

SOUTH AFRICAN LEPIDOPTERA, 2.

Descriptions of new species of Hypeninae from the
Kruger National Park (Noctuidae)

by
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In March, 1952 Dr. A. J. T. Janse and the present author initiated the insect survey of the Kruger National Park. During this first expedition many thousands of insects, mainly Heterocera, were collected and comprise numerous new and otherwise interesting species, some of which will be described in this paper.

It was not until recently, November 1961, that this survey was again taken up and it is hoped to carry it on at more or less regular intervals, so as to obtain a fairly complete picture of the insect world of this park. On account of the marvellous flora of the park which obviously must support a rich insect fauna, it is urgent and worth-while to continue the research work on insects as to inventory the treasures of the Kruger National Park. No wonder that the results obtained are very much encouraging, since very little collecting was done in this area so far and also because of new methods applied in collecting insects. These methods include the collecting with a mercury vapour lamp and the collecting of leafmining insects. Most of the leafmining Lepidoptera fly in day time only and on account of their small size they easily escape our notice and are consequently rarely observed. The following new species were collected in the Kruger National Park and recently described: *Epicephala homostola* Vári, *E. haplodoxa* Vári, *Liocrobyla tephrosiae* Vári and *L. grewiella* Vári.

No doubt that many more new species will be found and subsequently dealt with in further papers.

Naarda flavisignata spec. nov.

Plate 1, fig. 1; text figs. 1 and 2

♂ and ♀, 13-15 mm. Head and labial palpi dark fuscous; antennae fuscous, in male strongly bipectinated, pectination near base of antenna four times diameter of shaft, becoming gradually shorter towards tip of antenna, in female finely ciliated. Abdomen and legs fuscous, coxae dark fuscous, inner

side of legs and tarsi pale straw-yellow. Thorax and forewings along costa dark fuscous, fore- and hindwings fuscous; orbicular and reniform orange-yellow, orbicular small, reniform irregularly oval; antemedial, medial and postmedial lines dark fuscous, ante- and postmedial narrow, medial slightly thicker, subterminal faintly indicated, greyish, terminal blackish; cilia dark fuscous. Hindwings fuscous, medial and postmedial lines dark fuscous, faintly indicated in costal half. Underside of fore- and hindwings greyish, irrorated with dark fuscous along costa, hindwing with discoidal spot, antemedial, medial and postmedial fasciae faintly indicated.

♂-*Genitalia* : Tegumen moderate, sclerotized, vinculum narrow; uncus short, slightly sinuate, suddenly tapering to a sharp curved point; tuba analis long, with an upcurved, median, sclerotized ridge dorsally; valvae moderate, oblong, costa sinuate, cuculus rounded, set with some fine bristles, posterior edge incurved and with a small, projecting tooth; sacculus well developed, projecting at apex, with fine bristles; saccus small, rounded; aedoeagus moderate, well sclerotized, tubular, carina penis with four small teeth, mid-ventrally with five teeth before apex, no cornuti; juxta moderate, with two large rounded lobes. Slide no. G 7815, holotype, fig. 1.

♀-*Genitalia* : Papillae anales moderately sclerotized, subtriangular, finely haired, apophyses long, narrow, almost straight; antapophyses two-fifths of apophyses, triangular at base; lamella postvaginalis sclerotized, with rounded lobes posteriorly; tuba analis with two oblong, scobinate patches ventrally; ostium bursae membranous, simple, ductus bursae bifurcate, well sclerotized, with longitudinal ridges; corpus bursae membranous, projection of corpus bursae with two large areas set with very fine spines on the inside. Slide no. G 7816, allotype, fig. 2.

Remarks : This new species is closely resembling some specimens which are identified as *N. tandonana* B.Bak., but differs from it in the ♂-genitalia by having more teeth on the aedoeagus and the ♀-genitalia being slightly smaller, the sclerotized oblong patches on tuba analis stronger developed and the ductus bursae narrower.

