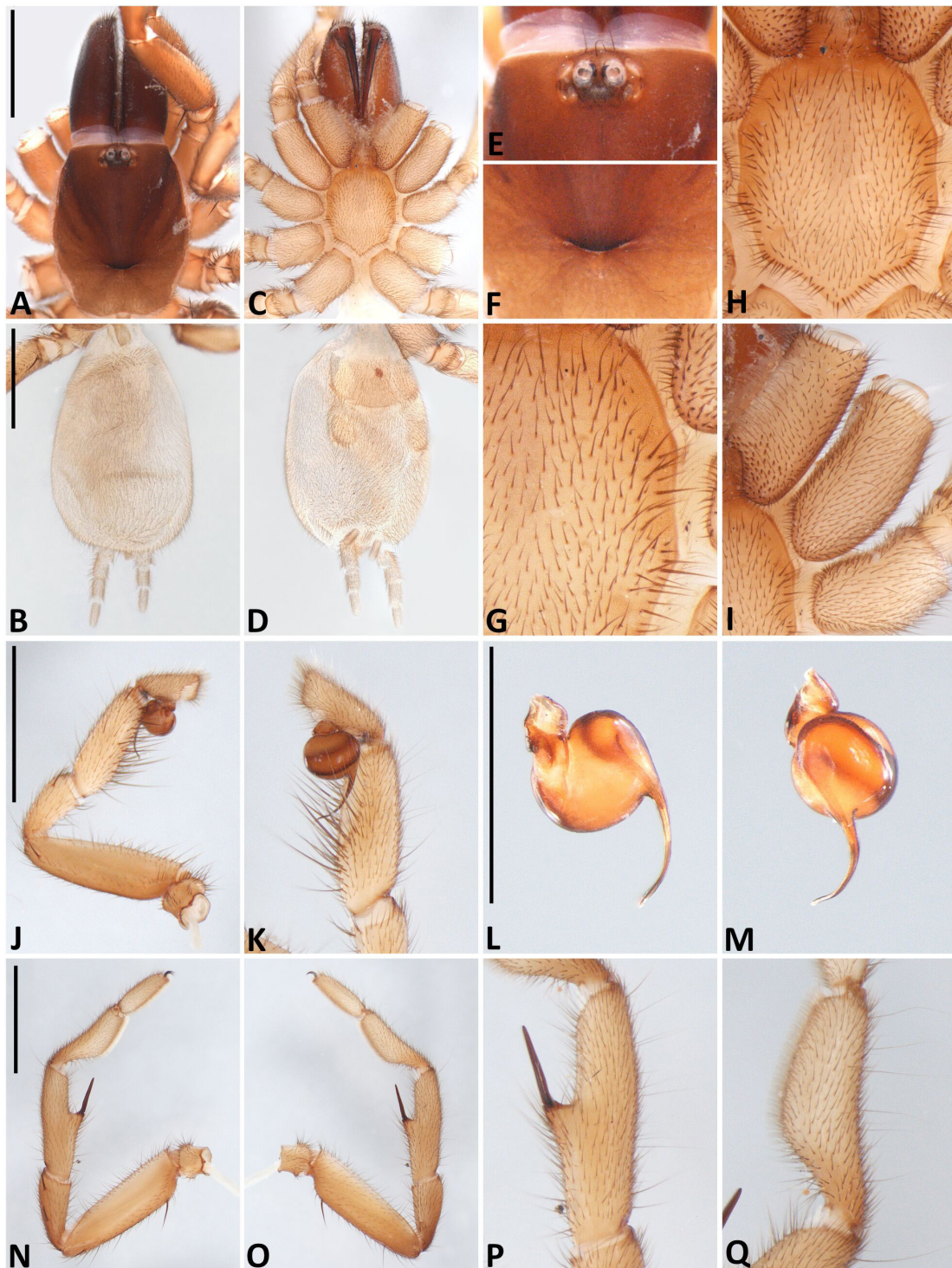


Fig. 103. *Aname cudmore* sp. nov., holotype, ♂ (QMB S96936). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J–K.** Left pedipalp, full prolateral view (J), partial retrolateral view (K). **L–M.** Right bulb, prolateral view (L), dorsal view (M). **N–Q.** Left leg I, full prolateral view (N), full retrolateral view (O), retrolateral view of tibia (P), retrolateral view of metatarsus (Q). Scale bars: A–B, J, N=2 mm; L=1 mm.

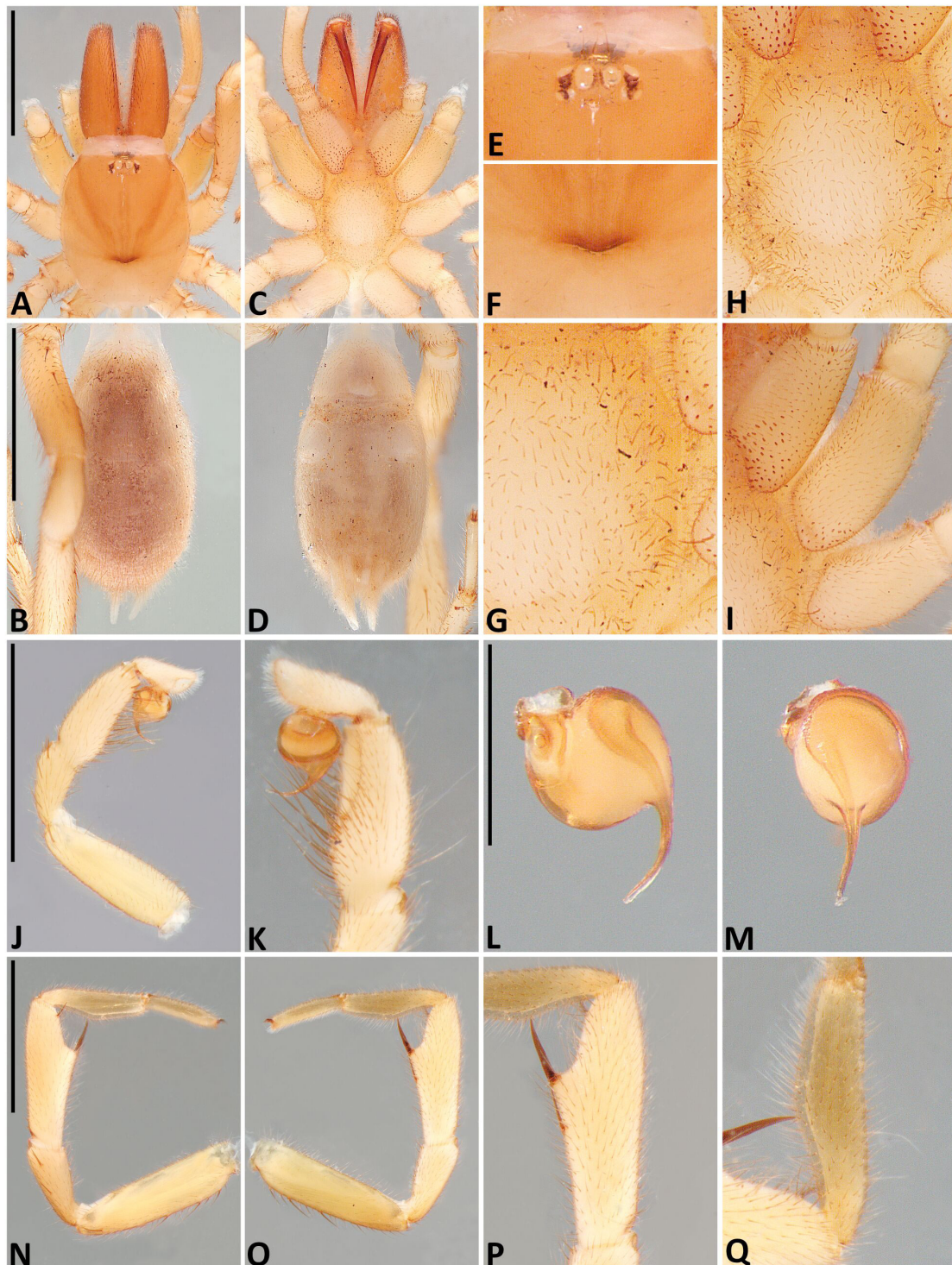


Fig. 104. *Aname savannella* sp. nov., holotype, ♂ (QMB S76052). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J–K.** Left pedipalp, full prolateral view (J), partial retrolateral view (K). **L–M.** Right bulb, prolateral view (L), dorsal view (M). **N–Q.** Left leg I, full prolateral view (N), full retrolateral view (O), retrolateral view of tibia (P), retrolateral view of metatarsus (Q). Scale bars: A–B, J, N=2 mm; L=0.5 mm.

