On genitalia of some southern African Phycitinae (Lepidoptera, Phycitinae)

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The male and female genitalia of 28 previously known species of southern African Phycitinae (Lepidoptera, Pyralidae) are described. Two new species, characterized by their genitalia, are described: *Epicrocis varii*, and *Trachypteryx victoriola*.

Die manlike en vroulike geslagsorgane van 28 voorheen bekende spesies van die Phycitinae (Lepidoptera, Pyralidae) van suidelike Afrika word beskryf. Twee nuwe spesies wat deur hulle geslagsorgane gekenmerk word, nl. *Epicrocis varii*, en *Trachypteryx victoriola*, *word ook beskryf.*

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Most of the known species of moths of the subfamily Phycitinae were described at a time when it was not regarded as necessary to examine their genitalia, which are nowadays considered as the best criteria for distinguishing species in insects. The above statement holds true for authors beginning from Linnaeus and Fabricius, and continuing with works of Ragonot (1888, 1893, 1901), Hampson (1896, 1926, 1930) and de Joannis (1927).

For many species this defect has been supplemented in more recent publications. The genitalia of American Phycitinae (both North and South) have been described in the monograph by Heinrich (1956); the genitalia of some species of mainly European Phycitinae are described in publications by Pierce & Metcalf (1938), Hannemann (1964), Ivinskis (1981), and especially in the monograph by Roesler (1973), which, however, only deals with trifine Acrobasiina. the gentitalia of a few species of Indian Phycitinae are described in two short papers: by Paini & Rose (1973) and Rose (1982).

The present paper presents descriptions of a number of species of Phycitinae occurring in southern Africa, based on the collection in the Transvaal Museum.

The identification of the materials in the Transvaal Museum is mainly due to the South African lepidopterist, Dr A.J.T. Janse, who made a special study of the subfamily (1941, 1942, 1944, 1945). In 1921 Dr Janse visited G.F. Hampson in London, and discussed the identification of the South African Phycitinae with the latter. It may be accepted, therefore, that the identification of at least some of the South African species bear the authority of Hampson, though it cannot be asserted that the latter had seen and examined all species. Where possible, the identification of the South African species has been checked by myself against the original descriptions, or the descriptions in the Ragonot/Hampson monograph (1893, 1901).

The subdivisions within the subfamily are those proposed by Agenjo (1958) see Roesler (1973) and Ivinskis (1981), though the interpretation of the grouping by Roesler is not identical with that of Agenjo.

Terminology used is that of Roesler, 1973, as applied by Balinsky 1987, 1989. The geographical position of the less known localities, mentioned in this paper, are given accord-

Figures 1–3 **1.** *Epicrocis festivella* Zeller from Queensland, Australia. **2.** *Epicrocis varii* sp. nov. from Broken Hill, Zambia. **3.** *Trachypteryx victoriola* sp. nov.

ing to the 'quarter degree reference system' (see Leistner & Morris 1976).

Phycitina Agenjo 1958

Ceutolopha isidis Zeller. (Figures 4, 5).
Ceutolopha isidis Zeller, 1867: 375.
Ceutolopha isidis Zeller, in Ragonot 1893: 252.
Ceutolopha isidis Zeller, in Janse 1942: 35.

Material examined. Three preparations of male genitalia, seven preparations of female genitalia (Transvaal, Johannesburg).

Diagnosis. In forewings R_2 close to stalk of R_{3+4}. M_1 conascent with stalk. M_2 and M_3 on short stalk from sharp angle of cell. In hindwings Sc and Rs partially fused, then very close. Cell very short, about quarter of length of wing. Dc vertical, not curved, obsolescent. Cu_1 conascent with stalk of M_{2+3}, the latter almost twice length of free parts of these veins. Cu_2 far proximal of Dc. Labial palpi curved upwards, maxillary palpi scaled. Antennae in male with medium-sized touffe. Forewings dark mottled grey with patches of brown in some specimens. On hindwings in male stripe of intensely black scales between A_1 and A_2. On underside of forewing a patch of enlarged black scales between lower median and A. In male uncus enlongated triangular. Components of transtilla strong, separated, bifurcated anteriorly. Valve with bulbous outgrowth at base of sacculus. Aedeagus with one or two cornuti. Culcita complicated, with a pair of large bunches of sensory scales laterally. In female ductus bursae membraneous, bursa with longitudinal striation, without signa.

Male genitalia (Figure 4). Uncus elongated, square-shaped, with transverse posterior tip, strongly hirsute. Gnathos long, straight, the tip forming a short hook, lateral parts of gnathos with a straight shaft, expanded towards median part of gnathos, and forming a projection towards angle of uncus. Tegumen curved at anterior ends, but not bending inwards. Components of transtilla biramous, with the median rami longer than the lateral rami. Anellus with a pair of short finger-like projections facing inwards and posteriad and bearing bristles. Vinculum moderately long with transverse anterior edge. Valves moderately broad, very hirsute, with curved and pointed tip, and strongly sclerotized costa. Sacculus with a bulbous outgrowth near base, directed towards costa. Aedeagus elongated with one or two cornuti, if two — a longer and a shorter one. Culcita complicated, the median part consisting of a network of interconnected rods, supporting posteriorly a poorly sclerotized transverse plate bearing a row of hairs. Laterally on each side a large bunch of sensory scales.

Female genitalia (Figure 5). Ovipositor without peculiarities. Posterior apophyses longer than the anterior ones, which are conspicuously short. The supporting elements of the anterior apophyses extend towards each other and join in the middle. The eighth sternite bears three bunches of scent scales, two ventro-laterally, and one medio-ventrally. Antrum without sclerotizations. Ductus bursae about half the length of the bursa, membraneous. Corpus bursae cylindrical, without a signa, but with longitudinal folds running the whole length of the bursa. The ductus seminalis from a lateral projection near the distal end of the corpus bursa.

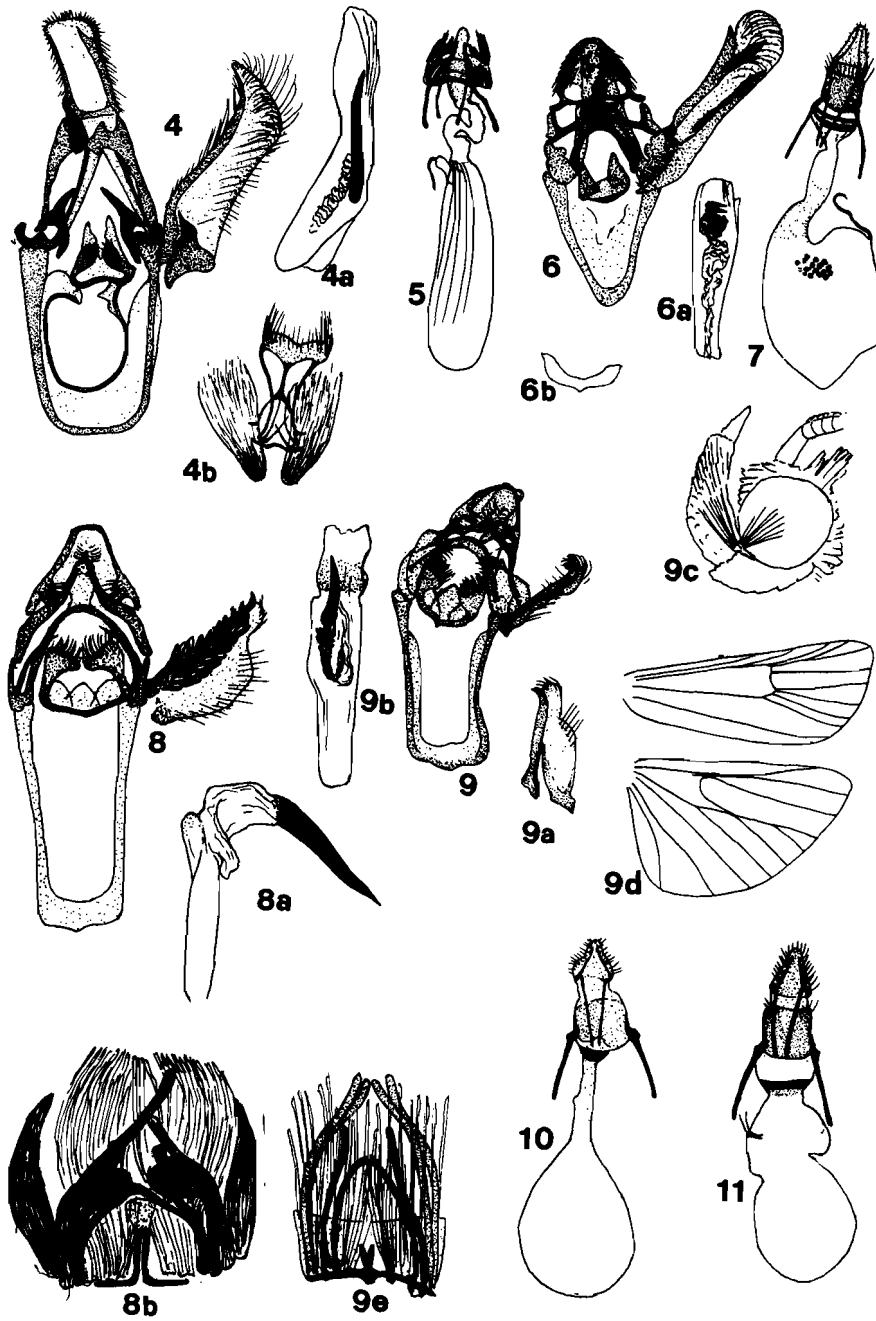
Remark. The description of the venation in Janse's paper (1942: 35) differs radically from the one in the above 'Diagnosis'. By examining the specimens in the Transvaal Museum collection, I have found that Janse had at his disposal only two specimens, both from Quattar. His two specimens are not conspecific. While the male has the black stripe on the hindwings, distinctive for *Ceutolopha isidis*, the female has a completely different venation, namely Heinrich's type IB venation; the specimen is thus not a *Ceutolopha* at all, and Janse's description of the venation for the genus made from female's wing is in error. The venation in the Johannesburg specimens, as well as other features, correspond well to Ragonot's description (1893: 252). The genitalia of the male Quattar specimen (Janse's 4 800) are similar to those from Johannesburg. Ragonot quotes as patria of *Ceutolopha isidis*: Egypt and Karachi (Pakistan).

Didia subramosella Ragonot. (Figures 6, 7).
Didia subramosella Ragonot 1893: 61.
Didia subramosella Ragonot in Janse 1941: 147.
Didia subramosella Ragonot in Vári & Kroon, 1986: 84.

Material examined. One genitalia preparation male (Transvaal, Pretoria), two genitalia preparations female (Transvaal, Zoutpan n. Pretoria, Johannesburg).

Diagnosis. In forewing R_2 very close at origin to stalk of R_{3+4}. M_2 and M_3 on stalk of about quarter of their free length. In hindwings Sc and Rs closely parallel. Cell nearly half length of wing. M_2 and M_3 on very short stalk; Cu_1 at end of cell and connected to lower median by short oblique vein. Cu_2 well before end of cell. Labial palpi upturned, long. Maxillary palpi scaly. Antennae in male with enlarged scape. Forewings grey with a broad black transverse band, narrowing towards anal edge, at about ⅓ of wing. In male uncus with projections at antero-lateral angles. Components of tegumen very broad. Transtilla continuous across midline posteriorly. Aedeagus cylindrical, with two tiny cornuti. Culcita very simple, as curved transverse bar without hairs. In female antrum with narrow transverse sclerotization, ductus bursae moderately long, bursa broadly oval with a group of short spines. Ductus seminalis from bursa.

Male genitalia (Figure 6). Uncus broad, rounded posteriorly, hirsute, with laterally projecting anterior angles. Gnathos with poorly sclerotized tip. Lateral parts of the gnathos almost transverse, at their lateral ends forming long extensions to meet angles of the uncus. Tegumen components very broad anteriorly. Transtilla continuous across the mid-line, where it forms two short projections, and with long curved antero-lateral lobes. Anellus consists of three parts: a strongly sclerotized semicircular bar, forming the anterior border of a thin oval plate, and a pair of triangular plates pointing posteriad, with a few bristles at tip, attached to the oval plate. Vinculum triangular, pointed anteriorly. Valves large and broad, reaching well beyond the tip of the uncus. Costa strongly sclerotized, ending with a sharp point distally, and with a thin branch before the



Figures 4–11 4. *Ceutolopha isidis* Zeller, male genitalia. **4a** — aedeagus, **4b** — culcita. 5. *Ceutolopha isidis* Zeller, female genitalia. 6. *Didia subramosella* Ragonot, male genitalia. **6a** — aedeagus, **6b** culcita. 7. *Didia subramosella* Ragonot, female genitalia. 8. *Epicrocis festivella* Zeller, male genitalia. **8a** — aedeagus, **8b** — culcita. 9. *Epicrocis varii* sp. nov., male genitalia. **9a** — valve, **9b** — aedeague, **9c** — head with appendages, **9d** — venation, **9e** — culcita. 10. *Epicrocis festivella* Zeller, female genitalia. 11. *Epicrocis varii* sp. nov., female genitalia.

end, which bears a comb of hairs pointing inwards. Sacculus also strongly sclerotized with hairs similar to those on the branch of the costa, and also with a tubercle at ⅓ from base. Aedeagus not very large, cylindrical, with two small cornuti in distal part, oriented transversely in intact aedeagus. Culcita very simple, in form of curved transverse bar, without hairs.

