

CHECK-LIST OF THE COLLEMBOLA OF
SOUTH AFRICAN PARKS (PART 1).

by

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The unspoilt nature of the vegetation and soils of our parks has allowed the rich variety of the natural insect fauna to flourish unhindered by destructive agricultural practices. The different climatic conditions to which the various parks are subject by reason of their geographical situations, also contribute to making innumerable ecological niches available to the insects.

The Collembola, with their wide ecological range, have apparently taken full advantage of the situation. They have been found in the soil, sometimes at a considerable depth, under and on fallen leaves and rotting remains of vegetation, on all parts of plants and even on and at the margins of pools and streams. The author has collected in all the National Parks, except the Golden Gate Highlands National Park, and in some of the Provincial Parks; due to necessary limitations on time it has not been possible to carry out more than a preliminary survey. The large amount of material that has been taken with very little effort indicates the large numbers and variety of species of Collembola present. This material includes many species which are new to science, mainly because South African Collembola have received very little attention from taxonomists. Only a few of the new species have so far been described by the author. The following check-list must therefore be regarded as representing only a small proportion of the Collembola in our parks, though the genus *Seira*, family Entomobryidae, has been treated relatively intensively.

Suborder ARTHROPLEONA

Family ONYCHIURIDAE

Mesaphorura kilimanjarica Del. Deb., 1953

Kruger National Park: under dead leaves, Kloppefontein, N. 25.

Family HYPOGASTRURIDAE

Xenylla rhodesiensis Womersley, 1926

Kruger National Park: under reeds in vlei, N. 151.

Hypogastrura armata (Nicolet, 1841)

Addo Elephant National Park: on reeds and also in soil, Caesar's Dam.

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Suborder NEOARTHROPLEONA

Family BRACHYSTOMELLIDAE

Brachystomella parvula (Schaeffer, 1896)

Kruger National Park: under rotting leaves of *Bougainvillea* sp. and under *Portulacaria afra*, Shingwidzi Rest Camp; under *Hyphaene crinita*, Shingwidzi River.

Family ISOTOMIDAE

Isotomina thermophila (Axelson, 1900)

Tsitsikama Forest and Coastal National Park: under fallen oak leaves, near conservator's house and under rotting leaves, Storms River Mouth.

Family ENTOMOBRYIDAE

Seira tsikama Coates, 1968

Tsitsikama Forest and Coastal National Park: under oak leaves; from rotting leaves, Storms River Mouth and in litter in indigenous forest.

Seira anncla Coates, 1968

Tsitsikama Forest and Coastal National Park: on grass next to the sea. Mountain Zebra National Park: on unidentified shrub.

Seira rowani Yosii, 1959

Tsitsikama Forest and Coastal National Park: on *Passerina* sp. and on unidentified shrub, Storms River Mouth.

Seira vaneedeni Coates, 1968

Mkuze Game Reserve (Natal Parks Board): under dead leaves, on grass and on *Grewia occidentalis* L.

St. Lucia (Natal Parks Board): Charters Creek and Fanie's Island on *Phyllanthus reticulatus*.

Oribi Gorge (Natal Parks Board): on grass.

Seira mathewsi Coates, 1968

Bontebok National Park: on *Chondropetalum nudum* and on *Serruria fucifolia*.

Mountain Zebra National Park: on *Grewia* sp. and on grass on mountain near hut.

Seira annulicornis (Borner, 1903)

Kruger National Park: Klopperfontein, in soil around pool.

Seira addoensis Coates, 1968

Addo Elephant National Park: in antelope camp, under grass and on top of soil; on *Euclea undulata*.

Seira barnardi (Womersley, 1934)

Tsitsikama Forest and Coastal National Park: on *Passerina* sp.

Seira grisea (Womersley, 1934)

Bontebok National Park: on *Elytropappus rhinocerotis*.

Seira damerella Coates, 1968

Kruger National Park: under dead leaves, Letaba River, N. 237 and under *Hyphaene crinita*, Shingwidzi Rest Camp.