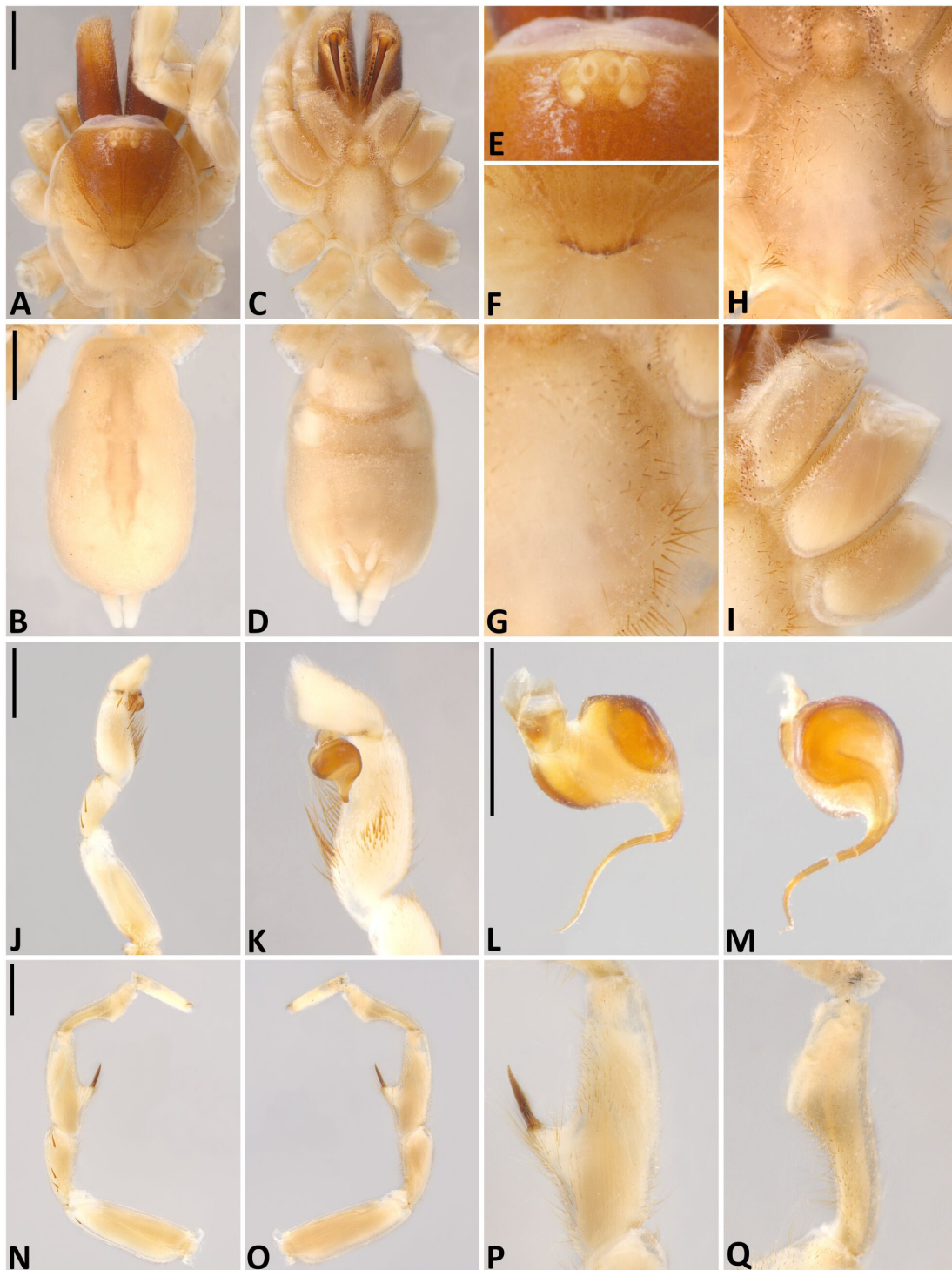


Fig. 105. *Aname camara* Raven, 1985, holotype, ♂ (QMB S1250). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J–K.** Left pedipalp, full prolateral view (J), partial retrolateral view (K). **L–M.** Right bulb, prolateral view (L), dorsal view (M). **N–Q.** Left leg I, full prolateral view (N), full retrolateral view (O), retrolateral view of tibia (P), retrolateral view of metatarsus (Q). Scale bars: A–B, J, N=2 mm; L=1 mm.

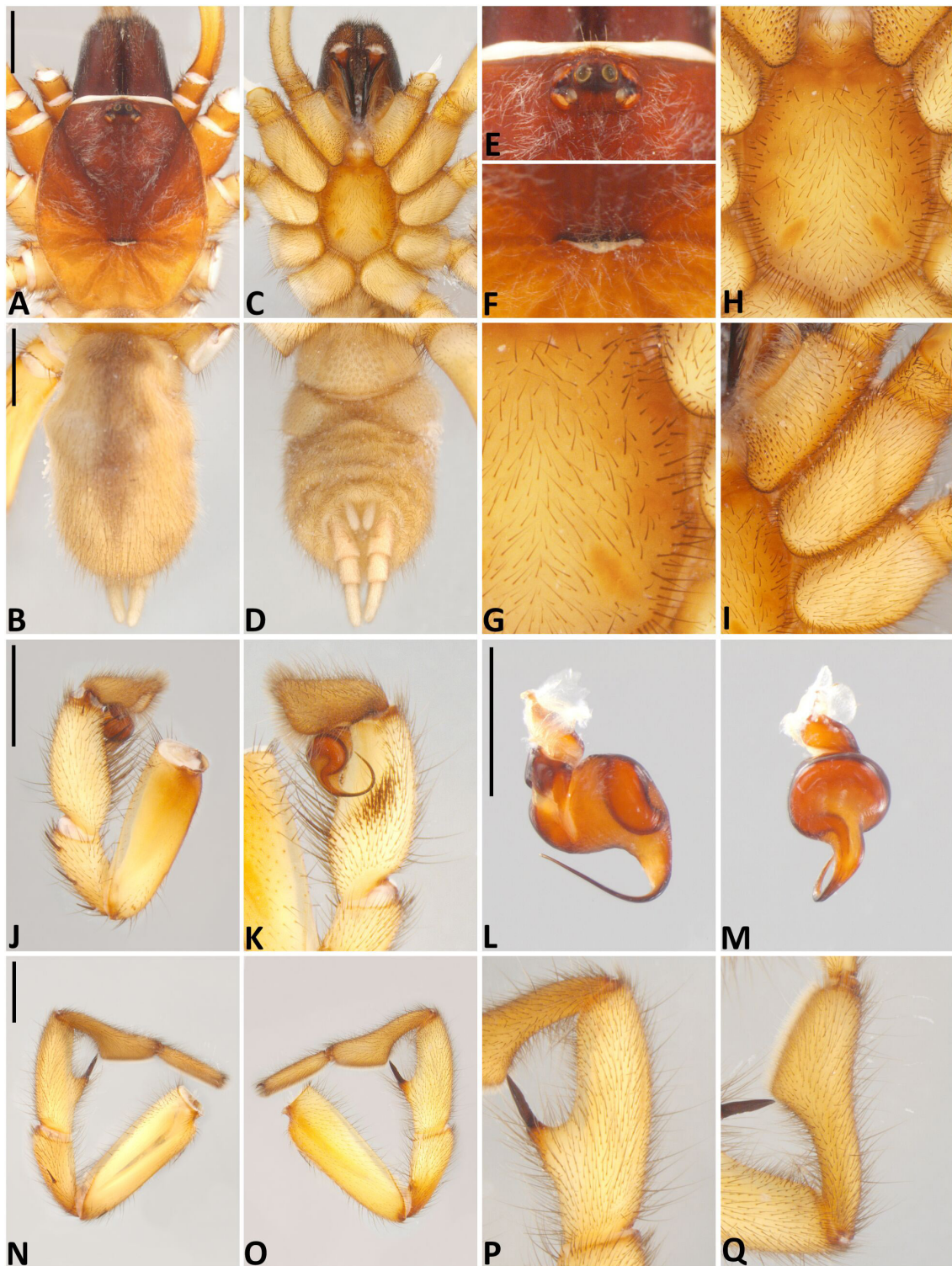


Fig. 106. *Aname camara* Raven, 1985, ♂ (QMB S20402). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I-II, left view. **J–K.** Left pedipalp, full proteral view (J), partial retrolateral view (K). **L–M.** Right bulb, proteral view (L), dorsal view (M). **N–Q.** Right leg I (images reflected), full proteral view (N), full retrolateral view (O), retrolateral view of tibia (P), retrolateral view of metatarsus (Q). Scale bars: A–B, J, N=2 mm; L=1 mm.