Distribution : Lower Sabi (K.N.P.), 26.III.1952 (Janse and Vári), holotype; Pretorius Kop (K.N.P.), 6-7.IV.1952 (L. Vári), allotype; Lower Sabi, 26.III.1952, Pretorius Kop, 22 and 31.III, and 1.IV.1952, and Skukuza (K.N.P.), 23.III.1952 (Janse and Vári); eight ♂- and five ♀-paratypes.

Rhynchina poecilopa spec. nov.

Plate 1, fig. 2; text figs. 3 and 4

♂ and ♀, 19-22 mm. Head, patagia, tegulae and thorax whitish-grey, irrorated with yellowish and some blackish scales; labial palpi yellowish-grey, mixed with white and blackish scales, second and third segments loosely scaled above, scales with white tips; antennae pale grey with fuscous rings, in male with cilia almost twice diameter of shaft, in female simple; patagia with a

white margin. Abdomen yellowish above, underside whitish-yellow and mixed with some fuscous scales above and beneath. Legs pale yellowish, fore and middle legs suffused with fuscous, apices of tarsi white; middle tibiae of male with a pencil of grey hairs in groove on outer side. Forewings pale grey with a slight violetish tinge, in basal third an oblique, ochreous fuscous streak, antemedial line usually indistinct, whitish, sharply bent inwards at two-thirds and with a small tuft of raised scales at angle; in middle of cell an ochreous fuscous patch with a small black spot basally and a tuft of raised scales on discocellular; postmedial line fine, black, very oblique from costa at two-thirds directed towards the whitish fascia, then acutely curved downwards and running in a straight line to the inner margin, edged with pale yellow inwardly and with ochreous fuscous outwardly; a straight fascia containing the greater part of postmedial line from just before apex on costa to middle of inner margin; terminal area strongly suffused with ochreous fuscous, irrorated with black scales and edged with a fine black line along hindmargin; in this area eight to nine small tufts of raised scales, those along the fascia with black scales; tips of veins 2-7 marked with grey and black scales; cilia grey, mixed with fuscous, a white line along base and beyond middle, at tornus a little longer and mixed with black scales. Hindwings in male fuscous, a little paler towards base; in female slightly darker; cilia pale yellowish-grey in basal half, along hindmargin mixed with fuscous. Underside of fore- and hindwings pale yellowish-grey, forewings suffused with fuscous, tips of veins 8-11 white at costa; hindwings finely irrorated with fuscous scales, cilia as above.

♂-*Genitalia* : Tegumen moderate, well sclerotized, vinculum narrow; uncus long, slightly curved at base, with sharp-pointed apex, finely haired; tuba analis very wide at base, membranous; valvae long, rather narrow, finely haired, near base at costa a moderate tooth, costa slightly curved, cuculus rounded, sacculus weakly sclerotized; ampulla straight, well sclerotized and with a sharp-pointed tooth at apex; saccus pointed; aedoeagus moderate, with a slightly curved, well sclerotized dorsal spine, ventrally with four shorter spines, coecum penis narrow; juxta a rather narrow, semicircular band. Slide no. G 7834, holotype, fig. 3.

♀-*Genitalia* : Papillae anales moderate, weakly sclerotized, suboval, finely long-haired, apophyses moderate, narrow, basal third a little wider; slightly curved, antapophyses one-sixth of apophyses, slightly curved; lamella postvaginalis well sclerotized, with projecting edge posteriorly; ostium bursae strongly sclerotized with projecting lobes laterally, ductus bursae immediately merging into corpus bursae which has two irregularly shaped, sclerotized patches and a slight scobination between them. Slide no. G 7819, allotype, fig. 4.

Remarks : Closely related to *Rh. leucodonta* Hmps., but smaller and forewings more variegated; ♂- and ♀-genitalia differ in a number of details.