Female genitalia (Figure 7). Ovipositor of average structure. Posterior apophyses slightly longer and thinner than anterior apophyses. Antrum ends dorsally with a narrow double ring of sclerotization. Ductus bursae slightly shorter than corpus bursae, finely granular in proximal half. Corpus bursae broadly oval membraneous, with single signa consisting of a group of short spines, with scalloped bases, not connected to common plate. Ductus seminalis from a bulge in distal part of bursa.

Epicrocis varii sp. nov. (Figures 2, 9, 11).
Non *Epicrocis festivella* Zeller 1848.

Material examined. One preparation male genitalia

(Durban, Natal), one preparation male genitalia (Sarnia, Natal 29 30 DD). Two preparations male genitalia (Broken Hill, Zambia, 14 28 AA). Two preparations female genitalia (St Johns, Ciskei, 31 29 DA). One preparation male genitalia Fort de Kock Sumatra, labelled. *Epicrocis festivella* Zell. leg. Jacobson, one preparation female genitalia Brisbane, Queensland, det. by British Museum N.H. as *Ilithyia festivella* Zell.

Diagnosis. External characters. Wing-span: male 18 mm. Female 18 mm. Labial palpi (Figure 9c), twice width of eye, sharply upturned, reaching well beyond vertex, second segment three times third, third segment pointed. Maxillary palpi in male in form of aigrette. Frons rough, but not having a tuft. Antennae in male with rather small touffe, shaft of antennae filiform. In female antennae filiform. Head and thorax above reddish brown. Abdomen above whitish. Underside and legs whitish. Colour of forewings a combination of reddish-brown and yellowish-brown, with white markings (Figure 2). At base of wing — yellowish-brown area, stretching along anal edge, followed by dark reddish-brown area, stretching obliquely from costal edge to nearly anal edge, at about middle of wing length. Distal edge of this area sharply demarkated by oblique white line, fading distally into a yellowish-brown area. Discal spot formed by a narrow crescentic black line followed by white spot, fading distally. Broad reddish-brown area across wing beyond discal spot. Edge of wing a lighter brown with fine horizontal white streaks. Hindwing very light brown, with narrow darker edge.

Venation (Figure 9D). In forewings R_2 very close to stalk of R_{3+4} but separate. Stalk of R_{3+4} slightly less than free length of R_3. M_2 and M_3 very close at cell, but separate. In hindwings Sc and Rs closely parallel. Cell almost half of length of wing. Dc touches origin of Cu_1, but does not fuse with it. M_2 and M_3 on stalk, slightly longer than free length of M_2. Cu_2 well before angle of cell.

Male genitalia (Figure 9). Uncus triangular, with rounded apex. Gnathos with tiny point posteriorly. Lateral parts of gnathos narrow, extended anteriad. Tegumen a smoothly bent arch across midline posteriorly, and with broadened anterior ends. Components of transtilla thin rods with broadened anterior ends. Anellus complex, with transverse curved sclerotized bar anteriorly, extended posteriad in three poorly sclerotizted lobes, and at each end projections broadening posteriorly, in two oblique lobes which bear on their edge numerous strong bristles. Vinculum transverse anteriorly. Valves short, not reaching tip of uncus; costa ending with a tiny point. Sacculus poorly sclerotized, instead ventral side of valve broad but abruptly narrowing towards tip. Some strong bristles before narrowed part. Aedeagus cylindrical, long, almost as long as the whole sexual apparatus, with a single cornutus, the proximal end of which is extended by a shaft bearing numbers of short spikes. Culcita complex, consisting of a narrow transverse bar, with a forked posteriad extension in middle, and attached to the bar a fornix, and numerous ribbon-like bands, of which three pairs are prominent by their greater breadth.

Female genitalia (Figure 11). Eighth abdominal segment as long as broad. Posterior apophyses slender, anterior slightly longer and more robust. Antrum membraneous, at transition to ductus bursae transverse sclerotized ring. Ductus bursae very short, practically non-existent. Corpus bursae elongated oval, membraneous, without signa. Ductus seminalis from corpus bursae, near distal end.

Holotype male: Durban, Natal, VIII 1899, no collector, genitalia preparation 4826. Paratypes male: Sarnia, Natal (29 30 DD), 10.1.1912 (Janse), genitalia preparation 3627; Broken Hill, Zambia (14 28 AA) (Janse), preparations genitalia 255, 256. Paratypes female: St Johns, Ciskei (31 29 DA) IV. 1909 (Swinny), genitalia preparations 3627, 851. Types in Transvaal Museum.

Remark. Epicrocis varii sp. nov. is extremely similar in external features to *Epicrocis festivella* Zeller (Zeller, 1848: 878; Ragonot 1893: 438 = *Ilithyia festivella* autorum). While there is some variability in the pattern and coloration of wings, the two species could not be held apart. The genitalia of both the males and females show, however, that the two species are distinctly different in spite of some similarities. The similarities in the male are the gnathos, with its lateral parts, the tegumen, and especially the unusual structure of anellus, also *shape* of valves. The diffences: in *E. festivella* (Figure 8) the inner surface of the valve is covered by numerous enlarged black scales — no such scales in present species. In *E. festivella* the cornutus is very much longer, almost the whole length of the sheath of the aedeagus, and it does not have at its base a group of short spines, present in *E. varii* sp. nov. The culcita of *E. festivella* (Figure 8B) possesses two pairs of lobes, a pair of elongated ones laterally, and a pair of spatulate lobes medially, as well as ribbon-like appendages, whereas in the present species the culcita possesses only ribbon-like appendages and no lobes (Figure 9). In the female sex of *E. festivella* the ductus bursa is long, about ⅔ of the length of corpus bursae (Figure 10), whereas in the present species it is reduced (Figure 11).

Epicrocis festivella Zeller, was described from Java. In Ragonot, 1893 the patria of the species is shown as East India, Ceylon, Java, South Africa — the latter locality obviously as a result of not distinguishing *Epicrocis festivella* Zeller from the present species. The genitalia of three Indian species of *Epicrocis* are described by Paini & Rose (1973) and Rose (1982). According to Pajni & Rose both *Epicrocis hilarella* Ragonot and *Epicrocis aegnusalis* Walker have the valves of a completely different shape from both *E. festivella* and *E. varii* sp. nov. *E. hilarella* has two cornuti, *E. aegnusalis* — three cornuti, as against a single cornutus in both *E. festivella* and *E.* sp. nov. In female sex, according to Rose, *E. hilarella* possesses spines in the bursae, in *E. aegnusalis* the anterior apophyses are shorter than posterior ones, in *E. lateritialis* Walker (as well as *E. aegnusalis*) the ductus bursae is long as in *E. festivella*. Thus the present species can be clearly differentiated by the genitalia from the three Indian species of *Epicrocis* as well as from *Epicrocis festivella* Zell.

The species is named in honour of Dr L. Vári, who drew my attention to the differences between *E. festivella* and the present species.

Eucarphia leucomera (Hampson). (Figures 12, 13).
Argyrorhabda leucomera Hampson 1926: 634.
Eucarphia leucomera (Hampson) in Vári & Kroon 1986: 49.

Material examined. Four preparations of male genitalia: one Transvaal, Waterberg (24 28 AB), one Cape Province, Balmoral (33 22 DD), two Zimbabwe, Sawmills (19 28 CA). Female genitalia: Transvaal three, Pretoria, Middelburg (25 29 CD), Kransberg.

Diagnosis. In forewings R_2 remote from stalk of R_{3+4}, M_2 and M_3 remote. In hindwings Sc and Rs closely parallel. Cell short, Ds just beyond Cu_1, M_2 and M_3 on long stalk (Heinrich's venation type ID). Labial palpi long, porrect. No airgrette. No touffe. Forewings rufous, with broad costal silvery white stripe and black spot at lower distal angle of cell. In male, uncus with a pair of narrow projections at distal end and unusually elongated anterior angles. Valves with claspers on inner surface, between costa and sacculus. Aedeagus without a cornutus. Culcita with a number of elongated band-like scales and a fornix. In female, antrum with a complicated sclerotization, two strong spikes extending into eighth segment. Bursa membraneous.

Male genitalia (Figure 12). Uncus very long, trapezoid, posterior angles extended as pointed horns. Gnathos placed against the middle of length of uncus, the tip forming one to three short points. Lateral parts of gnathos curved at their posterior ends to meet the angles of the uncus. Components of tegumen extending backwards from their anterior ends to meet the ends of the lateral parts of gnathos. Transtilla absent. Anellus a large plate, with the sclerotized anterior and lateral edges, ending posteriorly with points bearing bristles. Vinculum relatively short, with rounded anterior edge. Valves long (reaching beyond the tip of uncus) and broad, with claspers on their median surface; the latter ending with a strongly sclerotized dorsad directed point. Aedeagus cylindrical, long, without a cornutus. Culcita in form of an irreguarly rhomboid elongated plate, with lateral extentions, to which are attached a number of band-like modified scales and a fornix.

Female genitalia (Figure 13). Rods from distal ends of posterior apophyses fuse at distal ends. Posterior apophyses slender and twice as long as anterior apophyses. Eighth abdominal segment elongated, longer than broad. Antrum with strongly sclerotized two-pronged body, with pointed posterior tips, protruding into eighth segment. Ductus bursae very short, membraneous. Corpus bursae cylindrical, without signa. Ductus seminalis from a small outgrowth of bursa, near its distal end.

Gaana asperella (Ragonot). (Figures 14, 17).
Dysphylia asperella Ragonot, 1893: 620.
Gaana asperella (Ragonot) in de Joannis 1927: 229.
Gaana asperella (Ragonot) in Vári & Kroon 1986: 12.

Material examined. Three preparations male genitalia (Johannesburg, Pretoria, Cape Town), three preparations female genitalia (Johannesburg, Pretoria, Cape Town).

Diagnosis. In forewings R_2 on common stalk with R_3 and R_4, M_2 and M_3 remote. In hindwings Sc and Rs partially fused beyond cell. Cell long, lower median connected by oblique branch to origin of M_2 and M_3 (trifid condition after Ragonot 1893). Labial palpi strongly turned up. Maxillary palpi scaled in both sexes. Antennae without touffe, strongly ciliate. Forewings grey, with clear black transverse bands. In male transtilla in the shape of an H, left and right components joined across midline. Aedeagus thick, but without a cornutus. Culcita simple, with transverse bar and bunches of hairs at each end. In female antrum sclerotized, ductus bursae short and broad, strongly sclerotized. Corpus bursae membraneous with single pit-shaped signa.

Male genitalia (Figure 14). Uncus short and broad, rounded posteriorly and covered on the edges with short but strong bristles. Gnathos pointed and forming a hook at the end. The lateral parts of gnathos broadened towards middle, and bent laterally to form rather long lobes contacting the angles of uncus. Tegumen with very broad anterior ends. Transtilla very large continuous across the middle, forming two lateral lobes posteriorly, where they overlap the lateral parts of the uncus, and anteriorly curving first in a lateral direction, and then in anterior direction. Anellus with a transverse middle section, from which two long projections extend posteriad; the latter bear bristles on their lateral edges. Vinculum rounded anteriorly. Valves large and broad, reaching well beyond the tip of uncus. Costa very strongly sclerotized, with a point distally, and bearing, near the base, a stong, dorsally directed projection, covered with bristles. Sacculus also strongly sclerotized, and ends distally in curved blunt point. Aedeagus cylindrical, thick, without a cornutus. There are some short spines laterally near to distal end of aedeagus. Culcita in form of transverse bar with a thin crescentic rod attached to it posteriorly; laterally the two support a pair of bunches of hairs.

Female genitalia (Figure 17). Ovipositor short and broad. Skeletal rods attached to distal ends of posterior apophyses do not enter the terminal lobe of the ovipositor. Posterior apophyses slightly shorter than anterior ones. Antrum as broad as the eighth segment, sclerotized. Ductus bursae very short, strongly sclerotized. Corpus bursae cylindrical, with pit-type signa near its middle. Ductus seminalis from near distal end of bursa.

Gaana basiferella Walker (Figures 15, 18).
Gaana basiferella Walker 1866: 1729.
Eurhodope basiferella Walker in Ragonot 1893.
Gaana basiferella Walker in Vári & Kroon 1986: 15.

Material examined. One preparation genitalia male (Highlands, n. Cape Town), one preparation genitalia female (Highlands, n. Cape Town).