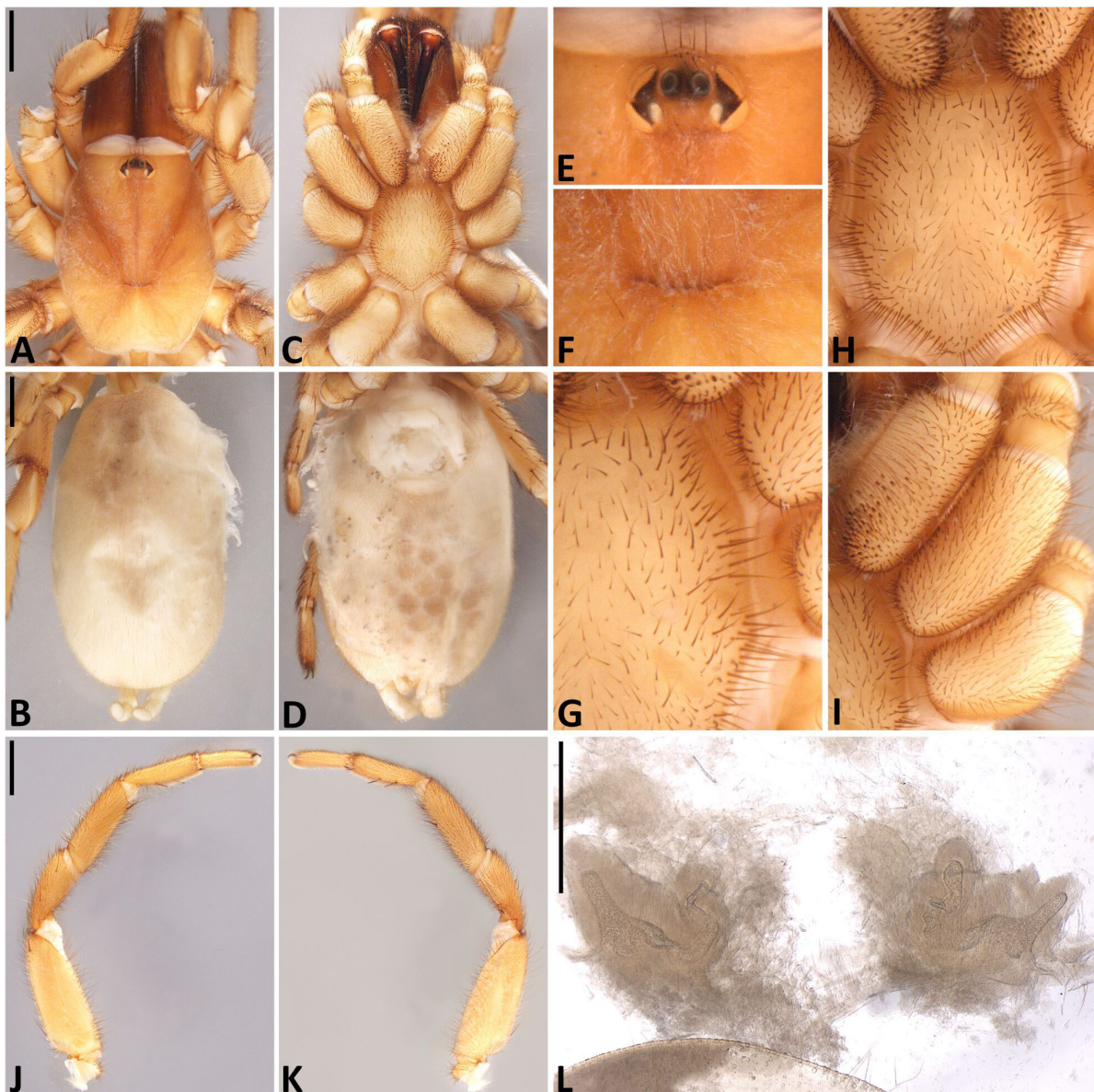


Fig. 107. *Aname camara* Raven, 1985, ♀ (QMB S1252). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J.** Left leg I, prolateral view. **K.** Left leg I, retrolateral view. **L.** Internal genitalia, dorsal view. Scale bars: A–B, J=2 mm; L=1 mm.