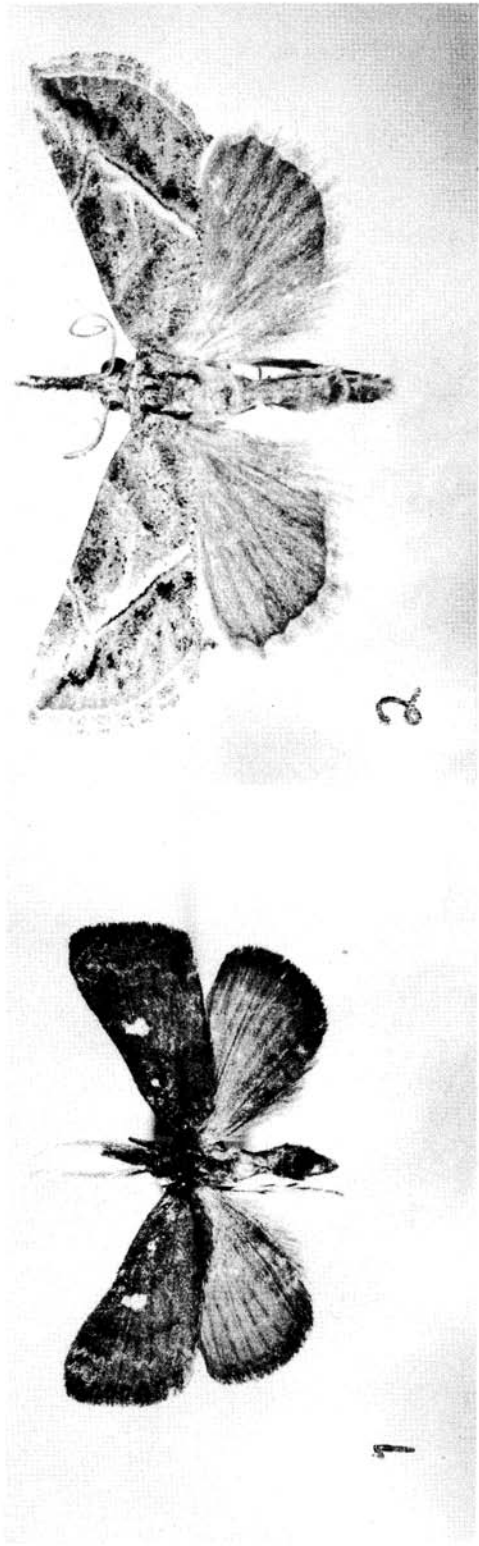
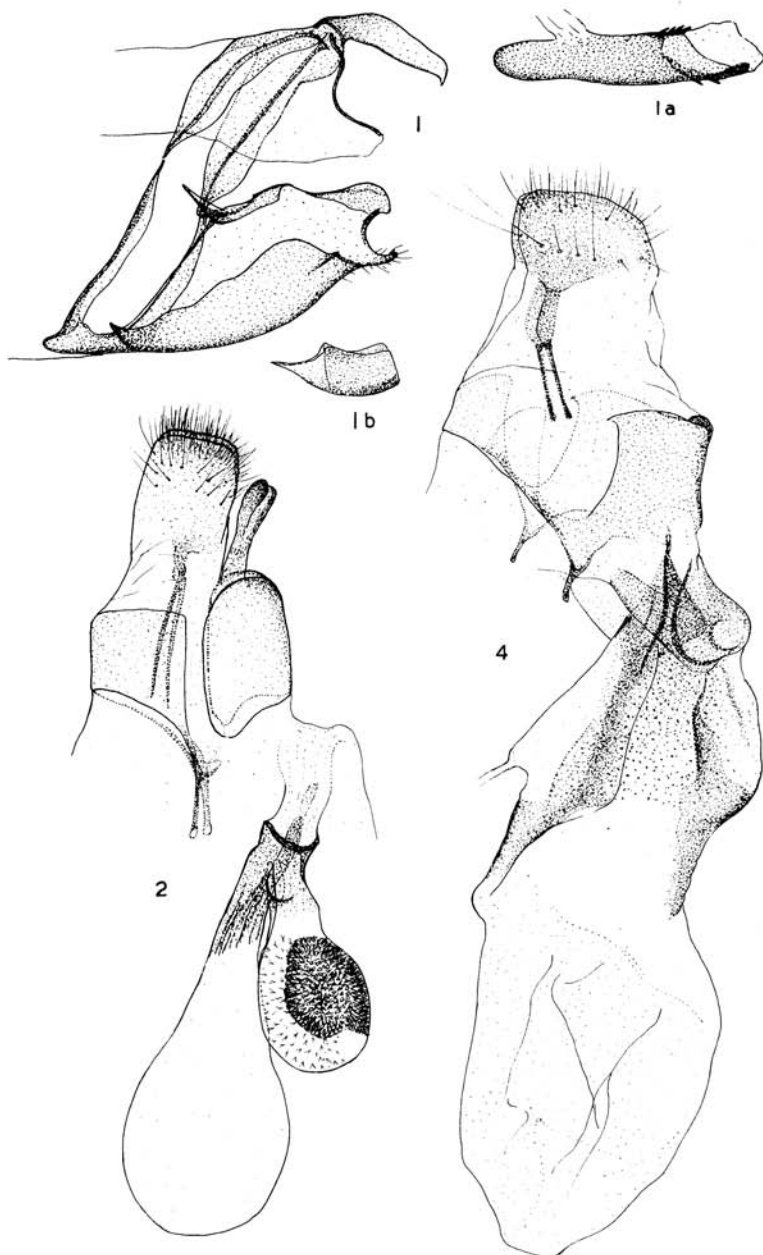