Diagnosis. In forewings R_2 on common stalk with R_3 and R_4. M_2 and M_3 remote. In hindwings Sc and Rs either partly fused beyond cell, or closely parallel. Cell long, lower median connected by oblique branch to origin of M_2 and M_3 (trifid after Ragonot 1893). Forewing brownish-grey with rather vague transverse bands. In male, components of transtilla of complicated shape, massive, close together at

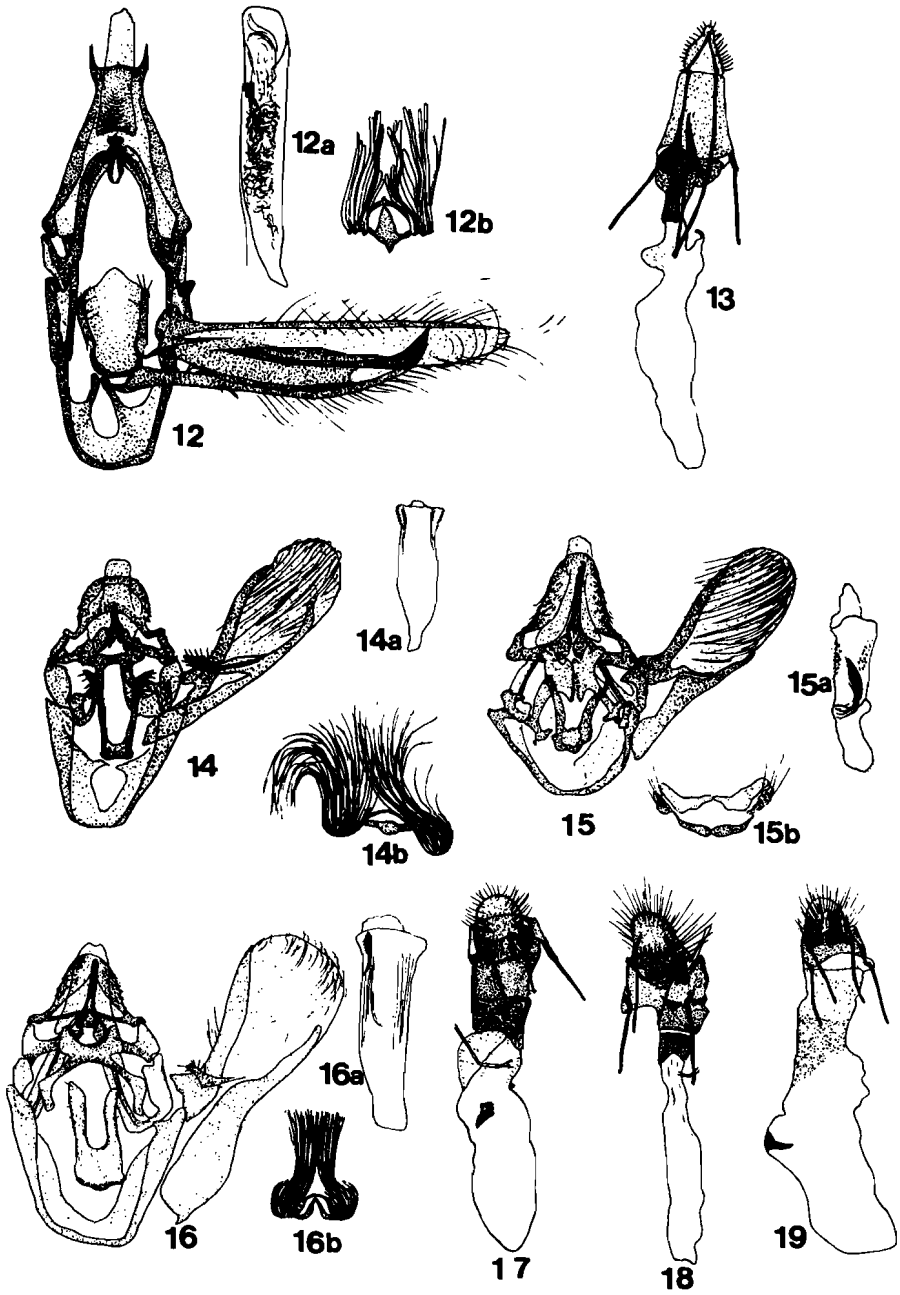


Figure 12–19 12. *Eucarphia leucomera* (Hampson), male genitalia. **12a** — aedeagus, **12b** — culcita. **13.** *Eucarphia leucomera* (Hampson), female genitalia. **14.** *Gaana asperella* (Ragonot), male genitalia. **14a** — aedeagus, **14b** — culcita. **15.** *Gaana basiferella* Walker, male genitalia. **15a** — aedeagus, **15b** — culcita. **16.** *Gaana viridella* (Ragonot), male genitalia. **16a** — aedeagus, **16b** — culcita. **17.** *Gaana asperella* (Ragonot), female genitalia. **18.** *Gaana basiferella* Walker, female genitalia. **19.** *Gaana viridella (Ragonot), female genitalia.*

mid-line but not fused. Aedeagus without cornutus, cylindrical. Culcita simple, poorly developed, with only a few hairs. In female antrum sclerotized, ductus bursae short and broad, sclerotized. Corpus bursae membraneous with tiny signa.

Male genitalia (Figure 15). Uncus triangular with rounded tip, with short hairs on edges. Gnathos very long, nearly reaching tip of uncus, with a little hook at the end. Lateral parts of gnathos massive, almost transverse, bending backwards at lateral ends to meet angles of uncus. Tegumen comparatively short, anterior ends forming inwards-directed projections. Components of transtilla large and massive, touching but not fusing in mid-line, where the edges bear small denticles. From the main body of each component a double lobe extends backwards overlapping the lateral parts of uncus, and a long curved projection extends obliquely forwards. Anellus with a transverse middle section from which two long projections extend posteriad; these bear bristles at their ends. Vinculum broad and rounded anteriorly. Valves long and very broad, costa and sacculus massive, the latter ends with a point distally. Aedeagus thick, cylindrical with some short spines on each side, nearer distal end, but without a cornutus. Culcita simple, consisting of a

narrow crescentic bar, and posterior to it two weakly sclerotized plates, bearing a few bristles laterally.

Female genitalia (Figure 18). Ovipositor short and broad, as well as the eighth segment of abdomen. Posterior apophyses slightly shorter than the anterior ones. Antrum sclerotized. Ductus bursae strongly sclerotized short, merging with the bursa without a clear boundary. Bursa cylindrical, membraneous, with only a tiny signa. Ductus seminalis close to distal end of bursa.

Gaana viridella (Ragonot) (Figures 16, 19).
Dysphylia viridella Ragonot 1888: 5.
Dysphylia viridella in Ragonot 1893: 3.
Gaana viridella (Ragonot) in de Joannis 1927: 229.
Dysphylia viridella Ragonot in Janse 1941: 139.
Gaana viridella (Ragonot) in Vári & Kroon 1986: 92.

Material examined. Genitalia preparations one male and two female (Mt. Sheba, E. Transvaal, 24 30 DC)

Diagnosis. In forewings R_2 on common stalk with R_3 and R_3, M_2 and M_3 remote. In hindwings Sc and Rs partially fused beyond cell. Cell long, lower median connected by oblique branch to origin of M_2 and M_3 (trifid after Ragonot 1893). Labial palpi strongly curved upwards. Maxillary palpi in both sexes scaled. Anetennae without touffe, strongly ciliate in male, filiform in female. Forewings pale green with black markings. In male transtilla in form of H, left and right components joined across mid-line. Aedeagus thick, without cornutus. Culcita simple with transverse bar and bunches of hairs at each end. In female antrum sclerotized, ductus bursae short and broad, strongly sclerotized. Corpus bursae membraneous with single pit-shaped signa.

Male genitalia (Figure 16). Uncus broad, triangular, rounded posteriorly, with hairs on lateral margins. Gnathos very long narrow, nearly reaching tip of uncus. Lateral parts of uncus nearly transverse, broadened laterally, where they reach the angles of the uncus. Tegumen broad, and strongly broadened at anterior ends. Transtilla large and massive, continuous across mid-line. From median body a pair of broad lobes extend posteriad, where they overlap the lateral parts of the uncus, and also antero-laterally in form of narrower projections, bent inwards at the ends. Anellus with a transverse medial part, from which two long projections extend posteriad; the latter bearing bristles on lateral edges. Vinculum very broad with slightly rounded, almost transverse anterior edge. Valves very broad and long, reaching far beyond the tip of uncus. Costa strongly sclerotized, ending with a point distally. Near its proximal end there is a dorsally directed pointed outgrowth, bearing bristles. Sacculus very massive, bearing a point distally. Aedeagus cylindrical thick, bearing short spines laterally near distal end. Culcita consists of a thin transverse bar, which is bent posteriad in the middle, and connected to it posteriorly is a crescentic bar; these structures support laterally a pair of tufts of long hairs.

Female genitalia (Figure 19). Ovipositor short and broad, the skeletal rods attached to the distal ends of the posterior apophyses do not enter the terminal lobe of the ovipositor. Eighth abdominal segment also very short. Posterior and anterior apophyses of equal length. Antrum as broad as the eighth abdominal segment, sclerotized. Ductus bursae very short, broad and strongly sclerotized. Bursa cylindrical, with a pit-type signa. Ductus seminalis, apparently from distal part of bursa, could not be seen in preparation.

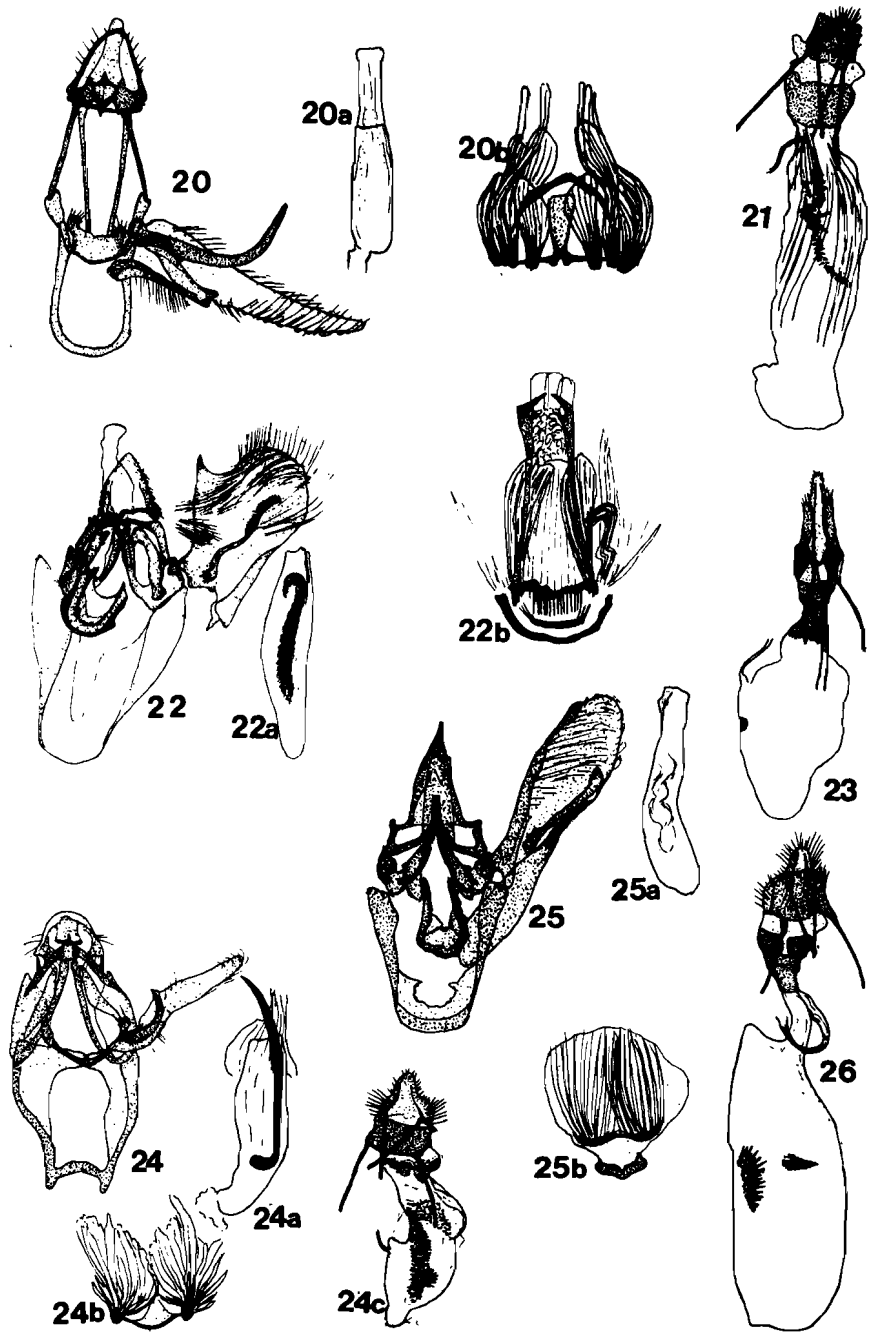
Remark. The three species, now referred to the genus *Gaana* although referred in Ragonot's monograph to two different genera (*Dysphylia* and *Eurhodope*) show a striking similarity in both male and female genitalia, as well as in their venation. The similarity is closest between *Gaana asperella* and *Gaana viridella*, in which gentialia differ in only very minor details. *Gaana basiferella* differs from both in having the transtilla divided in the mid-line, in the absence of an outgrowth at the base of the costa, in a different structure of the culcita and a different type of signa.

Hydaspia dorsipunctella Ragonot (Figures 20, 21).
Hydaspia dorsipunctella Ragonot 1888: 22.
Hydaspia dorsipunctella Ragonot 1893: 439.
Hydaspia dorsipunctella Ragonot in Janse 1944: 11.
Hydaspia dorsipunctella Ragonot in Vári & Kroon 1986: 30.

Materials examined. One preparation of male genitalia (Potgietersrus 27 29 AA), one preparation of female genitalia (Sawmills, Zimbabwe 19 28 CA).

Diagnosis. In forewings R_2 separate from stalk of R_{3+4}. M_2 and M_3 remote. In hindwings Sc and Rs closely parallel. Cell a little over ⅓ of wing. Dc continued as stalk of M_{2+3} and connected to C_1 by short cross vein. Labial palpi very long, curved up and reaching far beyond vertex. In male maxillary palpi with aigrette, antennae with large touffe. In female maxillary palpi scaly and antennae without touffe. Forewings brownish-yellow, with white costa and several black spots, the most prominent: the discal spot and two on A. In male lateral parts of gnathos and components of tegumen straight and markedly elongated. On valve large curved clasper (in Janse's description referred to as 'claw'). Aedeagus with cornutus. Culcita complex, with lobes. In female ductus bursae short, sclerotized, corpus bursae elongated, with rows of small spicules.