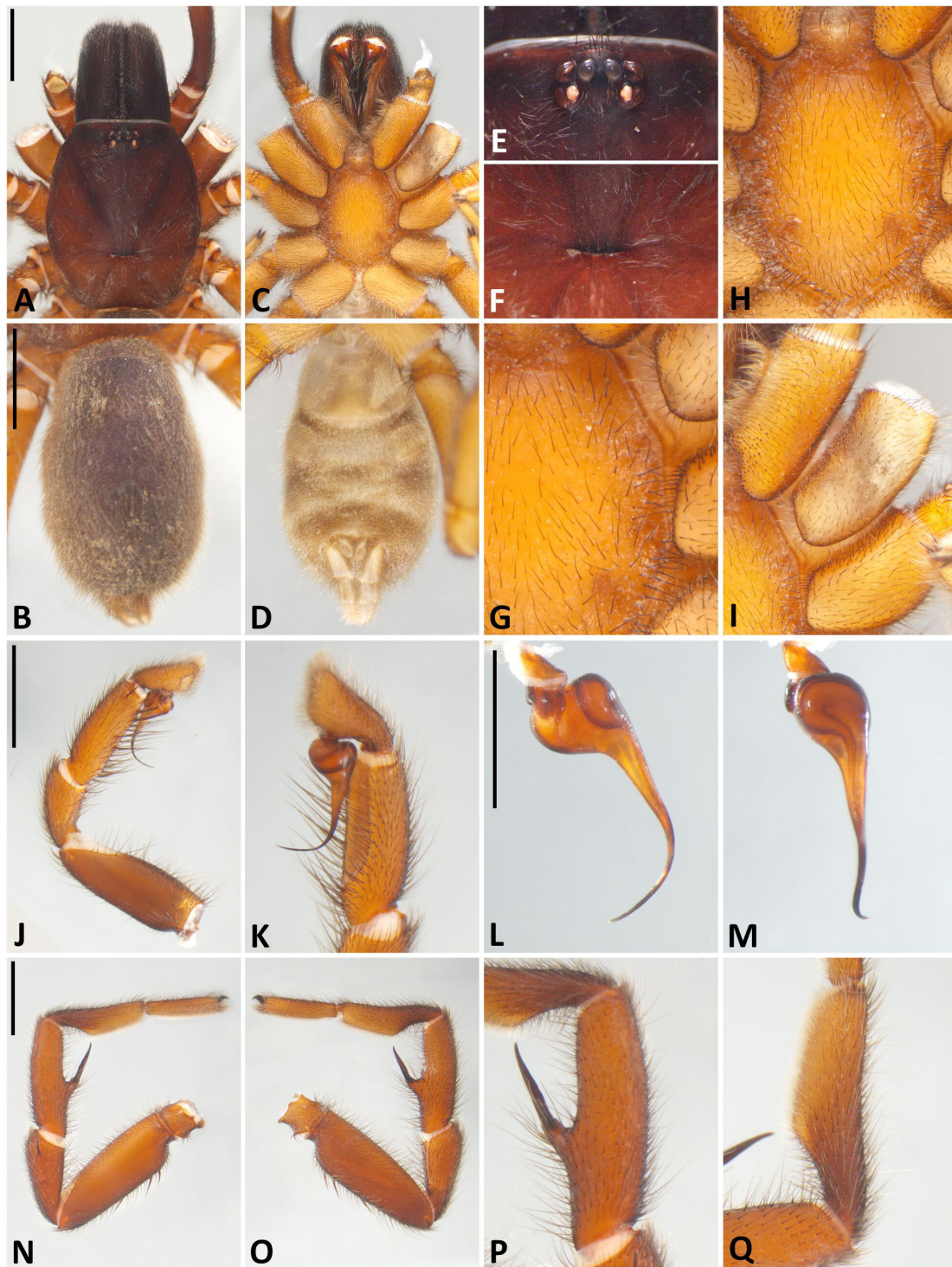


Fig. 108. *Aname consuelo* sp. nov., holotype, ♂ (QMB S58082). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J–K.** Left pedipalp, full prolateral view (J), partial retrolateral view (K). **L–M.** Right bulb, prolateral view (L), dorsal view (M). **N–Q.** Right leg I (images reflected), full prolateral view (N), full retrolateral view (O), retrolateral view of tibia (P), retrolateral view of metatarsus (Q). Scale bars: A–B, J, N=2 mm; L=1 mm.

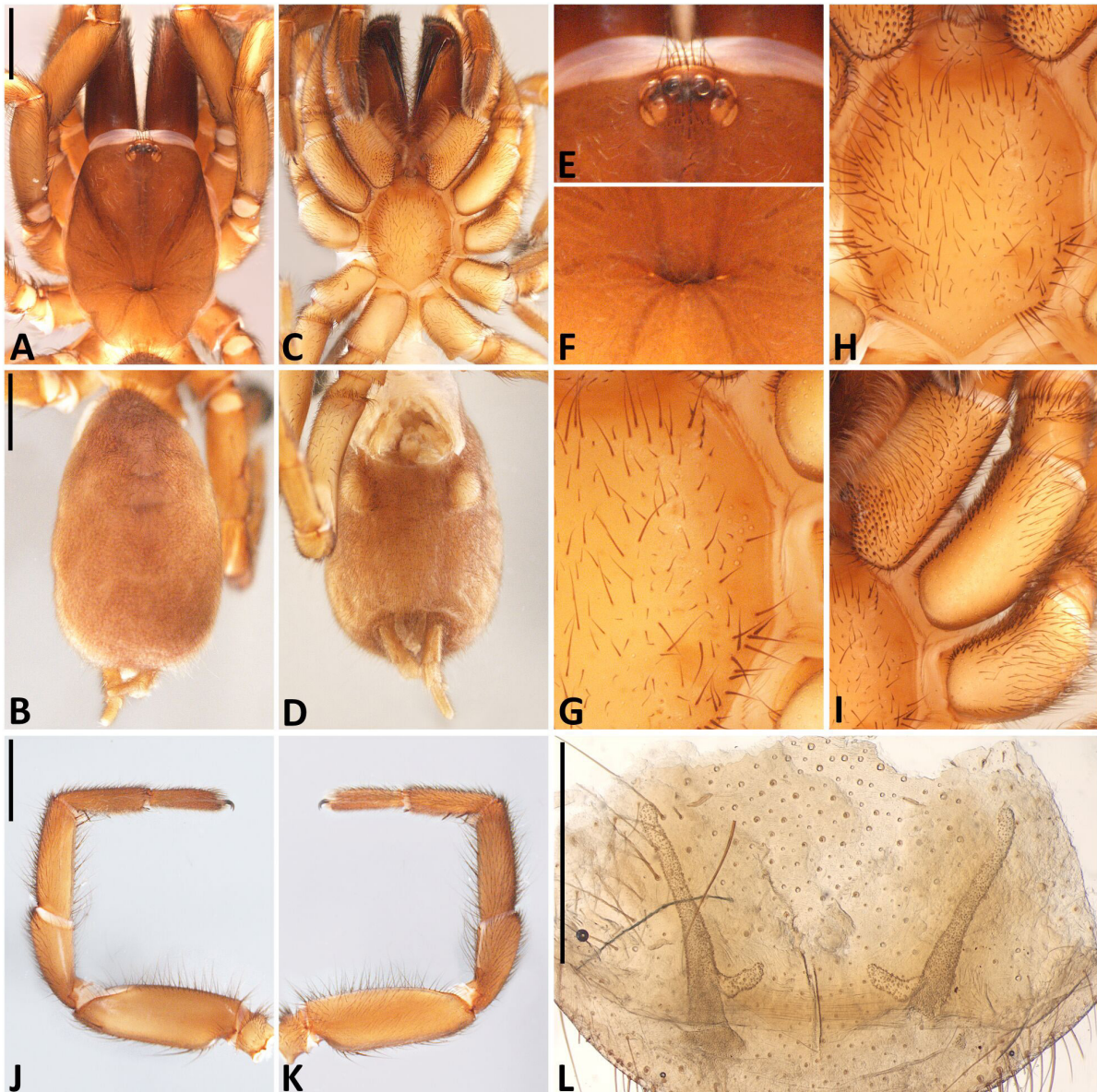


Fig. 109. *Aname consuelo* sp. nov., paratype, ♀ (QMB S59299). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J.** Left leg I, prolateral view. **K.** Left leg I, retrolateral view. **L.** Internal genitalia, dorsal view. Scale bars: A–B, J=2 mm; L=1 mm.