Fig. 1: *Naarda flavisquata* spec. nov.; fig. 2: *Rhynchina poecilopa* spec. nov.; fig. 3: *Rh. antistrophe* spec. nov.; fig. 4: *Rh. coniodes* spec. nov.



Figs. 1 and 2: *Naarda flavisignata* spec. nov.; fig. 1. ♂-genitalia, 1a. aedeagus, 1b. juxta; fig. 2. ♀-genitalia.

Fig. 4: *Rhynchina poecilopa* spec. nov., ♀-genitalia.

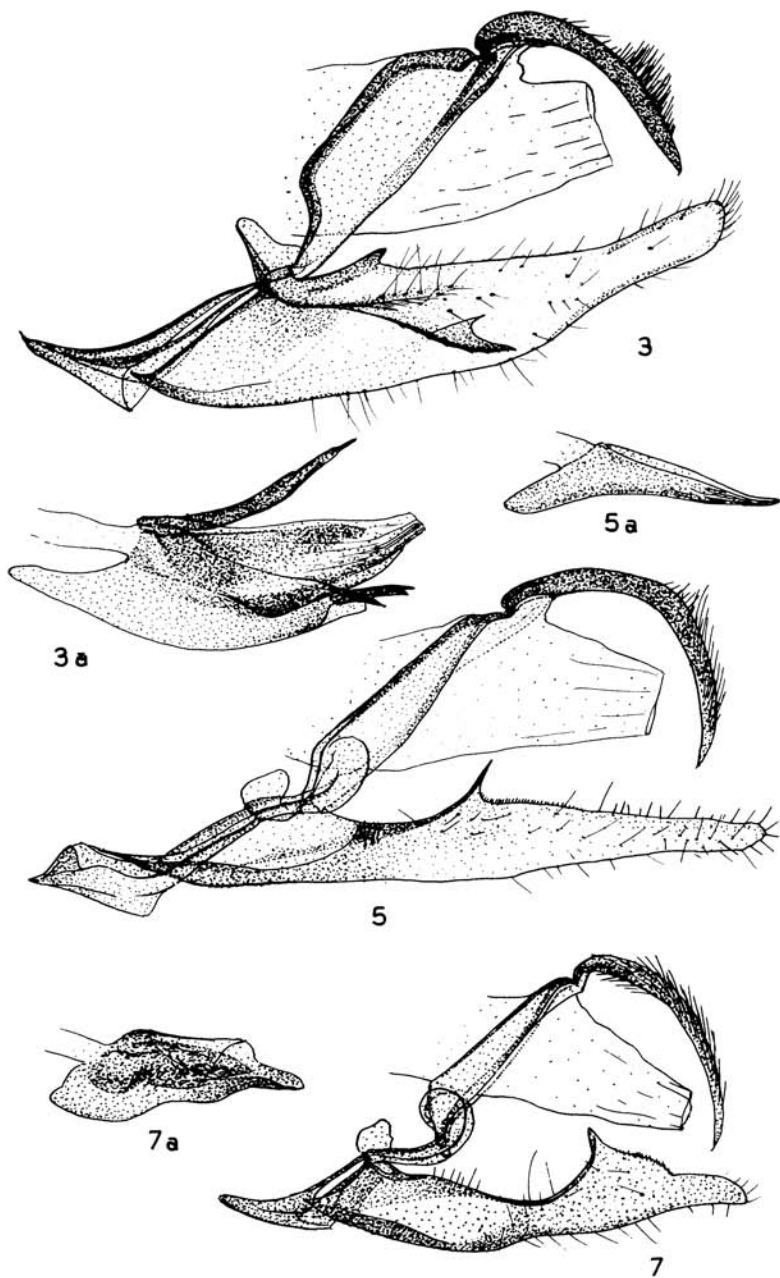