Male genitalia (Figure 20). Uncus triangular, with blunted apex. Gnathos broadish with tiny point posteriorly. Lateral parts of gnathos broad at posterior ends, further anteriorly very thin, straight and long. Components of tegumen likewise very thin, long and straight, with broadened anterior ends. Transtilla absent. Anellus a semicircular transverse plate, with, at each end, a short (length equals breadth) finger-like process, with bristles at ends. Vinculum rounded anteriorly. Valve elongated, narrowing towards tip, reaching well beyond tip of uncus. Costa thin. Large strongly sclerotized clasper with curved distal part, about ¾ length of the valve, on its inner surface. A shorter sclerotized structure, ⅓ length of valve, ending in a short point, nearer sacculus edge of valve. Aedeagus cylindrical, without cornutus. Culcita complex, consisting of a transverse bar, extended in the middle in a poorly sclerotized tongue, a fornix, four



Figures 20–26 **20.***Hydaspia dorsipunctella* Ragonot, male genitalia. **20a** — aedeagus, **20b** — culcita. **21.** *Hydaspia dorsipunctella* Ragonot, female genitalia. **22.** *Hypargyria metalliferella* Ragonot, male genitalia. **22a** — aedeagus **22b** — culcita. **23.** *Hypargyria metalliferella* Ragonot, female genitalia. **24.** *Oxybia transversella* Duponchel, male genitalia. **24a** — aedeagus, **24b** — culcita, **24c** — female genitalia. **25.** *Plagoa cerostomella* (Ragonot), male genitalia. **25a** — aedeagus, **25b** — culcita. **26.** *Plagoa cerostomella* (Ragonot), female genitalia.

pairs of broad lobes, and several pairs of narrow band-like structures.

Female genitalia (Figure 21). Posterior apophyses slender, anterior apophyses slightly longer and more robust. Antrum membraneous. Ductus bursae short, about ⅓ of corpus bursae, strongly sclerotized. Corpus bursae elongated, cylindrical, membraneous but with several rows of small spicules. Ductus seminalis from corpus bursae on border with ductus bursae.

Remark. Dr Janse states (1944, p. 11) that his specimens of *Hydaspia dorsipunctella* had been identified as such by Hampson. Inasmuch as the species had been described by Ragonot from East Indies, Dr Janse expressed his doubt, whether the South African specimens are conspecific with the East Indian *Hydaspia dorsipunctella* Ragonot. The conspecificity should be tested, according to Dr Janse, by examining the genitalia of the East Indian species. Such an examination has not been carried out, and therefore Dr Janse's reservations remain in force. The description of the male genitalia in the present paper have been made from

the same preparation which was examined (but not described in detail) by Dr Janse.

Hypargyria metalliferella Ragonot. (Figures 22, 23).
Hypargyria metalliferella Ragonot 1888: 9.
Hypargyria metalliferella Ragonot 1893: 122.
Hypargyria metalliferella Ragonot in Janse 1941: 149.
Hypargyria metalliferella Ragonot in Rose 1982: 29.
Hypargyria metalliferella Ragonot in Vári & Kroon 1986: 55.

Material examined. Three preparations male genitalia (Johannesburg, Pretoria, E. Transveal n. Goedspruit, 24 31 AA), three preparations of female genitalia, South Africa, Durban, Zimbabwe (20 30 BD) Ruanda, Kigali (1 29 DD).

Diagnosis. In forewings R_2 separate from stalk of R_{3+4}. M_2 and M_3 from sharp prominence of cell, on tiny common stalk. In hindwings Sc and Rs closely parallel; cell short, ⅓ of length of wing; Dc joins lower median proximal to Cu_1, M_2 and M_3 on stalk about ⅓ of free length of M_3. Labial palpi curved upwards, maxillary palpi in both sexes scaled, antennae without touffe. Forewings light grey with broad transverse band of reddish elevated scales. Underside of wings in males (but not in females) with metallic silver sheen. In males medial part of gnathos a tiny nodule. Components of transtilla two strong nearly straight rods. Anellus with pair of posteriad directed pointed prongs. Valves unusually broad. Aedeagus with single spongy cornutus. Culcita complicated, with three transverse rods and a number of broadened scales. In female antrum with a pair of sclerotizations, ductus bursae short with granulations. Bursa with small pit-like signa. Ductus seminalis from corpus bursae.

Male genitalia (Figure 22). Uncus triangular with pointed apex. Medial part of gnathos only a tiny nodule. Lateral parts of gnathos slender medially, more massive laterally, with small projections to meet angles of uncus. Components of tegumen very massive and expanded antero-laterally. Components of transtilla longer than anellus, in form of two massive rods, bent inwards at posterior ends. Anellus U-shaped, not strongly sclerotized medially, strongly sclerotized along edges, and forming two sharp points posteriorly. Vinculum longer than the rest of the genital apparatus, rounded at anterior end. Valves large, reaching beyond the tip of uncus, and unusally broad: breadth about ⅔ of length. Costa produced in a point at about ⅝ of valve. Median surface of valve bears a curved ridge covered with a row of spines and ending in a swelling at proximal end. Aedeagus long and thick, contains a single cornutus, which is, however, not solid but fibrous, and is curved on itself at posterior end. Culcita complicated, consisting of a curved thin rod anteriorly, followed distally by a transverse straight bar, and still further distally by a third curved transverse bar, supporting proximally a comb-like series of short spikes, and, distally, a number of broadened ribbon-like scales of a variety of shapes. In addition to this, the eighth segment supports a pair of very large tufts of long black scent hairs.

Female genitalia (Figure 23). Ovipositor slender. Posterior apophyses very slender and long — more than twice as long as the anterior apophyses. Antrum with a pair of dark bodies laterally. Ductus bursae short and bears a granulation. Corpus bursae oval, with a small cuplike round depressed signa. Ductus seminalis from corpus bursae, near middle.

Remark. The present description of the female genitalia corresponds in most features to that given by Rose (l.c.), except that Rose does not indicate the position of the ductus seminalis.

Oxybia transversella Duponchel (Figure 24).
Oxybia transversella Duponchel 1836.
Oxybia transversella Duponchel in Ragonot 1901: 110.
Oxybia transversella Duponchel in Vári & Kroon 1986: 88.

Material examined. Two genitalia preparation male and one wings preparation, (Cape Town). One preparation female (Pretoria).

Diagnosis. In forewings R_2 remote from stalk of R_{3+4}. M_2 and M_3 remote. In hindwings M_2 and M_3 fused (Heinrich's venation group II). Sc and Rs closely parallel. Cell about ⅖ of length of wing. Dc reaches lower median midway between Cu_1 and Cu_2. Forewings brown, with a lighter brown broad spot at about ⅓ wing and a similarly coloured area bordering termen. No aigrette, no touffe. Gnathos with tiny point. Components of tegumen with very broad posteriad directed proximal part. Anellus a narrow V. Aedeagus with long curved cornutus. Culcita with two bunches of broadened elongated scales. In female numerous closely set spines on common base in corpus bursae.

Male genitalia (Figure 24). Uncus rounded and broad, with conspicuous tufts of bristles at antero-lateral angles, the bristles directed inwards and anteriad. Gnathos broad but with only a tiny posterior point. Lateral parts of gnathos slender, at half-length with projections to meet angles of uncus. Components of tegumen with long slender shafts connected to uncus, but inflected posteriad flanges very broad. Anellus a strongly sclerotized V-shaped rod (angle pointing anteriad) with small bulbous thickenings at ends, bearing bristles. Vinculum convex anteriorly. Valves narrow with a curved sclerotization on inner surface, forming a short point across costa about ⅓ from proximal end of costa. Aedeagus with a long curved cornutus, projecting from the end of aedeagus in unerected state. Culcita a transverse bar, extended in form of a tongue posteriorly, and at each end a strong bunch of broadened and elongated scales.

Female genitalia (Figure 24c). Eighth abdominal segment broader than long. Apophyses slender, anterior ones slightly longer than posterior ones. Antrum sclerotized in proximal half, ending with distinct edge. Ductus bursae very short, about ⅓ of length of corpus bursae, with some sclerotization adjacent to antrum. Corpus bursae elongated; along most of its length stretches a thin plate bearing numerous, closely set long spines. Another lot of spines in an area closer to distal end of corpus bursae. Ductus seminalis from about the middle of corpus bursae.

Plagoa cerostomella (Ragonot) (Figures 25, 26).
Mabilia cerostomella Ragonot, 1888: 6.
Mabilia cerostomella Ragonot 1893: 6.
Mabilia cerostomella Ragonot in Janse 1941: 140.
Plagoa cerostomella Ragonot in Vári & Kroon 1986: 20.

Material examined. One preparation male genitalia (Transvaal, Lydenburg 25 30 AB). One preparation female genitalia (Zambia, Nkana 12 28 DD).

Diagnosis. In forewings R_2 remote from stalk of R_{3+4}. M_2 and M_3 remote. In hindwings Sc and Rs on stalk. Cell extremely short: less than quarter of length of wing. Dc well beyond origins of Cu_1 and Cu_2 (Heinrich's venation type ID), ending at origin of M_2 and M_3, which are conascent. Labial palpi strongly upturned, maxillary palpi squamous. Antennae, pectinate proximally in male, ciliated in female. Forewings bicolorous, costal half yellowish-brown, anal half rusty brown. Several black dots placed longitudinally at level of cell. In male, uncus sharply pointed, components of transtilla broad, pointed posteriorly. Aedeagus cylindrical, without cornutus. Culcita with a plate bearing long hairs. In female antrum with two sclerotizations laterally, ductus bursae short sclerotized distally, and bearing ductus seminalis. Corpus bursae with two groups of spikes.

Male genitalia (Figure 25). Uncus triangular with a sharply pointed end and outwards curved anterior angles. Gnathos with blunt posterior end. Lateral parts of gnathos curved, with outer ends bent backwards to meet angles of uncus. Components of tegumen broad especially at anterior ends and forming sharp points to meet parts of gnathos. Components of transtilla in form of elongated triangular plates joined at posterior end and broad anterior ends, bearing each two small lateral projections. Anellus with semicircular central part, surrounded with a sclerotized edge, which is extended posteriad in long (length five times breadth) projections which bear laterally a few bristles. Vinculum rounded at anterior end. Valves reaching well beyond tip of uncus. Costa strongly sclerotized: a bulbous thickening at end, reaching beyond edge of valve. Sacculus massive and strongly sclerotized especially at distal end. Between costa and sacculus a separate sclerotization, close to sacculus forming a point at distal end. Aedeagus moderately large, cylindrical, without cornuti. Culcita in form of a short curved transverse bar supporting distally a broad poorly sclerotized plate to which are attached double crescentic bases of bunches of hairs, reaching as far as the posterior edge of the plate.

Female genitalia (Figure 26). Ovipositor short and broad. Posterior apophyses slender, anterior apophyses more massive, both of about same length. Antrum bears a pair of lateral sclerotizations. Beginning of duct similarly sclerotized, rest of duct membraneous. Duct short, less than one third the length of bursa. Bursa elongated cylindrical, with two signa consisting of groups of long thin spikes: a larger signa with larger spikes, and a smaller signa with small spikes. Ductus seminalis from middle of the ductus bursae.

Pretoria hutchinsoni Ragonot. (Figures 27, 28).
Pretoria hutchinsoni Ragonot 1893: 624.
Pretoria hutchinsoni Ragonot in Janse 1942: 37.
Pretoria hutchinsoni Ragonot in Vári & Kroon 1986: 42.

Material examined. One preparation of male genitalia (Transvaal, Zoutspan n. Pretoria), one preparation female genitalia (Pretoria).