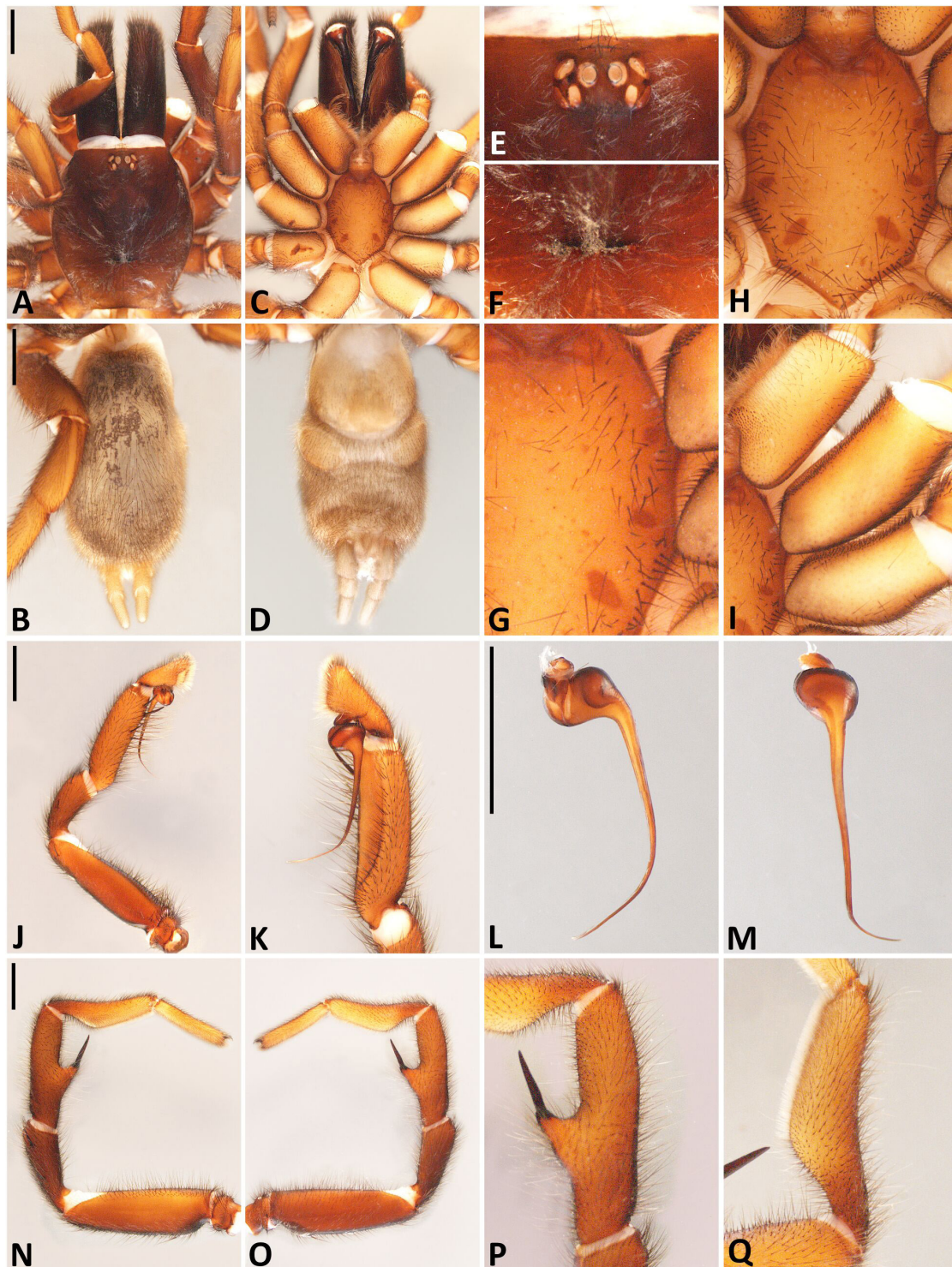


Fig. 110. *Aname distorta* sp. nov., holotype, ♂ (QMB S63018). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J–K.** Right pedipalp (images reflected), full prolateral view (J), partial retrolateral view (K). **L–M.** Right bulb, prolateral view (L), dorsal view (M). **N–Q.** Left leg I, full prolateral view (N), full retrolateral view (O), retrolateral view of tibia (P), retrolateral view of metatarsus (Q). Scale bars: A–B, J, L, N=2 mm.

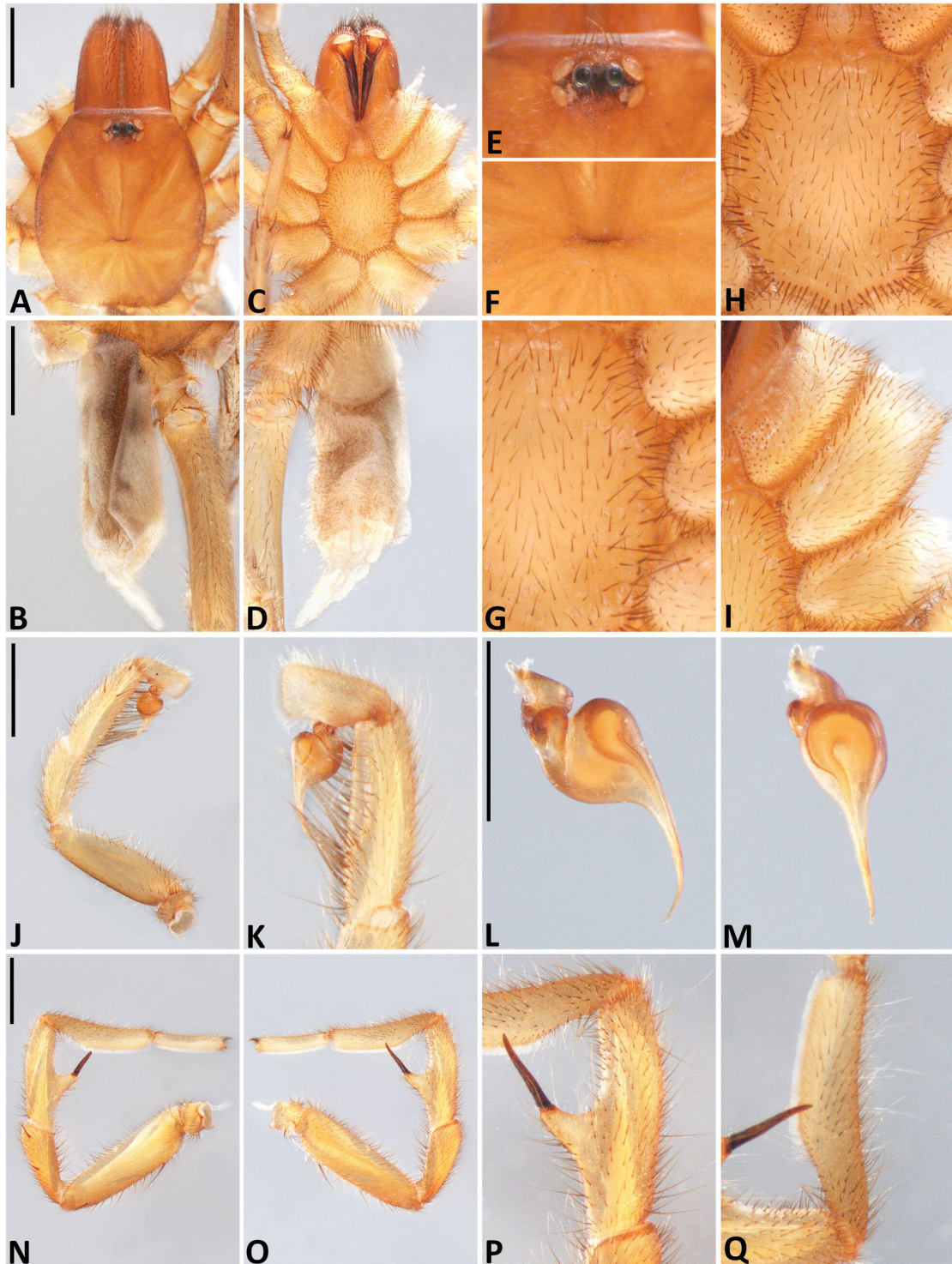


Fig. 111. *Aname ethabuka* sp. nov., holotype, ♂ (QMB S95216). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J–K.** Left pedipalp, full prolateral view (J), partial retrolateral view (K). **L–M.** Right bulb, prolateral view (L), dorsal view (M). **N–Q.** Left leg I, full prolateral view (N), full retrolateral view (O), retrolateral view of tibia (P), retrolateral view of metatarsus (Q). Scale bars: A–B, J, N=2 mm; L=1 mm.



Fig. 112. *Aname insolita* sp. nov., holotype, ♂ (QMB S46416). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J–K.** Left pedipalp, full prolateral view (J), partial retrolateral view (K). **L–M.** Right bulb, prolateral view (L), dorsal view (M). **N–Q.** Left leg I, full prolateral view (N), full retrolateral view (O), retrolateral view of tibia (P), retrolateral view of metatarsus (Q). Scale bars: A–B, J, N=2 mm; L=1 mm.