Fig. 3: *Rhynchina poecilopa* spec. nov., ♂-genitalia, 3a aedeagus; Fig. 5: *Rh. antistropha* spec. nov., ♂-genitalia, 5a aedeagus; fig. 7: *Rh. coniodes* spec. nov., ♂-genitalia, 7a aedeagus.

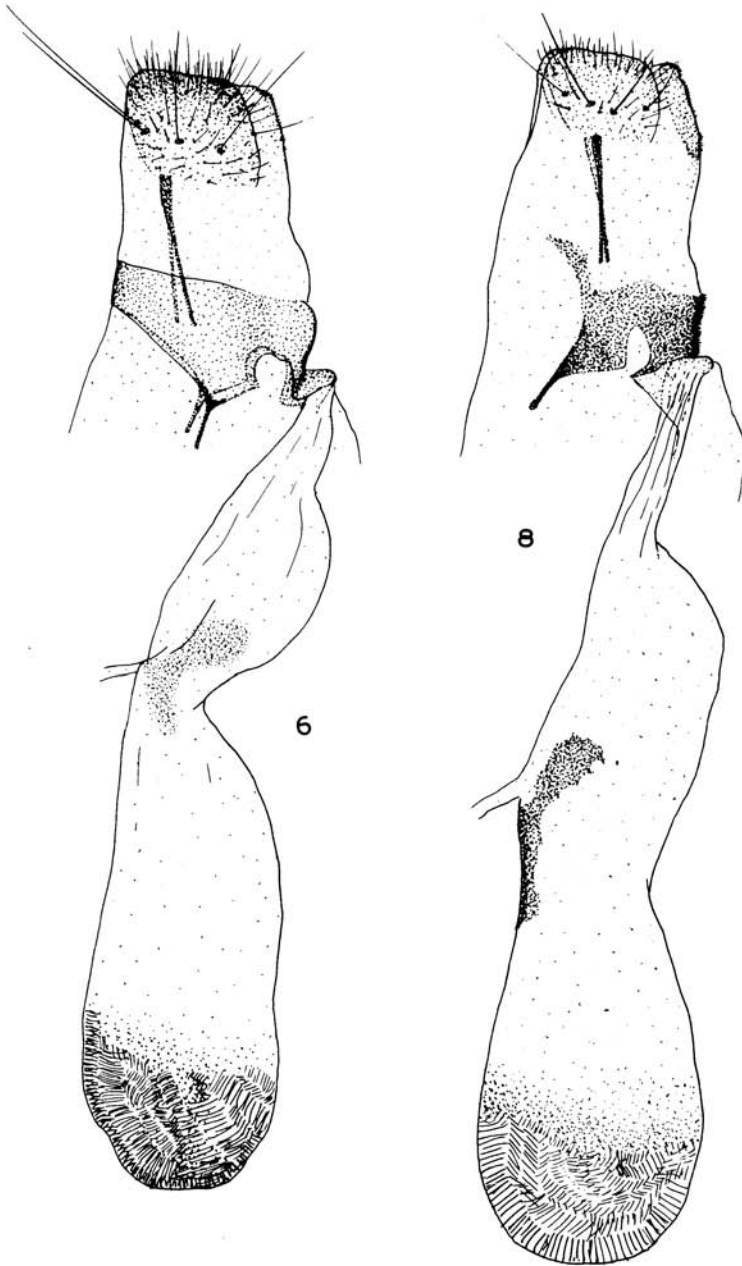


Fig. 6: *Rhynchina antistropha* spec. nov., ♀-genitalia; fig. 8: *Rh. Coniodes* spec. nov., ♀-genitalia.