Seira marephila Coates, 1968

Bontebok National Park: on *Rhus undulata*, *Serruria fucifolia* and under rotting wood.

Tsitsikama Forest and Coastal National Park: on unidentified shrubs and under rotting leaves, Storms River Mouth.

Seira lindei Coates, 1968

Mountain Zebra National Park: from rotting leaves and grass in stream.

Addo Elephant National Park: in antelope camp on grass.

Seira munroi (Paclt, 1959)

Kalahari Gemsbok National Park: Twee Rivieren, in ants' nests.

Seira eleana Coates, 1968

Kruger National Park: under dead leaves, N. 41; under rotting leaves, Shingwidzi Rest Camp; from soil, Klopperfontein; under elephant droppings, Shingwidzi; under dead leaves, Letaba River, N. 237 and also N. 216.

Lepidokrugeria meyeri Coates, 1969

Kruger National Park: under dead leaves, Letaba River, N. 237 and under *Portulacaria afra*, Shingwidzi Rest Camp.

Entomobrya nivalis (Linnaeus, 1758)

Tsitsikama Forest and Coastal National Park: from rotting leaves in indigenous forest, Storms River.

Suborder SYMPHYPLEONA

Family SMINTHURIDAE

Prorastrioptes webbi (Paclt, 1964)

Kruger National Park: under rotting leaves of *Bougainvillea* sp., Shingwidzi Rest Camp.

Mountain Zebra National Park: on *Diospyros austroafricana* var. *microphylla* and on unidentified shrub on top of mountain near beacon.

The following species have been reported by Paclt (1959) from the localities mentioned:

Suborder ARTHROPLEONA

Family ONYCHIURIDAE

Cape Point Nature Reserve (Cape Provincial Administration) and at Royal Natal National Park (Natal Parks Board): *Tullbergia* (*Mesaphorura*) *kilimanjarica* (Del. Deb., 1953).

Family HYPOGASTRURIDAE

Cape Point Nature Reserve (Cape Provincial Administration): *Hypogastrura purpurescens* (Lubbock, 1868), *H. armata* (Nicolet, 1841), *Choreutina libyca* (Caroli, 1914) and *Xenylla maritima* Tullberg, 1869.

Suborder NEOARTHROPLEONA

Family BRACHYSTOMELLIDAE

Cape Point Nature Reserve (Cape Provincial Administration): *Brachystomella parvula* (Schaeffer, 1896).

Royal Natal National Park (Natal Parks Board): at Champagne Castle, *Odontella empodialis* Stach, 1934.

Family NEANURIDAE

Royal Natal National Park (Natal Parks Board): at Champagne Castle, *Neanura montana* (Handschin, 1929) and *Ceratrimeria allaudi* (Del. Deb., 1946); at Gudu Falls and at Cathkin Peak, *C. allaudi*.

Family ISOTOMIDAE

Mkuze Game Reserve (Natal Parks Board): *Isotomurus palustris* (O. F. Muller, 1776).

Royal Natal National Park (Natal Parks Board): at Champagne Castle, *Folsomides americanus* Denis, 1931, *Cryptopygus caecus* Wahlgren, 1906 and *Sorensia finitima* (Scerbakov, 1899).

Cape Point Nature Reserve (Cape Provincial Administration): *Proisotoma minuta* (Tullberg, 1871), *P. africana* Womersley, 1934 and *Isotoma notabilis* Schaeffer, 1896.

Suborder SYMPHYPLEONA

Family SMINTHURIDAE

Royal Natal National Park (Natal Parks Board): at Champagne Castle, *Katianna kerguelensis* Denis, 1947 and *Sphyrotheca prodigiosa* (Yosii, 1954).

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REFERENCE

- PACLT, J. 1959. Collembola. in HANSTROM, *et al.* *South African Animal Life* 6:24-78. Stockholm: Almqvist and Wiksell.