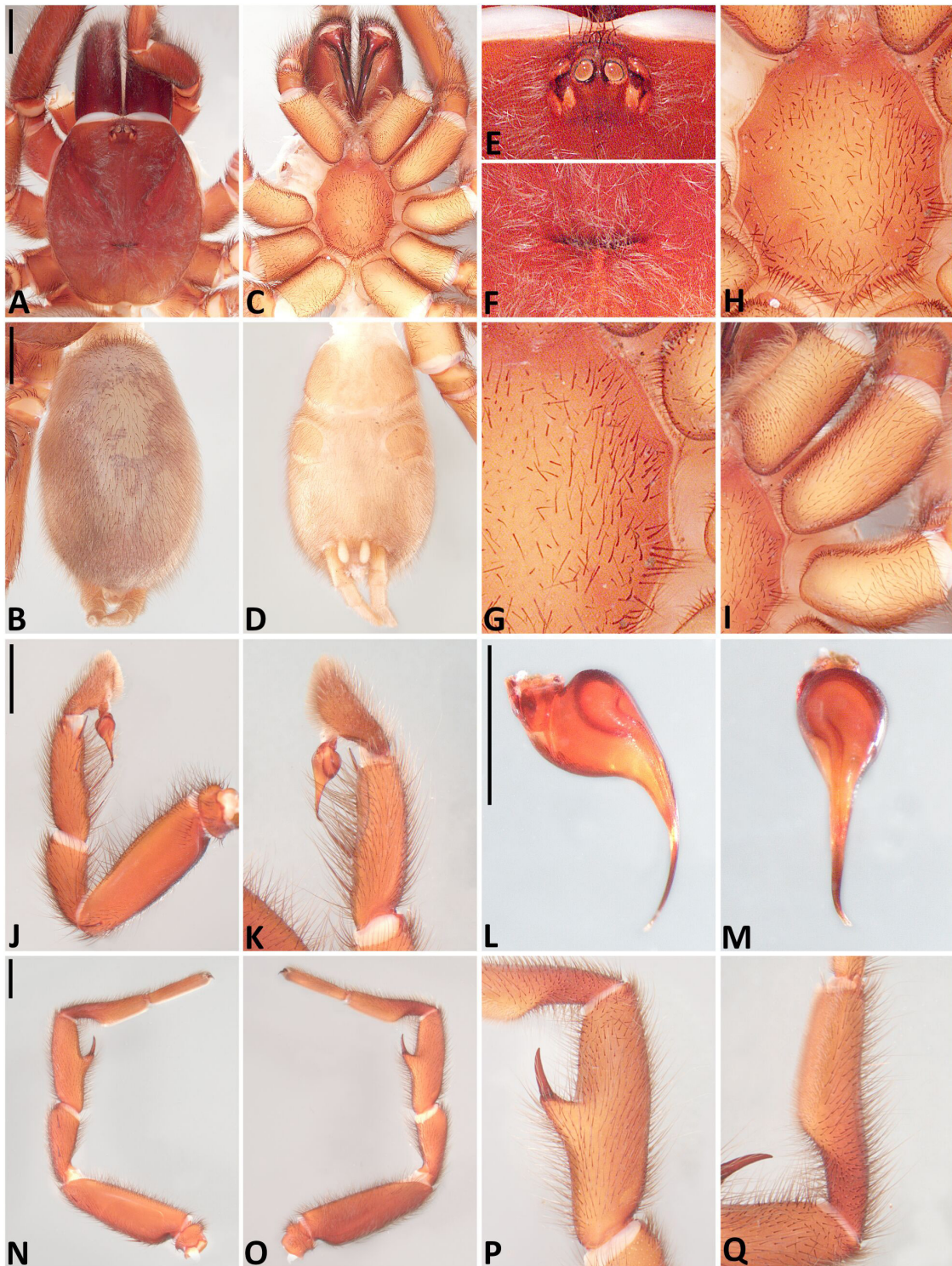


Fig. 113. *Aname lawrenceae* sp. nov., holotype, ♂ (QMB S58049). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J–K.** Left pedipalp, full prolateral view (J), partial retrolateral view (K). **L–M.** Right bulb, prolateral view (L), dorsal view (M). **N–Q.** Left leg I, full prolateral view (N), full retrolateral view (O), retrolateral view of tibia (P), retrolateral view of metatarsus (Q). Scale bars: A–B, J, N=2 mm; L=1 mm.

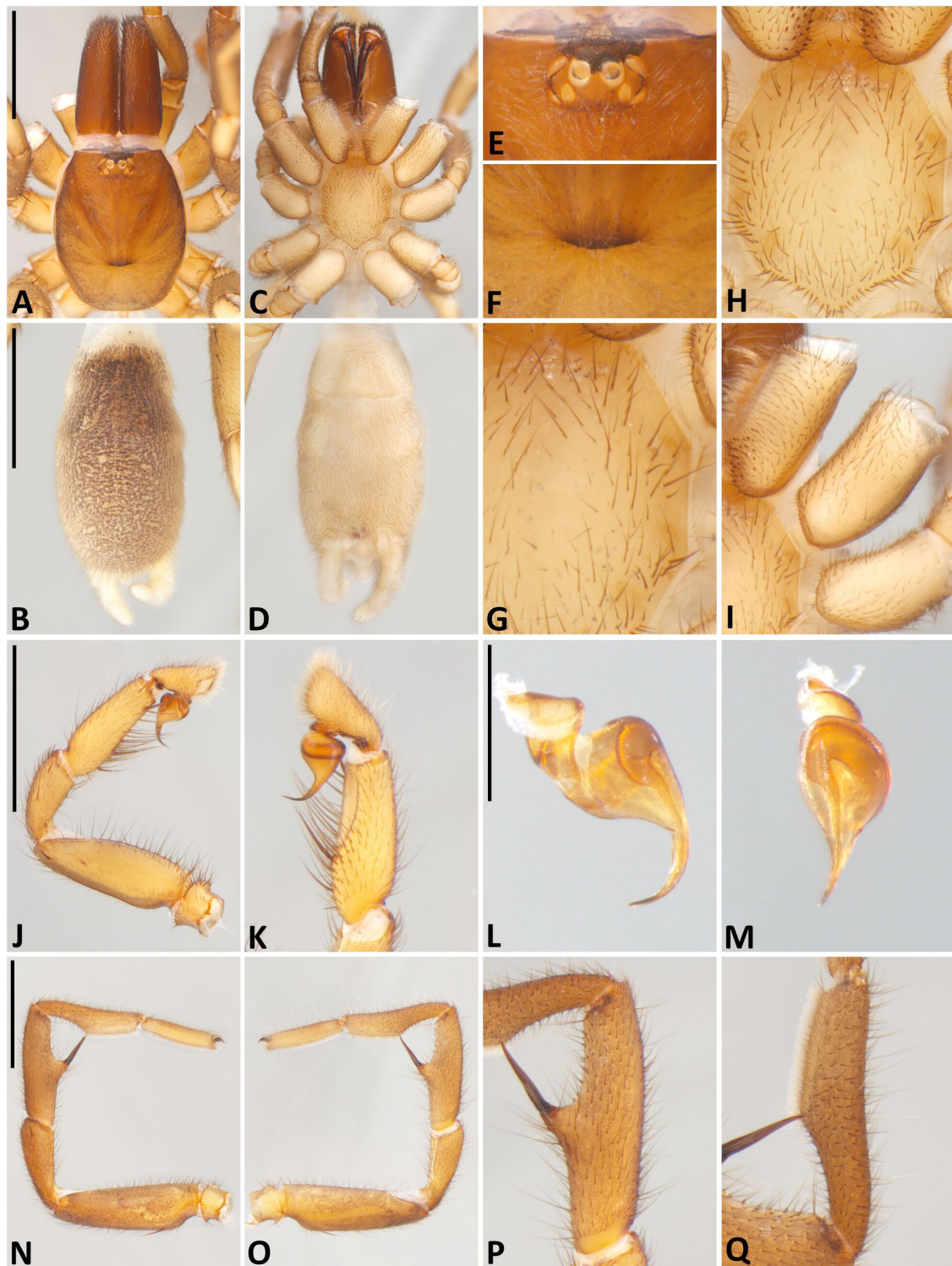


Fig. 114. *Aname litoralis* sp. nov., holotype, ♂ (QMB S85445). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J–K.** Left pedipalp, full prolateral view (J), partial retrolateral view (K). **L–M.** Right bulb, prolateral view (L), dorsal view (M). **N–Q.** Left leg I, full prolateral view (N), full retrolateral view (O), retrolateral view of tibia (P), retrolateral view of metatarsus (Q). Scale bars: A–B, J, N=2 mm; L=0.5 mm.