Distribution: Pretoria North (Tvl.), 21.XII.1916 (C. J. Swierstra), holotype; Pretorius Kop (K.N.P.), 1.IV.1952 (L. Vári), allotype; Pretoria North, 11.I to 20.III.1917 (C. J. Swierstra); Kranspoort (Bronkhorstspuit Distr., Tvl.), 21.XII.1906 (A. J. T. Janse); Naboomspruit (Potgietersrus Distr., Tvl.), 8.I.1927 (G. van Son); Potgietersrus (Tvl.), 23 and 24.XII.1925 (A. J. T. Janse); Chuniespoort (Pietersburg Distr., Tvl.), 30.XII.1925 (idem); Umtali (S.Rhod.), 4 and 11.I.1918 (idem); 14 ♂ - and five ♀-paratypes.

Rhynchina antistropa spec. nov.

Plate 1, fig. 3; text figs. 5 and 6

♂ and ♀, 17-19 mm. Head, patagia, tegulae and thorax pale yellowish, irrorated with fuscous and blackish scales; labial palpi as head and thorax, first segment whitish with a fine black dot near apex on outer side, second and third segments loosely scaled above; antennae pale yellowish fuscous, with indistinct paler rings, in male with cilia twice diameter of shaft, in female simple. Abdomen fuscous above, underside pale yellowish, irrorated with fuscous. Legs pale yellowish, finely irrorated with fuscous, fore and middle legs suffused with dark fuscous, middle tibiae of male with a long pencil of yellowish hairs in a groove on outer side, tarsal segments 2-5 of hind legs dark fuscous on outer side, apices pale yellowish. Forewings grey, finely sprinkled with black scales, general pattern and arrangement of tufts as in *Rh. poecilopa*; postmedial line fuscous brown, fascia less conspicuous, basal third of wing paler along inner margin; the greyish markings of the tips of veins 2-7 larger and more diffused; cilia greyish fuscous, with a fine whitish line along base. Hindwings fuscous, paler towards base, darker along hind margin; cilia pale greyish, basal half suffused with fuscous. Underside of fore- and hindwings pale yellowish fuscous, finely blackish edged, forewings suffused with fuscous, extreme tips of veins 8-11 white at costa; hindwings finely irrorated with fuscous scales, base of cilia in fore- and hindwings white.

♂-*Genitalia* : Tegumen long, sclerotized, vinculum narrow; uncus long, slender, curved, with sharp-pointed apex, finely haired; tuba analis very wide at base, membranous; valvae long, narrow, at one-third of costa a strong, projecting tooth, costa gently curved before the tooth, beyond it straight, disc gently tapering into rounded cuculus, sacculus sclerotized, no ampulla; saccus short, bluntly pointed; aedoeagus simple, a little curved, tubular, tapering at apex, no cornuti; juxta weakly indicated. Slide no. G 7817, holotype, fig. 5.

♀-*Genitalia* : Papillae anales moderate, weakly sclerotized, subtrapezoidal, finely haired, apophyses almost straight, rather long, very narrow; ant-apophyses one-quarter of apophyses, narrow; lamella postvaginalis simple; ostium bursae sclerotized, projecting; ductus bursae membranous, short, gradually merging into corpus bursae, with an irregularly shaped, sclerotized patch and scobinate in anterior half. Slide no. G 7818, allotype, fig. 6.

Remarks : Closely related to *Rh. poecilopa*, but slightly smaller and forewings a little more yellowish; ♂- and ♀-genitalia differ also in many details.