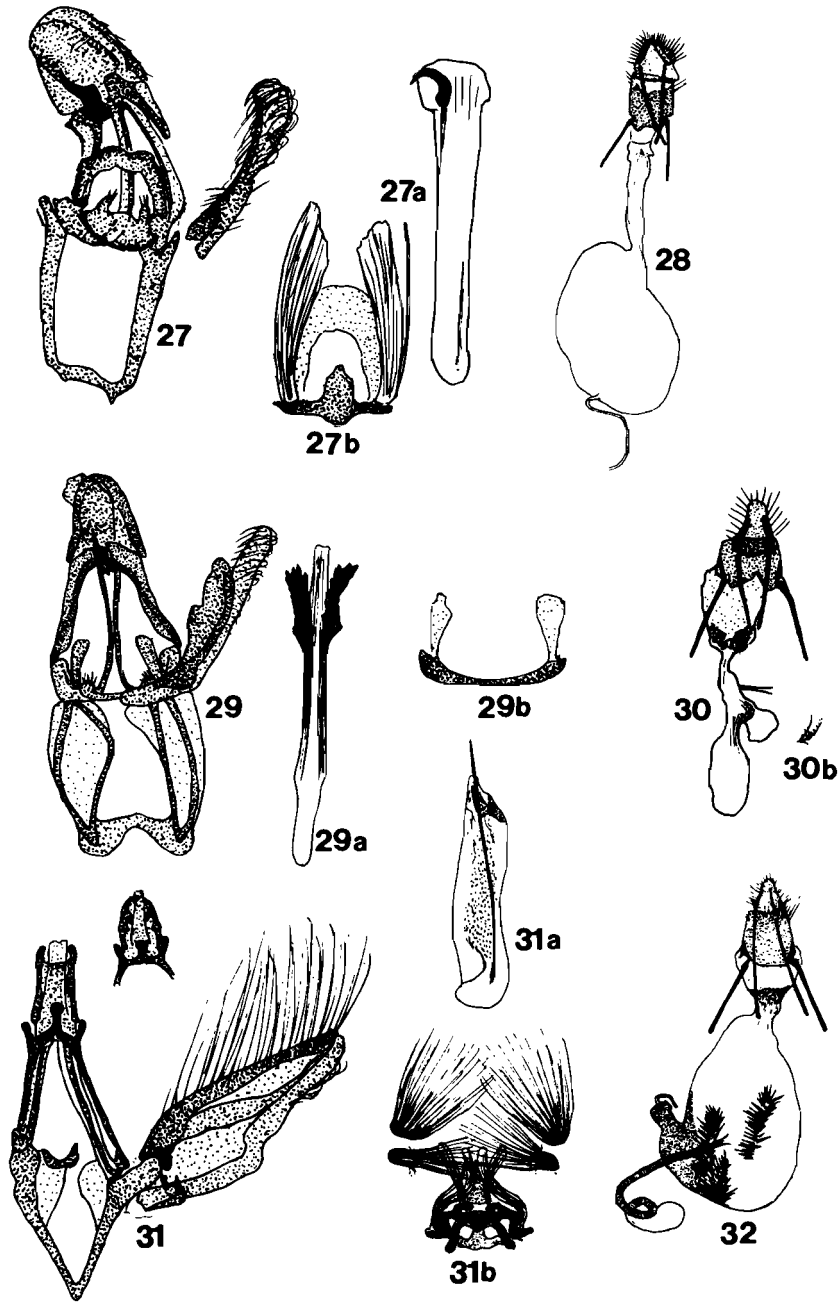
Diagnosis. In forewings R_2 on very short stalk with R_{3+4}. M_2 and M_3 on long stalk. Cu_1 on stalk with M_2 and M_3. In hindwing Cu_1 on stalk with M_{2+3}. Labial palpi curved up. Maxillary palpi in male with aigrette. Antennae in male with moderately large touffe. Forewings brownish-grey, with a transverse black line of elevated scales, bordered by white on both sides. In male gnathos in form of a hook; transtilla a massive horseshoe, continuous across middle posteriorly. Aedeagus slender, with small curved cornutus; culcita simple, with fornix and tufts of hairs laterally. In female ductus bursae long, narrow, membraneous, bursa egg-shaped, ductus seminalis from proximal end of bursa.
Male genitalia (Figure 27). Uncus short (length and breadth about equal), rounded posteriorly. Gnathos in form of a curved hook. Lateral parts of gnathos short, massive posteriorly. Tegumen moderately slender, broadened anteriorly and forming short medially directed projections. Transtilla continuous across mid-line posteriorly with a pair of forward directed broad extensions, which are slightly longer than anellus. Anellus in form of an oval plate, with a strongly sclerotized anterior edge, and a pair of short posteriorly directed finger-like projections bearing bristles at their ends. Vinculum with transverse anterior edge. Valves narrow, length about seven times the breadth, not reaching tip of uncus, without any spines or points. Aedeagus rather slender, with one small curved cornutus at posterior end. Culcita in form of transverse bar the middle part of which extends backwards in a triangular plate, a poorly sclerotized fornix and at each lateral end, a bunch of ribbon-like scales.

Female genitalia (Figure 28). Ovipositor short. Posterior apophyses about one and a half the length of anterior ones; both of equal thickness. Antrum not sclerotized. Ductus bursae two thirds the length of corpus bursae. Corpus bursae oval, membraneous, without a signa. Ductus seminalis from the proximal end of bursa.

Psorosa myrmidonella Ragonot. (Figures 29, 30).
Psorosa myrmidonella Ragonot 1901: 103.
Psorosa myrmidonella Ragonot in Janse 1945: 33.
Psorosa myrmidonella Ragonot in Vári & Kroon 1986: 58.

Material examined. One prepartion genitalia male (Umvuma, Zimbabwe 19 39 BC), one preparation female genitalia (Pretoria).

Diagnosis. In forewings R_2 separate from stalk of R_{3+4}. M_2 and M_3 conascent. In hindwings Dc joins lower median just beyond origin of Cu_2. Cu_1 on stalk with M_{2+3}. M_2 and M_3 on long stalk about twice length of free part of M_2. Labial



Figures 27–32 **27.** *Pretoria hutchinsoni* Ragonot, male genitalia. **27a** — aedeagus, **27b** — culcita. **28.** *Pretoria hutchinsoni* Ragonot, female genitalia. **29.** *Psorosa myrmidonella* Ragonot, male genitalia. **29a** — aedeagus, **29b** — culcita. **30.** *Psorosa myrmidonella* Ragonot, female genitalia. **30b** — detail of sclerotizations near pocket of bursa. **31.** *Thylacoptila paurosema* Meyrick, male genitalia. **31a** — aedeagus, **31b** — culcita. **32.** *Thylacoptila paurosema* Meyrick, female genitalia.

palpi in both sexes curved up, maxillary palpi scaled, antennae without touffe. Forewings brown, with double black antemedial band at about ⅔ of length of wing with yellowish between the black lines. Postmedial band absent. In male lateral parts of gnathos long, inflected parts of tegumen short. Valves with rounded lobes on sacculus. Aedeagus long and slender, without a cornutus, but with sclerotized outgrowths with spikes near distal end. Culcita simple. In female antrum with a pair of sclerotizations. Ductus bursae short, membraneous. Corpus bursae with a side pocket containing curved sclerotizations.

Male genitalia (Figure 29). Uncus with broadly rounded apex. Gnathos narrow with sharp point. Lateral parts of gnathos rather broad and almost straight. Components of tegumen very narrow, slightly thickened at anterior ends, but without inwardly directed projections. Components of transtilla rather broad plates, not strongly sclerotized, broader posteriorly. Anellus in form of a narrow transverse bar with thickened lateral ends, which bear some bristles. Vinculum broad, with concave anterior end. Valves narrow, not reaching tip of uncus by ⅙. Costa with a sharp point at about ¾ the length of valve. Sacculus forming two rounded lobes in the middle third of length. Aedeagus long (⅘ of length of valve) and very slender. Distal third of aedeagus bears on each side a sclerotized structure ending with

several points distally. Culcita in form of a simple transverse bar, with longitudinal lobes attached to each lateral end, but without bunches of hairs or elongated scales.

Female genitalia (Figure 30). Ovipositor very short, posterior and anterior apophyses equally long and both rather short. Antrum large, with a pair of sclerotizations at proximal end. Ductus bursae membraneous, narrow and very short: less than ⅓ the length of corpus bursae. Corpus bursae elongated, with a lateral pocket posterior to middle; some fine curved sclerotizations at mouth of the pocket. Ductus seminalis from corpus bursae, near distal end.

Remark. The genitalia of *Psorosa myrmidonella* do not bear the slightest resemblance to those of *Psorosa dahliella* (the type species for the genus examined by myself) the latter having six strong cornuti in the aedeagus, and no sclerotized lateral outgrowths at end, broad valves, and a strong bunch of hairs in culcita. This confirms Janse's opinion (l.c), that *myrmidonella* does not belong to genus *Psorosa*, that quite apart from *Psorosa dahliella* being a trifine, whereas *myrmidonella* is a quadrifine.

Thylacoptila paurosema Meyrick (Figures 31, 32).
Thylacoptila paurosema Meyrick, Entom. Month. Mag. XXII 188:5: 106.
Thylacoptila paurosema Meyrick in Ragonot 1893: 321.
Thylacoptila paurosema Meyrick in Janse 1942: 38.

Material examined. Four genitalia preparations, males (Johannesburg), four preparations females (Johannesburg), one preparation female (Durban), one preparation female (Wankie, Zimbabwe, 18 26 AD).

Diagnosis. Forewings with R_2 separate from stalk of R_{3+4}. M_2 and M_3 very close at origin but separate; hindwings with Sc and Rs closely parallel, cell medium, branches of M_2 M_3 Cu_1 and Cu_2 evenly spaced. Male with maxillary palpi in form of aigrette, antennae with large touffe; hindwings in male with peculiar pouch protruding on underside. Forewings dark grey, with indistinct mottling. In male uncus bifid at end, aedeagus with very long and slender cornutus. Culcita complicated with several pairs of lobes and additionally two pairs of bunches of hairs. Female with a suprabursa in form of a thin tube with a membraneous vesicle at end.

Male genitalia (Figure 31). Uncus elongated, nearly quadrangular, posterior corners forming projections, which may be extended beyond the median part of the uncus, but may also be folded forwards and inwards. Gnathos in form of a lobe broadened and obtuse at posterior end, lateral parts of the gnathos long narrow and straight; their posterior end forming projections which protrude beyond the angles of the uncus. Tegumen long and slender. Transtilla absent. Anellus a curved bilobed structure not bearing any bristles. Vinculum relatively short, triangular with pointed anterior end. Valves large and massive, reaching to beyond the tip of the uncus. Costa massive, bent slightly at quarter length, covered distally of bend with long hairs. A massive bar runs from near base of costa to tip of sacculus. Sacculus massive, kinked near middle, longer than costa. Aedeagus relatively enormous, almost as long as the genital apparatus from vinculum to uncus, containing a single long and thin cornutus which runs the whole length of the aedeagus and protrudes from its distal end. Culcita complicated basal transverse bar with posteriad prolongation in middle and, attached to it, four pairs of lobes, one pair of a complicated shape. In addition to these structures there is, more distally, a triangular sclerotization, and laterally on each side, a pair of bunches of hairs.

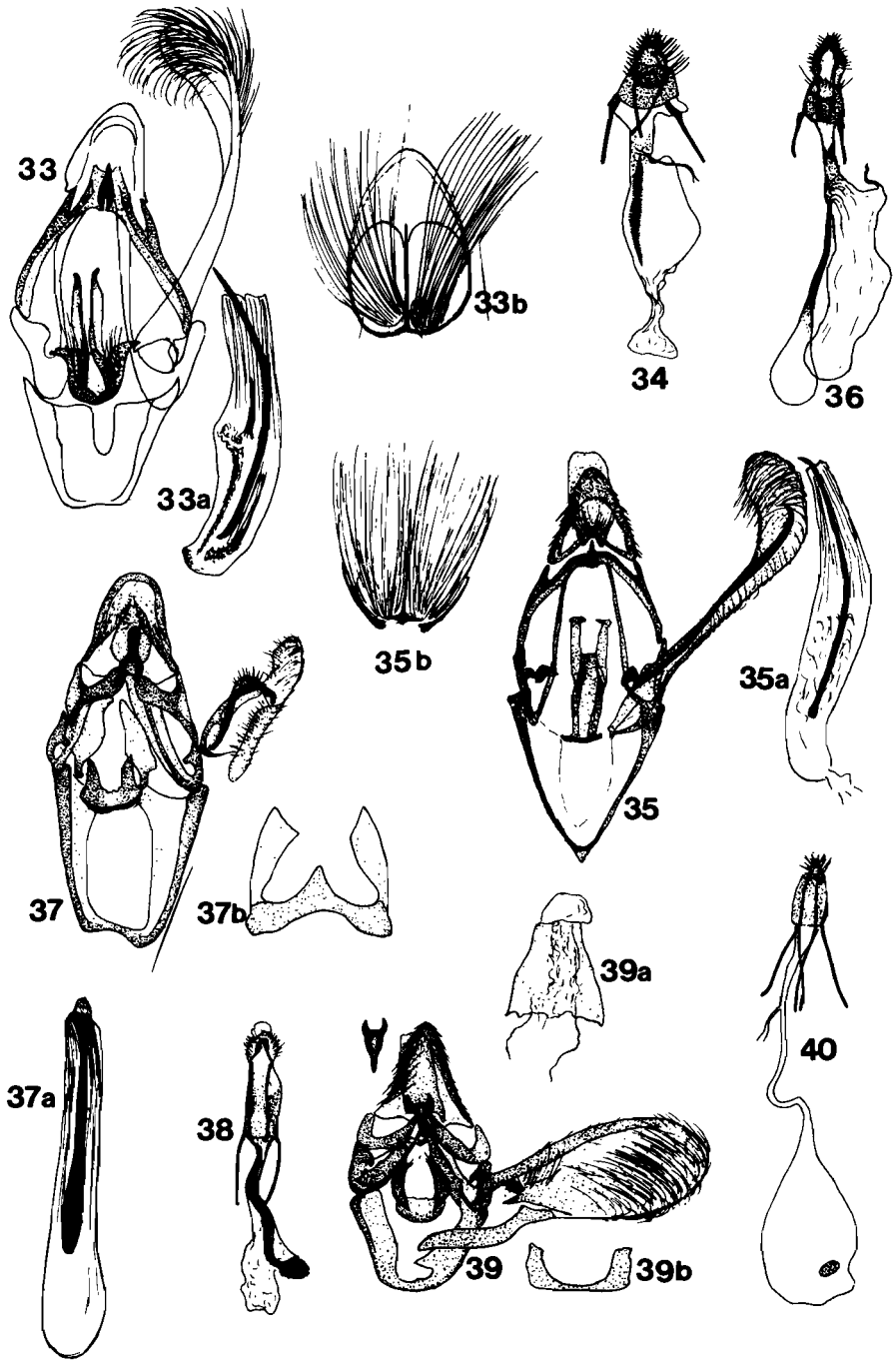
Female genitalia (Figure 32). Ductus bursae very short, its distal part, adjoining the antrum, sclerotized, the rest membraneous. Corpus bursae oval, its proximal part on one side sclerotized and extended into a partly spirally twisted outgrowth, which bears the ductus seminalis at its tip. The rest of the bursa membraneous but bears a system of long spines arranged in two twisting bands: a longer and a shorter one. Nearer the proximal end of the bursa there is, attached to it, and continuous with the cavity of the bursa, a tube, which we will call the suprabursa. The tube is about the length of the bursa, its walls are of uniform diameter and strenghened with transverse (possibly spiral) thick-enings, making the tube superficially similar to a trachea. Proximally the tube ends with a small thin walled vesicle.