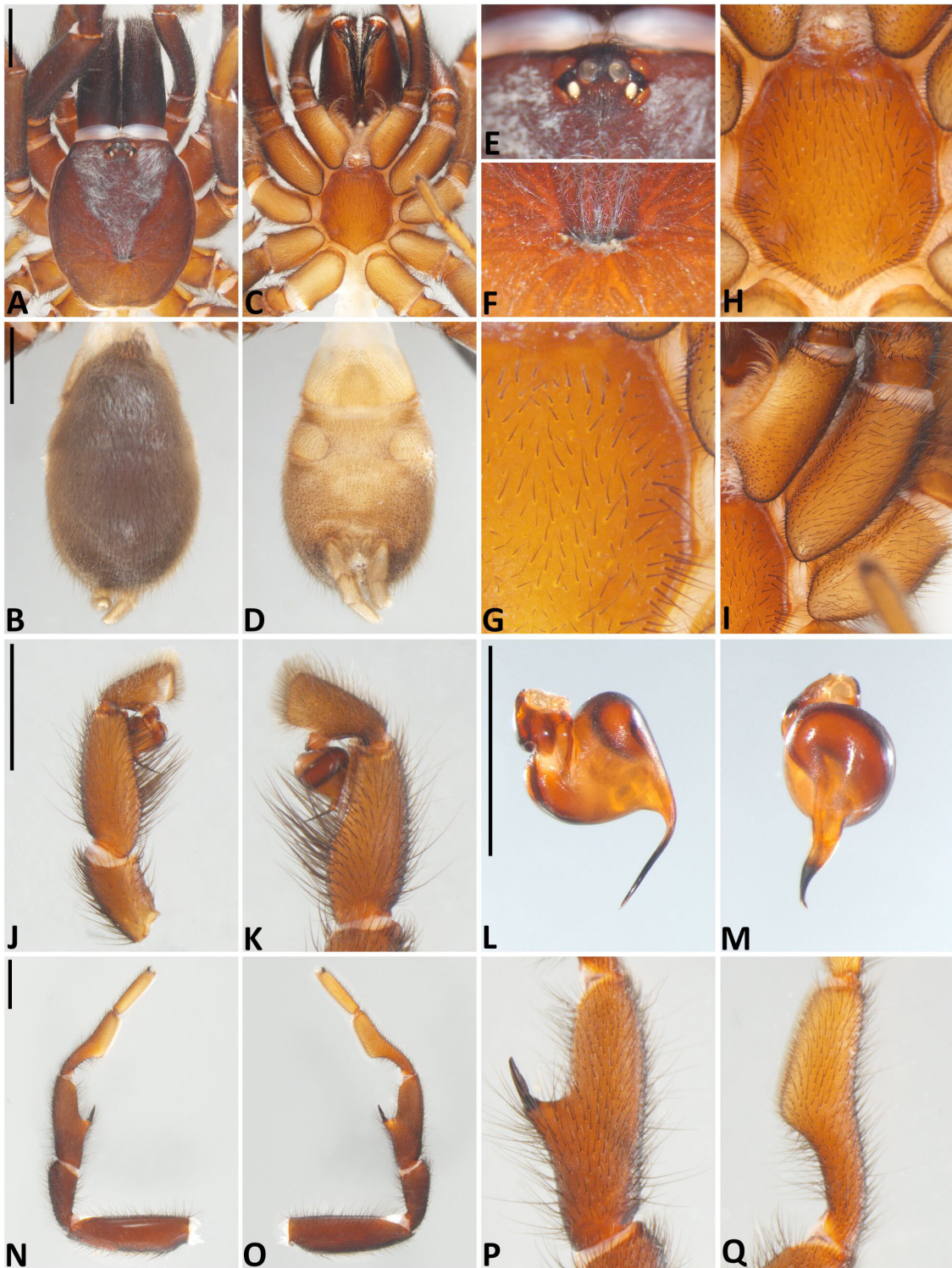


Fig. 115. *Aname namoi* sp. nov., holotype, ♂ (AMS KS77907). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J–K.** Left pedipalp, full prolateral view (J), partial retrolateral view (K). **L–M.** Right bulb, prolateral view (L), dorsal view (M). **N–Q.** Left leg I, full prolateral view (N), full retrolateral view (O), retrolateral view of tibia (P), retrolateral view of metatarsus (Q). Scale bars: A–B, J, N=2 mm; L=1 mm.

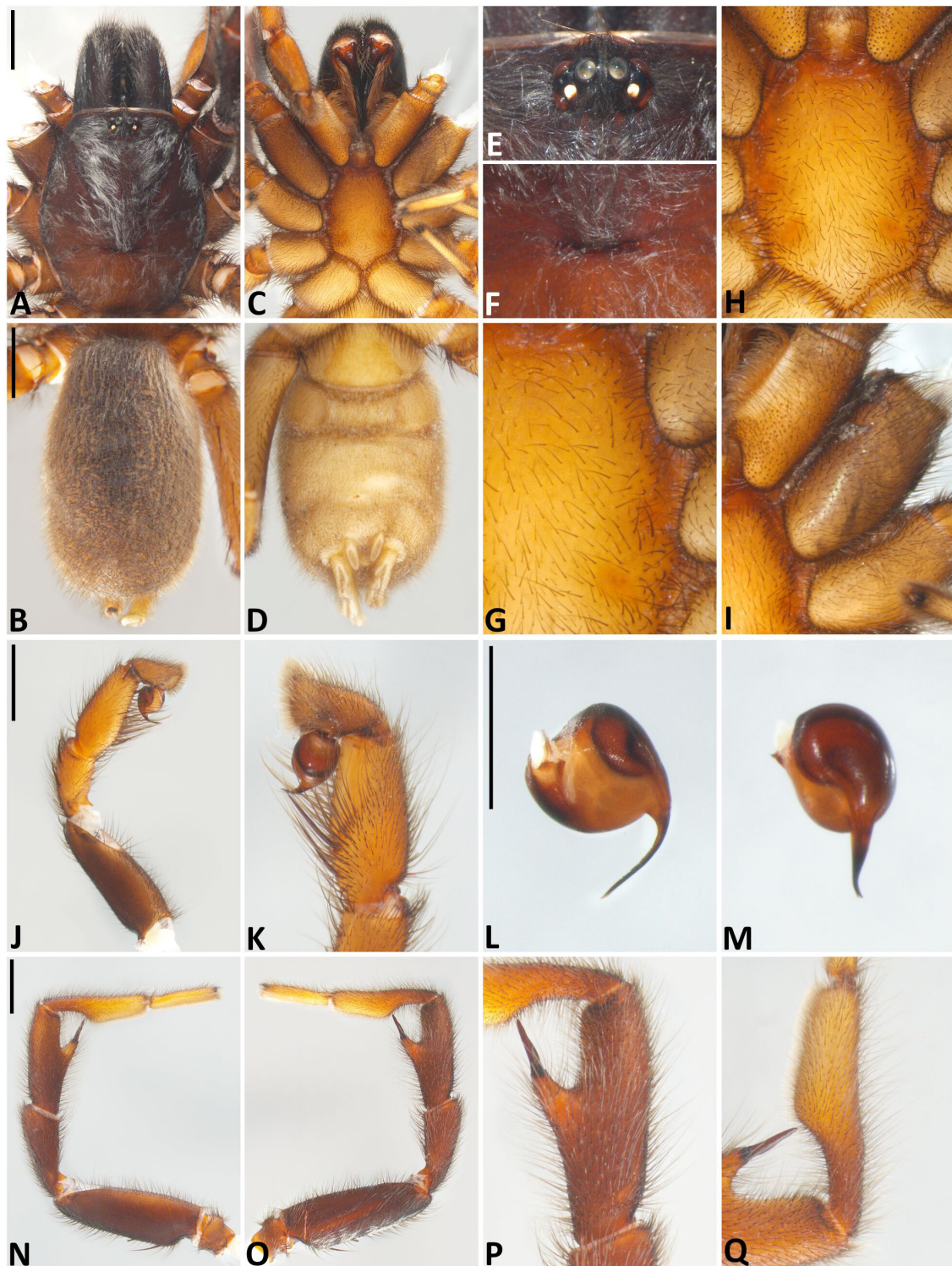


Fig. 116. *Aname olkola* sp. nov., holotype, ♂ (QMB S22650). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J–K.** Left pedipalp, full prolateral view (J), partial retrolateral view (K). **L–M.** Right bulb, prolateral view (L), dorsal view (M). **N–Q.** Left leg I, full prolateral view (N), full retrolateral view (O), retrolateral view of tibia (P), retrolateral view of metatarsus (Q). Scale bars: A–B, J, N=2 mm; L=1 mm.