Distribution : Lower Sabi (K.N.P.), 26.III.1952 (Janse and Vári), holotype; Satara (K.N.P.), 27.III.1952 (idem), allotype; Skukuza (K.N.P.), 23.III.1952 (idem) and 3.IV.1952 (L. Vári); Barberton (Tvl.), 19-26.III.1920 (van Dam and Roberts); Louw's Creek (Barberton Distr., Tvl.), March 1920 (idem); Isputeni (Mtonjaneni Distr., Nat.), 23.I.1916 (A. J. T. Janse); Rikatla (Marracuene Distr., Moçambique), May 1919 (H. A. Junod); four ♂- and two ♀-paratypes.

***Rhynchina coniodes* spec. nov.**

Plate 1, fig. 4; text figs. 7 and 8

♂ and ♀, 16-18.5 mm. Head, patagia, tegulae and thorax whitish, irrorated with fuscous and some black scales; labial palpi suffused with ochreous fuscous, first segment and base of second segment whitish, second and third segments loosely scaled above; antennae fuscous, in male with cilia twice diameter of shaft, in female simple. Abdomen pale yellowish, suffused with fuscous above. Legs as in *Rh. antistropha*, but all tarsal segments dark fuscous on outer side and apices whitish, hair pencil on middle tibiae of male yellowish with grey tips. Forewings grey along costal area, along fascia and inner margin chalky white, general pattern and arrangement of tufts as in *Rh. poecilopa*; postmedial line dark fuscous, a little sinuate between angle and inner margin; terminal area strongly variegated and edged with an ochreous fuscous line; cilia grey, mixed with blackish scales, apical half often ochreous fuscous, base of cilia with a fine white line. Hindwings greyish fuscous, paler towards base, darker along hind margin; cilia whitish, basal half suffused with fuscous. Underside of fore- and hindwings as in *Rh. antistropha*.

♂-*Genitalia* : Tegumen long, sclerotized, vinculum narrow; uncus long, slender, gently curved, with sharp-pointed apex, finely haired; tuba analis very wide at base, membranous; valvae long, slender, sparsely haired, slightly narrowed in middle, costa strongly curved towards middle and producing a strong tooth at two-thirds, disc tapering into a small cuculus, sacculus narrow, well sclerotized, no ampulla; saccus short, rounded; aedoeagus short, simple, sinuate, tapering at apex, vesica with some indistinct sclerotization; juxta weakly indicated. Slide no. G 7820, holotype, fig. 7.

♀-*Genitalia* : Papillae anales small, weakly sclerotized, subtriangular, finely haired, apophyses almost straight, rather long, very narrow; antapophyses one-quarter of apophyses, narrow; lamella postvaginalis sclerotized, finely scobinate; ostium bursae slightly projecting, ductus bursae membranous, gradually merging into corpus bursae which is weakly scobinate in anterior half, near ductus seminalis with an irregularly shaped, sclerotized patch. Slide no. G 7821, allotype, fig. 8.

Remarks : This new species is very close to *Rh. antistropha*, but is slightly smaller, most of the grey ground colour of forewings replaced by chalky

white and the yellow by fuscous; ♂- and ♀-genitalia differ also in some details.

Distribution : Skukuza (K.N.P.), 2.IV.1952 (L. Vári), holotype; Pretorius Kop (K.N.P.), 6-7.IV.1952 (idem), allotype; Shingwedzi (K.N.P.), 29.III.1952 (Janse and Vári); Barberton (Tvl.), 21.II.1911 (Miss Williams); Pretoria North (Tvl.), 16.I to 21.III.1917 (C. J. Swierstra); Soutpan (Pretoria Distr., Tvl.), 8.XII.1926 and 4-10.II.1929 (G. van Son); Malta Forest (Letaba Distr., Tvl.), February 1925 (idem); Sawmills (Nyamandhlovu Distr., S.Rhod.), 2-7.II.1918 (A. J. T. Janse); Umvuma (Selukwe Distr., S.Rhod.), 10.I.1918 (A. Carnegie); 13 ♂- and nine ♀-paratypes.

REFERENCE

Vári, L., 1961. South African Lepidoptera, volume I. Lithocolletidae. *Transv. Mus. Mem.* 12, xx+238 pp., 112 pls.