Veldticola nebulosella Hampson (Figures 33, 34).
Veldticola nebulosella Hampson 1930: 74.
Veldticola nebulosella Hampson in Vári & Kroon 1986: 59.

Material examined. Two preparations of genitalia male (Transvaal, Pretoria), three preparations of female genitalia (Transvaal, Pretoria, Zoutpan n. Pretoria, Johannesburg).

Diagnosis. In forewings R_2 remote from stalk of R_{3+4}. M_2 and M_3 conascent. In hindwings Sc and Rs closely parallel. Cell about ⅓ of length of wing. Dc approaches lower median between Cu_1 and Cu_2, and is continued as M_2. M_3 on stalk with Cu_1. Labial palpi with third segment bent down. Maxillary palpi scaly. Antennae in male with big touffe. Forewings grey with scattered patches of brown, and with several longitudinal black lines next to and below cell. In male lateral parts of gnathos, components of tegumen and a pair of outgrowths from anellus markedly elongated. No transtilla. Valves long and narrow, without claspers. Aedeagus with two thin cornuti, one long and one very short. Culcita with a pair of strong bunches of scent hairs. Eighth tergite with an oval plate made up of fused hairs. In female corpus bursae with a rod with small side projections along most of its length, and a membraneous suprabursa at proximal end.

Male genitalia (Figure 33). Uncus triangular with rounded tip. Gnathos moderately large, pointed. Lateral parts of the gnathos elongated, forming short projections posteriorly to meet angles of uncus. Tegumen slim and very elongated, but anterior end broad, and forming medially directed outgrowths. Transtilla absent. Anellus of complicated shape, with a pair of pointed outgrowths on the sides, and a pair of long lobes extending posteriad. Vinculum with a transverse anterior end. Valves very long, reaching far beyond uncus, very narrow but with broadened distal end. No clasper. Aedeagus long, with two slender cornuti; a very long one, reaching the whole length of the aedeagus and protruding



Figures 33–40 33. *Veldticola nebulosella* Hampson, male genitalia. 33a — aedeagus, 33b — culcita. 34. *Veldticola nebulosella* Hampson, female genitalia. 35. *Veldticola striatella* Hampson, male genitalia. 35a — aedeagus, 35b — culcita. 36. *Veldticola striatella* Hampson, female genitalia. 37. *Candiope joannisella* Ragonot, male genitalia. 37a — aedeagus, 37b — culcita. 38. *Candiope joannisella* Ragonot, female genitalia. 39. *Emporia melanobasis* Janse, male genitalia. 39a — aedeagus, 39b — culcita. 40. *Emporia melanobasis* Janse, female genitalia.

from its distal end, and a short one. Culcita with a three-pronged thin sclerotization to which are attached two large bundles of scent scales. The eighth tergite bears an oval plate consisting of fused scales.

Female genitalia (Figure 34). Ovipositor without peculiarities. Posterior and anterior apophyses of about equal length, the posterior more slender, the anterior more massive. Antrum without sclerotizations. Ductus bursae very short without sclerotizations. Corpus bursae oval, with signa in form of a long sclerotized stripe with short small side projections, which extends the length of main body of the corpus bursae. Corpus bursae is constricted at its proximal end, and connected by a short canal to a membraneous vesicle — a suprabursa. Ductus seminalis from most distal part of corpus bursae.

Veldticola striatella Hampson. (Figures 35, 36).
Veldticola striatella Hampson, 1930: 73.
Veldticola striatella Hampson in Vári & Kroon 1986: 83.

Material examined. Eight preparations of male genitalia, eight preparations for female genitalia (Transvaal, Johannesburg).

Diagnosis. In forewings R_2 remote from stalk of M_{3+4}. M_2 and M_3 conascent. In hindwings Sc and Rs closely parallel. Dc very oblique, cell at lower corner half length of wing. M_2 and M_3 on long stalk. Dc at level of Cu_1, Cu_2 well before angle of cell. Labial palpi upturned, but third segment bent downwards. Maxillary palpi scaly. Antennae in male with touffe, in female filiform. Forewing grey with numerous black longitudinal striations. In male gnathos small; lateral parts of gnathos and components of tegumen elongated. Components of transtilla small compact bodies. Valves very narrow, with long claspers. Aedeagus curved, with long thin cornutus. Culcita with a pair of very large bunches of scent scales. In female ductus bursae short. Corpus bursae membraneous with a long tubular suprabursa attached to its distal end.

Male genitalia (Figure 35). Uncus triangular, moderately hirsute. Gnathos small, pointed. Lateral parts of gnathos elongated, forming short projections to meet angles of the uncus. Tegumen very long and slender, with inwardly pointing projections at anterior ends. Components of transtilla in form of rather small compact curved bodies adjacent to the anterior ends of tegumen. Anellus very elongated with a pair of posteriad directed extensions, each bearing at its end an inwardly directed small lobe and small bristles on inner edge. Vinculum triangular, with pointed anterior end. Valves long, reaching beyond the tip of the uncus, very narrow, but broadening towards tip which is curved dorsad. There is a long slender clasper adhering to the inner surface of the valve, with a curved sharp point at the end. Aedeagus long, slightly curved, with a long slender cornutus, the tip of which projects beyond the end of the aedeagus. Culcita consists of three rods, to which are attached two very large bunches of scent scales.

Female genitalia (Figure 36). Ovipositor without any peculiarities. Posterior apophyses very slender. Anterior apophyses shorter by about a quarter, and more massive. Antrum without sclerotizations. Ductus bursae very short, bearing two thickenings laterally about middle of its length. Corpus bursae long, cylindrical, without a signa, bearing near its posterior end a long appendix (a suprabursa). The suprabursa consists of a long duct with a vesicular membraneous expansion proximally. The whole structure reaches beyond the proximal end of the main part of the bursa. Ductus seminalis from distal part of the bursa, opposite to origin of suprabursa.

Remark. Although *Veldticola striatella* Hampson and *Veldticola nebulosella* Hampson are very similar in outward appearance, including the structure of the antennae and the presence of tufts of scent scales on the tip of the abdomen, as well as some features of genitalia structures (long narrow valves, structure of anellus and aedeagus), there are very marked differences: in the male sex — the absence of the clasper in *Veldticola nebulosella*, and in the female sex — the presence of a signa in the bursa, and the absence of the complicated suprabursa in *Veldticola nebulosella*.

Acrobasilna Agenjo 1958

Candiope joannisella Ragonot. (Figures 37, 38).
Candiope joannisella Ragonot 1888: 14.
Candiope joannisella Ragonot 1893: 223.
Candiope joannisella Ragonot, in Vári & Kroon 1986: 47.

Material examined. Two preparations male genitalia (Brakt, Richtersfeld, Cape Province 28 17 AC, and Uitenhage, Cape Province 33 25 CD); one preparation female genitalia (Pretoria).

Diagnosis. In forewings R_2 remote from stalk of R_{3+4}. M_2 and M_3 remote. In hindwings Sc and Rs closely parallel. Cell nearly equal to half length of wing, Dc approaches Cu at branching point of Cu_1 and is connected to latter by very short vein, while the Dc is continued as M_2. Almost immediately after this point the lower median is continued as M_3, which runs closely parallel with M_2, fuses with the latter for a short stretch, forming common stalk of M_2 and M_3, before the two veins finally separate. Labial palpi ascending; maxillary palpi scaled, antennae, without touffe, strongly ciliated. Forewings light greyish brown, with oblique white antemedial band, and large brown discal spot, surrounded with white. In male, gnathos with blunt posterior end. Components of transtilla elongated plates, anellus with a pair of posteriad extensions without bristles. Valves short with a bulbous protrusion on costa. Aedeagus with long thin cornutus. Culcita simple. In female ovipositor elongated. Ductus bursae gradually broadening to corpus bursae; latter without signa, membraneous.

Male genitalia (Figure 37). Uncus rounded posteriorly. Gnathos with posterior process with a blunt end. Lateral parts of gnathos broad posteriorly, and with a posterolateral process to meet angles of uncus. Components of tegumen with inwards directed hooks at anterior end. Components of transtilla a pair of elongated plates, twice as long as anellus. Anellus with sclerotized curved anterior edge, and with a pair of pointed lobes posteriorly, without bristles at ends. Vinculum convex anteriorly. Valves short, not reaching tip of uncus by a third, with a bulbous outgrowth at distal end of costa, and the valve narrowing abruptly beyond the outgrowth. On medial surface of valve a sclerotized thickened bar, curving at distal end and forming a sharp point; another curved process next to this point. Aedeagus cylindrical, almost as long as the whole sexual apparatus, with a long thin cornutus. Culcita simple, consisting of a broadly V-shaped transverse bar with, at the ends, a pair of poorly sclerotized longitudinal plates.

Female genitalia (Figure 38). Ovipositor elongated, eighth segment half as long as broad. Apophyses slender, anterior ones slightly longer than posterior. Antrum membraneous. Ductus bursae 1½ as long as corpus bursae, membraneous, with longitudinal folding, broadening gradually towards corpus bursae. Corpus bursae mostly membraneous, but with a lateral pouch covered with minute spicules. Ductus seminalis could not be detected.

Emporia melanobasis Janse (Figures 39, 40).
Emporia melanobasis Hampson, a manuscript name.

Emporia melanobasis Hampson in Janse, 1920: 121.
Emporia melanobasis Hampson in Vári & Kroon 1986: 54.

Material examined. South Africa, Transvaal: Three males, Pretoria, genitalia preparations 3669, 466, 467; two females, preparations 493, 502, wings preparation 160.

External characters. Wing-span 19–21 mm. Forewings sandy yellow, several black dots at base of wing, at middle of wing, at the end of the cell, and, as oblique row of longitudinal spots, in place of the postmedial band. Hind wings light sandy yellow.

Venation. In forewings R_2 remote from stalk of R_{3+4}. M_2 and M_3 on stalk equal to about quarter of free length of M_2. In hindwings Sc and Rs fused for short diatance. Cell about half of length of wing. Dc ends beyond branching of Cu_1, the latter connected to stalk of M_{2+3} by a short vein.

Male genitalia (Figure 39). Uncus triangular, with sharp apex. Gnathos bifid, with two strong points, rather far apart. Lateral parts of gnathos massive, V-shaped, lateral part of V meeting angles of uncus. Components of tegumen with an inwards directed hook at anterior end. Transtilla as a pair of rather broad but poorly sclerotized plates, joined across mid-line posteriorly, and with small outwards directed points at anterior ends. Anellus a transverse oval plate with long (about four times as long as broad) appendages laterally, with bristles at ends. Vinculum short, with rounded anterior edge. Valves very broad and long — reaching by a third beyond tip of uncus, with a small tubercle-bearing bristles between base of costa and sacculus. Aedeagus very short and broad (width more than half of length), without a cornutus. Culcita very simple, as a transverse bar, with ends extended posteriad, without any hairs attached.

Female genitalia (Figure 40). Ovipositor narrow, eighth segment longer than broad. Apophyses slender, posterior almost twice as long as anterior ones. Antrum membraneous. Ductus bursae membraneous, narrow, 1½ length of corpus bursae. Corpus bursae ovoid, broadest proximally, membraneous, with small signa in form of an oval plate with coarse granulation. Ductus seminalis from ductus bursae, near antrum.

Lectoparatypes. Males, Pretoria 17.X.1909 (Janse), genitalia preparations 466, 467, genitalia preparation (preparavit Janse) 3669, labelled *Emporia melanobasis* Hampson. Females, Pretoria 17.X.1910 (Janse), genitalia preparation 493, 12.X.1909 (Janse), genitalia praparation 502. Lectotypes in Transvaal Museum.

Remark. The species was named originally as *Emporia melanobasis* by Hampson, but was never described and published by him. The name was accepted by Janse, and used as *Emporia melanobasis* Hampson in a publication in 1920 (South Afr. J. of natural History, vol II, pp. 121–126). The name thus became validated, and became *Emporia melanobasis* Janse. Janse's paper, however, does not provide any morphological description of the moth, only certain biological peculiarities. A description of the species is given here for the first time.

Endolasia transvaalica Hampson (Figures 41, 42).
Endolasia transvaalica Hampson, 1926: 620.
Endolasia transvaalica Hampson, in Vári & Kroon 1986: 88.

Material examined. One genitalia preparation male (Nkwalini, Transvaal, 28 31 DA), one genitalia preparation female (Pretoria).