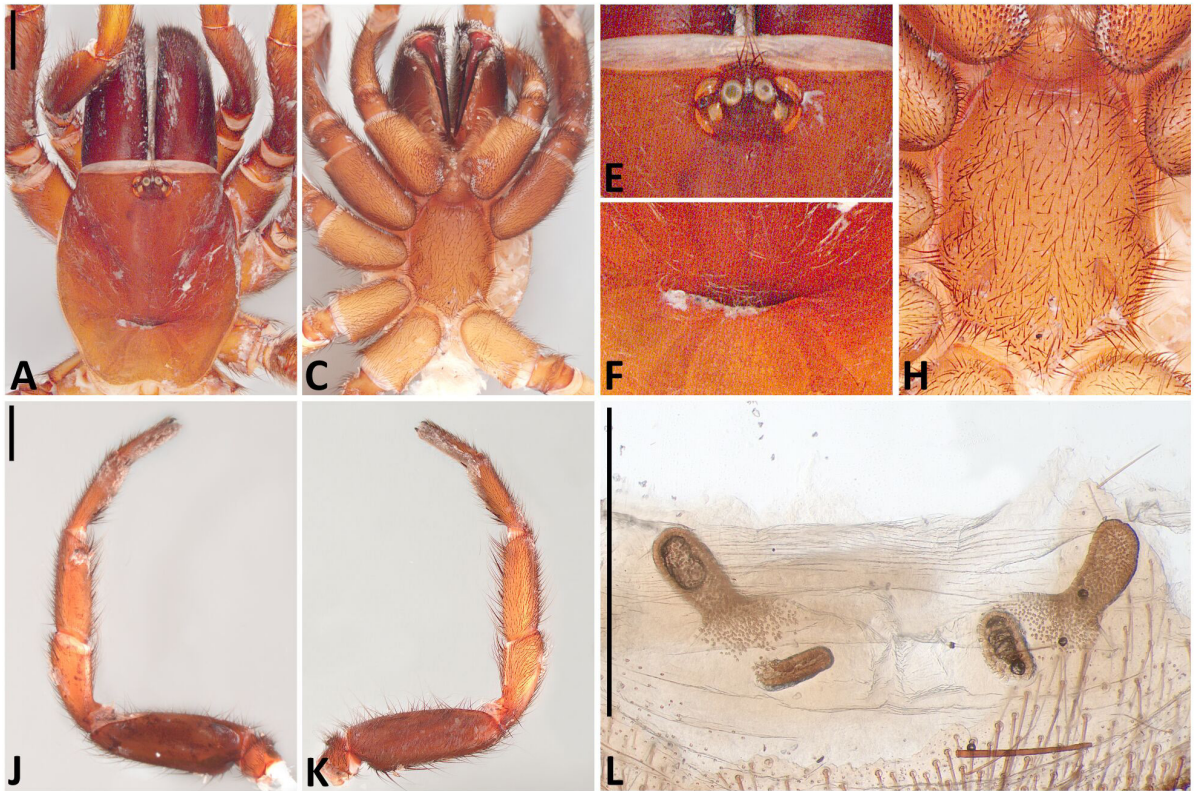


Fig. 117. *Aname olkola* sp. nov., paratype, ♀ (QMB S22010). **A.** Cephalothorax, dorsal view. **C.** Cephalothorax, ventral view. **E.** Ocular region. **F.** Fovea. **H.** Sternum and labium. **J.** Left leg I, prolateral view. **K.** Left leg I, retrolateral view. **L.** Internal genitalia, dorsal view. Scale bars: A, J, L=2 mm.



Fig. 118. *Aname serpentina* sp. nov., holotype, ♂ (QMB S118221). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J–K.** Left pedipalp, full prolateral view (J), partial retrolateral view (K). **L–M.** Right bulb, prolateral view (L), dorsal view (M). **N–Q.** Left leg I, full prolateral view (N), full retrolateral view (O), retrolateral view of tibia (P), retrolateral view of metatarsus (Q). Scale bars: A–B, J, N=2 mm; L=1 mm.

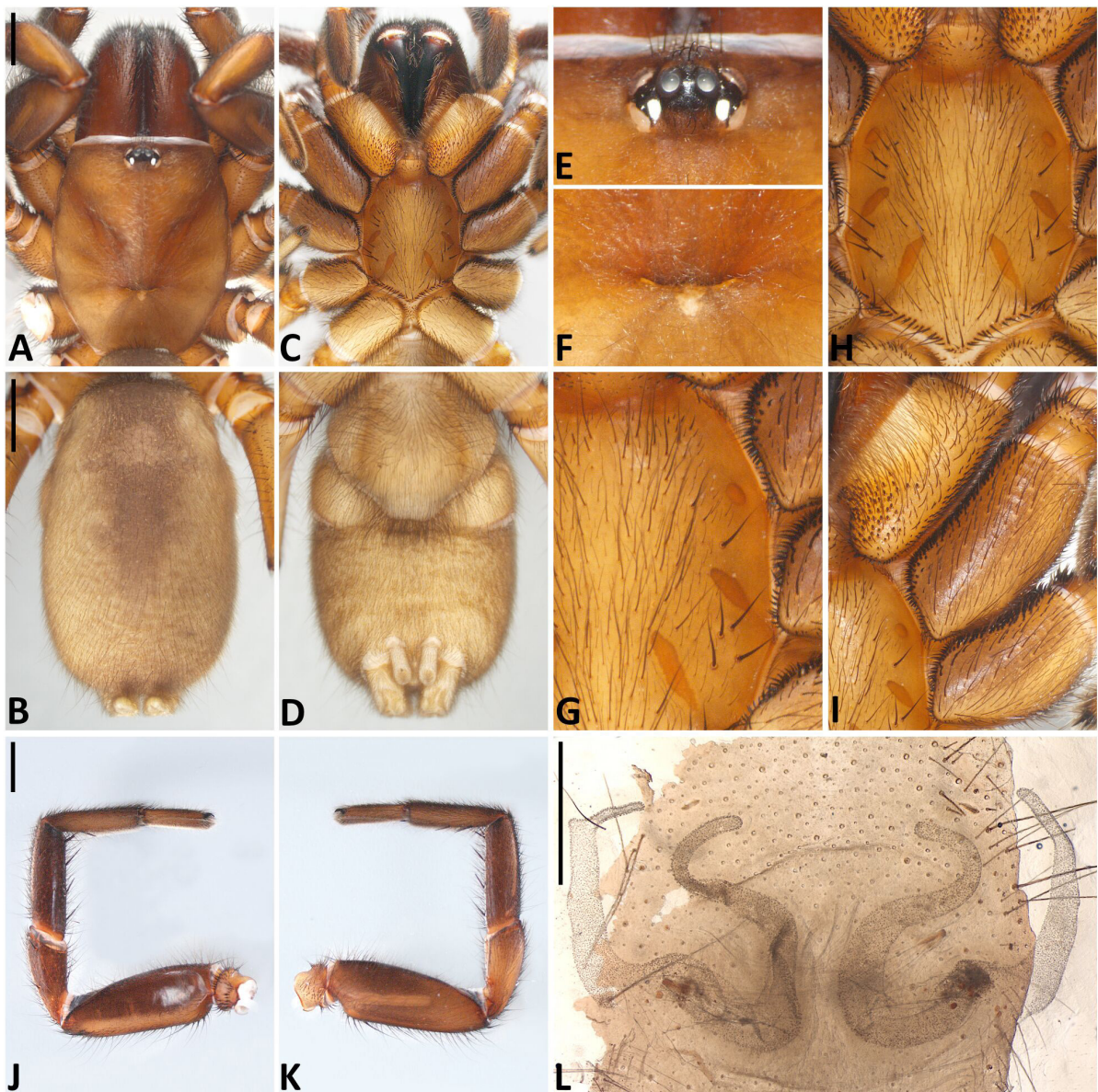


Fig. 119. *Aname serpentina* sp. nov., paratype, ♀ (QMB S118284). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J.** Left leg I, prolateral view. **K.** Left leg I, retrolateral view. **L.** Internal genitalia, dorsal view. Scale bars: A–B, J=2 mm; L=1 mm.



Fig. 120. *Aname viridiensis* sp. nov., holotype, ♂ (QMB S108682). **A.** Cephalothorax, dorsal view. **B.** Abdomen, dorsal view. **C.** Cephalothorax, ventral view. **D.** Abdomen, ventral view. **E.** Ocular region. **F.** Fovea. **G.** Sternal sigilla, left view. **H.** Sternum and labium. **I.** Maxilla and coxae I–II, left view. **J–K.** Left pedipalp, full prolateral view (**J**), partial retrolateral view (**K**). **L–M.** Right bulb, prolateral view (**L**), dorsal view (**M**). **N–Q.** Left leg I, full prolateral view (**N**), full retrolateral view (**O**), retrolateral view of tibia (**P**), retrolateral view of metatarsus (**Q**). Scale bars: **A–B**, **J**, **N**=2 mm; **L–Q**=1 mm.