Diagnosis. In forewings R_2 separate from stalk of R_{3+4}. M_2 and M_3 on stalk with Cu_1. In hindwings Sc and Rs closely parallel. Cell moderately long. Dc at level of Cu_2, continued as M_2; M_3 on stalk with Cu_1. Forewings grey with clear pattern of transverse bars and dark area across middle of wing. In male gnathos long and narrow, components of transtilla slender, valves short and narrow. Aedeagus with short thin cornutus, culcita with fornix and bunches of ribbon-like scales. In female antrum and ductus bursae membraneous, latter thin and long, longer than bursa. Bursa membraneous with two laminated signae. Ductus seminalis from antrum.

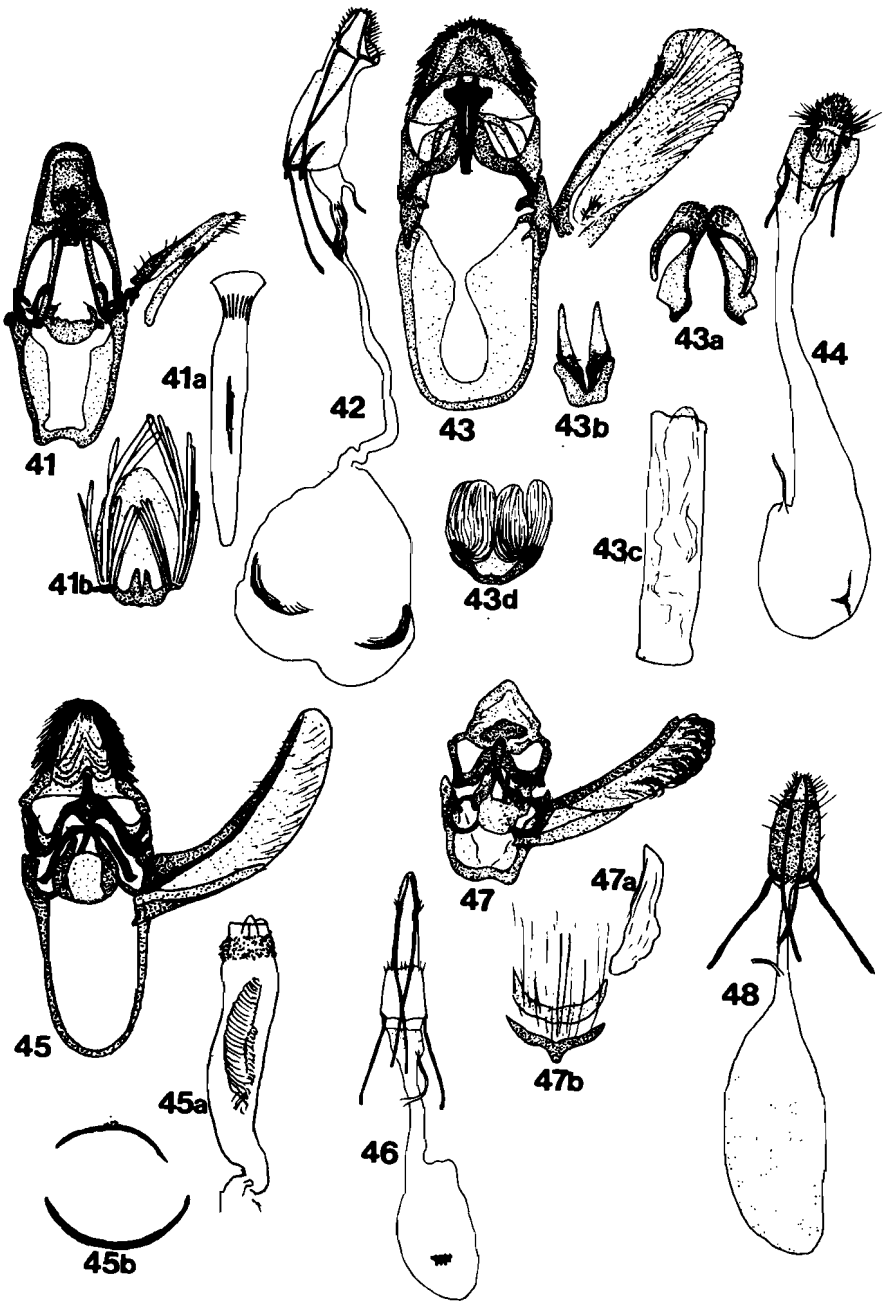
Male genitalia (Figure 41). Uncus as long as broad, with blunted posterior end. Gnathos very narrow, ending in a sharp point. Lateral parts of gnathos broad at posterior end where they flank the median part of gnathos, narrow and straight anteriorly. Components of tegumen long and narrow, forming at anterior end outgrowths facing inwards. Components of transtilla with broadened and bent posterior ends, and forked and strongly sclerotized anterior ends. Anellus in form of a broad semicircular plate, with at each end a backwards directed finger-like outgrowth with bristles at the end. Vinculum with a concave anterior end. Valves narrow and narrowing towards tip, not reaching posterior end of uncus, with an oblong thickening between costa and sacculus about the middle of the valve's length. Aedeagus long and rather narrow, with a small cornutus in the middle. Culcita in form of a transverse bar with a pair of backwards directed extensioris in the middle; to this is attached a poorly sclerotized triangular plate, and, at the lateral ends, bunches of ribbon-like scales.

Female genitalia (Figure 42). Ovipositor with eighth abdominal segment very long. Posterior apophyses very long and slender, twice length of eighth segment, anterior apophyses also long, but shorter than the posterior ones. Antrum membraneous. Ductus bursae very long, almost one and a half the length of corpus bursae, membraneous. Corpus bursae ovoid, bearing two signa, each curved and showing a laminated structure. Ductus seminalis from antrum.

Eurhodope infixella (Walker) (Figures 43, 44).
Rhodophaea infixella Walker 1866: 1710.
Rhodophaea infixella Walker in Ragonot 1893: 62.
Rhodophaea infixella (Walker) in Vári & Kroon 1986: 167.

Material examined. Two preparations genitalia male (Cape Town, Namibia: Abachaus 20 16 BC), three preparations genitalia female (Transvaal: Pienaars River, 28 28 AA, Waterfall Onder, 25 30 CB, Namibia: Abachaus 20 16 BC).

Diagnosis. In forewings R_2 remote from stalk of R_{3+4}, M_2 and M_3 conascent. In hindwings Sc and Rs closely parallel.



Figures 41–48 **41.** *Endolasia transvaalica* Hampson, male genitalia. **41a** — aedeagus, **41b** — culcita. **42.** *Endolasia transvaalica, female genitalia.* **43.** *Eurhodope infixella* (Walker), male genitalia. **43a** — transtilla, **43b** — anellus, **43c** — aedeagus, **43d** — culcita. **44.** *Eurhodope infixella* (Walker), female genitalia. **45.** *Homoeosoma stenotea* Hampson, male genitalia. **45a** — aedeagus, **45b** — cultita. **46.** *Homoeosoma stenotea* Hampson, female genitalia. **47.** *Mussidia melanoneura* Ragonot, male genitalia. **47a** — aedeagus, **47b** — culcita. **48.** *Mussidia melanoneura* Ragonot, female genitalia.

Cell long; lower median joined by oblique branch to stalk of M_{2+3}. Maxillary palpi scaled, antennae without touffe. Forewings with a pattern of brown, with two areas of light brown near costa. Gnathos ending posteriorly in widened plate with 2–6 sharp points. Components of transtilla massive, biramous, with posterior ends touching but not fusing on mid-line, and bearing numerous short spines. Aedeagus cylindrical, without a cornutus. Culcita simple consisting of transverse bar and two bunches of flattened scales. In female antrum and ductus bursae membraneous, latter long and widening gradually to corpus bursae with single pit-like signa.

Male genitalia (Figure 43). Uncus broad, evenly rounded moderately hirsute. Gnathos broadened distally with several (2–6) points distally. Lateral parts of gnathos curved, expanded laterally and forming long conical extensions to meet the angles of uncus. Components of tegumen with inwardly directed projections at their anterior ends. Transtilla of two symmetrical parts, each with two anteriad lobes, the inner lobe flattened and expanded proximally, the outer — narrow. The caudal ends of each half covered with rough spikes. Anellus of complicated structure, with two tapering lobes distally, and a pair of shorter lobes bearing bristles on caudal ends. Vinculum long rounded anteriorly.

Valves long, reaching beyond tip of uncus, and broad. Costa strongly sclerotized, but sacculus poorly developed. Near base of the valve, on its inner surface, there is a small projection, bearing bristles. Aedeagus long, cylindrical, without cornuti. Culcita in form of a curved bar bearing two pairs of bunches of flattened scales stacked on top of one another.

Female genitalia (Figure 44). Ovipositor short and broad. Posterior and anterior apophyses of about equal length. Antrum and ductus bursae membraneous, the latter twice as long as corpus bursae and widening gradually in anterior direction. Corpus bursae oval, with a small pit-like signa. Ductus seminalis from distal part of corpus bursae.

Homoeosoma stenotea Hampson (Figures 45, 46).
Homoeosoma stenotea Hampson 1926: 628.
Homoeosoma stenotea Hampson in De Joannis 1927: 99.
Homoeosoma stenotea Hampson in Vári & Kroon 1986: 83.

Material examined. Six preparations of male genitalia (Johannesburg), eight preparations of female genitalia (Johannesburg, Haenertsburg, Transvaal, 23 29 DD, Umtali, Zimbabwe, 19 32 BD).

Diagnosis. In hindwings M_2 and M_3 fused (Heinrich's Venation Group II). In forewings R_3 and R_4 fused. M_2 and M_3 on stalk of about ⅓ of their total length. In hindwings Sc and Rs on long stalk, 4–5 time length of free part of Sc. Cell about ⅓ of wing length. Dc straight and vertical. Cu_1 connected by short oblique vein to origin of M_{2+3}. Labial palpi upturned, maxillary palpi scaly, antennae in both sexes filiform. A longitudinal white stripe above eye. Forewings grey, with a white stripe along costa, not quite reaching apex. In male uncus very hirsute. Gnathos in addition to point posteriorly extended in a triangular outgrowth on each side. Anellus with on each side a pointed trianuglar lobe. Aedeagus with a dark body in interior, but without a sclerotized cornutus, and with small short spikes near distal end. Culcita in form of a very thin sclerotized semicircle. In female ductus bursae thin membraneous, about same length as corpus bursae; the latter with a signa bearing short blunt projections. Ductus seminalis from ductus bursae near antrum.

Male genitalia (Figure 45). Uncus very hirsute, triangular with rounded apex and with extended antero-lateral angles. Gnathos with a small blunted posterior point, and with wing-like extensions laterally, pointed at ends and slightly bent anteriad. Lateral parts of gnathos V-shaped, with main, longer, shaft adjoining medial gnathos, and shorter branch joining angle of uncus. Tegumen continuous across midline, antero-lateral components rather long, narrow, and straight. Anellus a transverse, poorly sclerotized oval plate, bearing, on each side a roughly triangular, elongated, strongly sclerotized lobe, without bristles on ends. Vinculum rounded anteriorly. Valves rather broad and long, reaching well beyond tip of uncus. Aedeagus cylindrical, as long as valves, with a dark body in interior, which appears to be spirally twisted but not sclerotized, and with short spines, pointing proximally, at distal end. Culcita in form of a thin, strongly sclerotized crescentic rod.

Female genitalia (Figure 46). Ovipositor narrow. Eighth segment longer than broad. Posterior apophyses long, almost twice the length of anterior ones; both slender. Antrum membraneous. Ductus bursae narrow, membraneous, about same length as corpus bursae. Corpus bursae oval, with ductus bursae joining corpus bursae excentrically. Corpus bursae membraneous, with signa in form of oval plate bearing short stubbly spines with blunted ends. Ductus seminalis from ductus bursae nearer antrum.

Remark. Genitalia of species belonging to the genus *Homoeosoma* have been described in several publications. Genitalia of numerous American species of the genus are described by Heinrich (1956), and the Palaearctic species by Roesler (1973). The female genitalia of *Homoeosoma sinuella*, the type for the genus, are figured by Ivinskis (1981). The genitalia of the Indian species, *Homoeosoma albovittella* are described by Pajni & Rose (males, 1973) and Rose (females 1982). The genitalia of *Homoeosoma stenotea* in most features conform to those of the Palaearctic and American species, but there are some differences. The anellus of the American and Palaearctic species is figured as consisting of a thin transverse bar, supporting at ends thin narrow lobes. In the present species the thin transverse bar appears to be the sclerotized anterior edge of a very thin oval plate, and the posteriad directed lobes are distinctly triangular, and bear bristles at the median edge. A more important difference is evident in the female sex. In all the American and Palaearctic species the ductus seminalis arises from the corpus bursae. In the present species the ductus seminalis arises from the ductus bursae, as has been verified in several preparations, which excludes the possibility of a mistake. The male of the Indian species, *Homoeosoma albovittella*, as figured by Pajni and Rose has the lobes of the anellus (marked as 'juxta') similar to *H. stenotea*: triangular and with bristles. What the position of the ductus seminalis is in *H. albovittella* is not clear, as in Rose's paper the ductus is not shown at all. Whether *Homoeosoma stenotea* Hampson is a true *Homoeosoma* could perhaps be queried — especially in view of the position of the ductus seminalis.

Mussidia melanoneura Ragonot 1893 (Figures 47, 48).
Mussidia melanoneura Ragonot 1893: 142.
Mussidia melanoneura Ragonot in Vári & Kroon 1986: 54.

Material examined. One preparation of male genitalia (Naboomspruit, Transvaal, 24 28 DA). One preparation of female genitalia (Zululand, Natal).

Diagnosis. In forewings R_2 on stalk with R_3 and R_4. M_2 and M_3 on short stalk. In hindwings Sc and Rs on stalk. Cell about half length of wing. Cu_1 connected by oblique vein to stalk of M_{2+3}, the latter less than half of free length of M_2. Labial palpi upturned, maxillary palpi scaly, antennae without touffe, pectinate in male, filiform in female. Forewings brownish-yellow mottled with streaks of darker brown, without transverse bands. In male gnathos short and blunt, lateral parts of gnathos almost U-shaped, with long extensions to meet angles of uncus. Transtilla continuous across

mid-line posteriorly, with long anterior components. Anellus with a pair of short thick fingerlike processes with bristles. Aedeagus without a cornutus. Culcita simple. In female ductus bursae narrow, membraneous. Corpus bursae ovoid without signa. Ductus seminalis from ductus bursae.

Male genitalia (Figure 47). Uncus short and broad, triangular, with pointed apex. Gnathos short and rather broad, with rounded tip. Lateral parts of gnathos with main shaft broad and bent outwards at an angle, and with an extension at the lateral end, which is almost as long as the main shaft, and which is directed posteriad to meet the angle of the uncus. Components of tegumen with inwards directed outgrowths at anterior end. Components of transtilla joined across mid-line at posterior ends, middle parts curved, and anterior ends produced into a rounded lobe anteriorly, and a narrow curved process laterally. Anellus very large, with an oval middle plate, and a pair of broad rounded extensions at the ends, bearing bristles. Vinculum short and broad, with transverse anterior end. Valves broad and long, reaching by more than ⅓ beyond tip of uncus, costa ending with a blunt point. Aedeagus shorter than valve by about a quarter of its length. Culcita of two crescentic bars, placed one posterior to the other. The anterior one more strongly sclerotized. Long hairs arise along the whole width of these bars, without forming tufts.

Female genitalia (Figure 48). Ovipositor narrow. Posterior apophyses longer than anterior ones by about a quarter, and more slender than the latter. Antrum and ductus bursae narrow, membraneous, latter less than half length of corpus bursa. Corpus bursae elongated oval, bearing over all its surface very tiny spicules. No signa. Ductus seminalis from ductus bursae, near its proximal end.

Myelodes flavimargo Hampson 1930 (Figures 49, 50).
Myelodes flavimargo Hampson 1930: 78.
Myelodes flavimargo Hampson, in Vári & Kroon 1986: 35.

Material examined. One preparation male genitalia (Roodeplaat, Transvaal). Two preparations female genitalia (Duivels Kloof, Transvaal, 23 30 CA).

Diagnosis. In forewing R_2 remote from stalk of R_{3+4}. M_2 and M_3 on stalk of about quarter of free length of M_2. In hindwings Sc and Rs fused briefly. Cell slightly longer than half of wing. M_2 and M_3 on long stalk 1½ times free length of M_2. Cu_1 at angle of cell, connected to stalk of M_{2+3} by short crossvein. Cu_2 far proximal to angle of cell. Labial palpi long, porrect. Maxillary palpi scaled. Antennae simple, filiform. Forewings yellowish-white with a number of black dots. In males gnathos bifid, in form of two strong horns. Components of transtilla separate. Anellus with fingerlike processes. Aedeagus large without cornuti. Culcita simple. In female antrum, ductus and corpus bursae membraneous. Bursa with a small round signa bearing small short spikes.

Male genitalia (Figure 49). Uncus blunt at apex, with very elongated antero-lateral extensions, so that gnathos is situated in middle of uncus. Gnathos bifid, forming a pair of pointed claws. Lateral parts of gnathos almost straight. Components of tegumen straight and broad. Components of transtilla in form of long (longer than anellus) slightly curved rods, narrower posteriorly and broadened at anterior ends. Anellus consists of a median bilobed poorly sclerotized plate, to which are attached laterally a pair of fingerlike elements, bearing bristles at their posterior ends. Vinculum roughly triangular, with convex anterior end. Valves broad and long, reaching to beyond the apex of uncus, evenly rounded distally, without spikes or points. Aedeagus as long as the whole genital apparatus thick and without cornuti. Culcita very simple, consisting of two thin rods, convex posteriad, without any hairs attached.

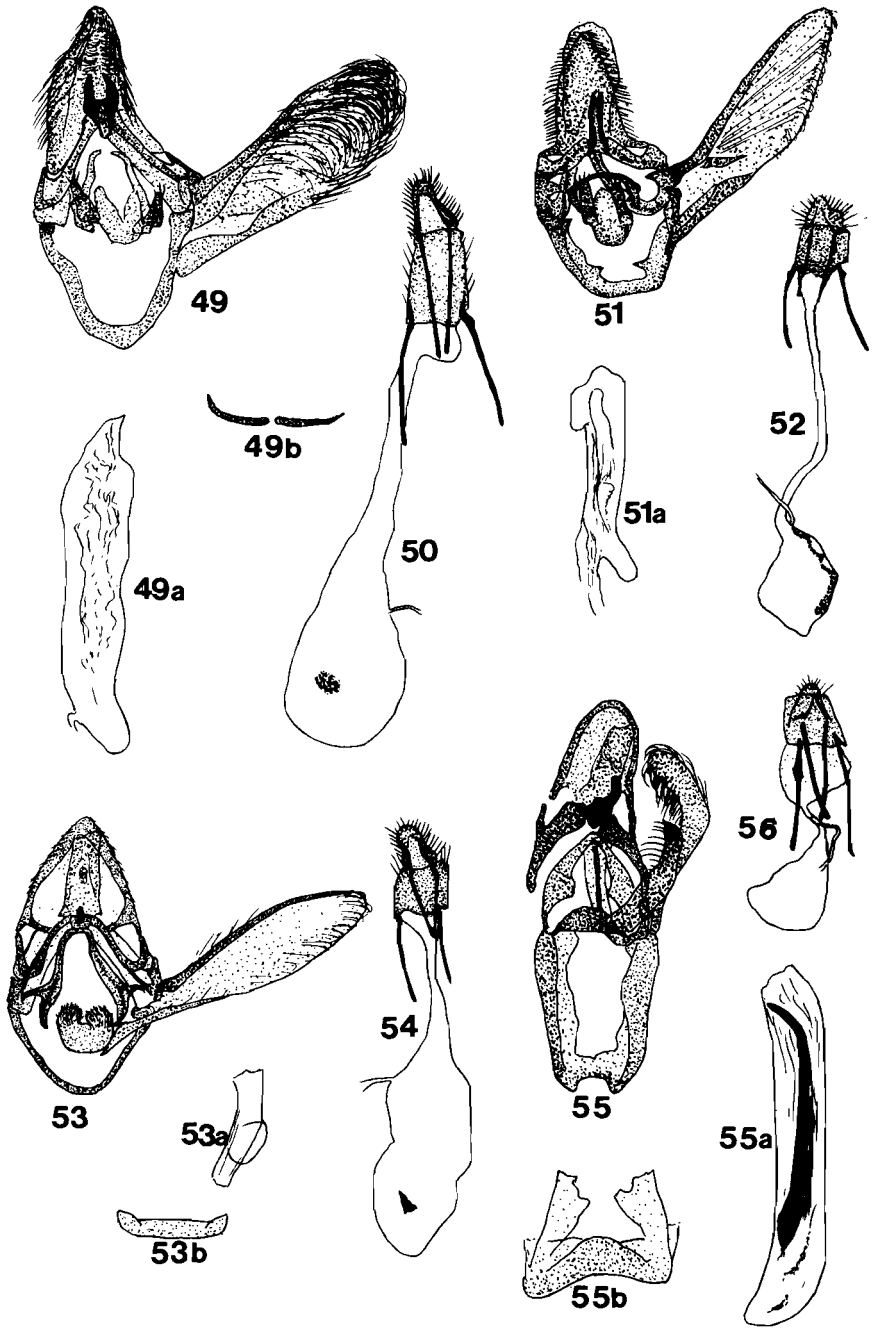
Female genitalia (Figure 50). Ovipositor rather slender. Eighth abdominal segment long, length to width as 5 : 3. Posterior and anterior apophyses of equal length. Antrum membraneous. Ductus bursae about one third of corpus bursae, membraneous, but boundary not clear: ductus broadens gradually. Corpus bursae broadest anteriorly, with small oval signa bearing small short spikes. Ductus seminalis from corpus bursae, about middle of its length.

Nyctegretis inclinella Raganot (Figures 51, 52).
Nyctegretis inclinella Ragonot 1888: 32.
Nyctegretis inclinella Ragonot 1901: 28.
Nyctegretis inclinella Ragonot in Vári & Kroon 1986: 44.

Material examined. One preparation male genitalia, one preparation female genitalia (Magude, Mozambique, 25 32 BA).

Diagnosis. Venation: trifine. In forewings R_2 conascent with stalk of R_{3+4}. Dc absent between M_1 and lower median. M_2 and M_3 on stalk about ½ of free length of M_2. Stalk of M_{2+3} conascent with Cu_1. In hindwings Sc and Rs partially fused. Dc joins lower median a short distance beyond Cu_2. M_{2+3} on stalk with Cu_1 which is about half the length of free part of M_{2+3}. Forewings dark brown with yellowish-brown antemedial and postmedial bands, the former straight and very oblique, the second slightly wavy. In male gnathos bifid at tip. Transtilla a thin crescentic bar, continuous across mid-line. Aedeagus without cornutus. No culcita. In female ductus long, thin, membraneous. Corpus bursae without signa.

Male genitalia (Figure 51). Uncus very long: length to breadth (without antero-lateral processes) 3 : 1,8 with pointed apex, and short lateral processes at anterior angles. Gnathos elongated, shortly bifid at posterior end. Lateral parts of gnathos thick, almost transverse, broadened at lateral ends. Components of tegumen rather broad, with medially directed processes at anterior ends. Transtilla in form of thin crescentic bar, convex posteriad, continuous across mid-line, with an anteriad directed triangular lobe ending in sharp point at each end of bar. Anellus with poorly sclerotized medial plate, pointed at posterior end, and, attached to it at both sides, finger-like processes, bearing bristles at posterior ends. Vinculum broad, with transverse anterior end. Valves long (reaching well beyond tip of uncus) and broad (breadth one third of length); a sclerotized oblique thickening on the membrane between



Figures 49–56 49. *Myelodes flavimargo* Hampson, male genitalia. **49a** — aedeagus, **49b** — culcita. **50.** *Myelodes flavimargo* Hampson, female genitalia. **51.** *Nyctegretis inclinella* Ragonot, male genitalia. **51a** — aedeagus. **52.** *Nyctegretis inclinella* Ragonot, female genitalia. **53.** *Pogonotropha wahlbergi* Zeller, male genitalia. **53a** — aedeagus, **53b** — culcita. **54.** *Pogonotropha Wahlbergi* Zeller, female genitalia. **55.** *Synoria euglyphella* Ragonot, male genitalia. **55a** — aedeagus, **55b** — culcita. **56.** *Synoria euglyphella* Ragonot, female genitalia.

costa and sacculus, nearer base of valve. Aedeagus moderately large, cylindrical without a cornutus. No culcita.

Female genitalia (Figure 52). Ovipositor short. Posterior apophyses more slender and slightly shorter than anterior ones. Ductus bursae thin, more than twice length of the corpus bursae, membraneous. Corpus bursae roughly rhomboid, with, along one side, a winding strip of coarse granules, the strip broadening towards anterior end. Ductus seminalis from junction between ductus and corpus bursae.

Pogonotropha wahlbergi Zeller (Figures 53, 54).
Pogonotropha wahlbergi Zeller 1852: 76.
Pogonotropha wahlbergi Zeller in Ragonot 1901: 206.
Pogonotropha wahlbergi Zeller in Janse 1945: 46.
Pogonotropha wahlbergi Zeller in Vári & Kroon 1986: 82.

Material examined. One preparation male genitalia (Pretoria), one preparation female genitalia (Sawmills, Zimbabwe, 19 28 CA).

Diagnosis. Venation extremely reduced: in forewings M_2

absent, M_3 on stalk with Cu_1. In hindwings Sc and Rs on stalk about six times length of free Sc. Dc partly obsolete, joins lower median at Cu_2. M_2 absent, M_3 on stalk with Cu_1 which is about twice length of free M_3. Labial palpi long, porrect. Maxillary palpi scaly, antennae without touffe. Forewings bicolourous: costal half almost white with scattered dark scales, the anal half — light brown. Black discal spot. In male gnathos tiny. Lateral parts of gnathos with long extensions towards angles of uncus. Components of transtilla large, bifid anteriorly. Anellus with a pair of outgrowths bearing numerous bristles. Vinculum very short. Aedeagus without cornutus. Culcita simple. In female ductus bursae long, membraneous. Corpus bursae membraneous except for small signa in form of triangular plate.

Male genitalia (Figure 53). Uncus broad, triangular, with pointed apex. Gnathos minute, less than ⅙ of length of uncus. Lateral parts of gnathos slightly curved, with the anterior end bent and extended posteriad to meet angle of uncus. Components of tegumen very broad, anterior end bent posteriad to meet lateral parts of gnathos. Components of transtilla very large, two and half times the length of anellus, attenuated posterior ends joined across the mid-line, broadened anterior ends branching and forming two pointed tips each. Anellus in form of a broad transverse plate with each end forming rounded posteriad projections bearing numerous bristles. Vinculum short and broad, with rounded anterior end. Valves of a simple shape, long (reaching by ⅙ beyond tip of uncus) and broad. Aedeagus relatively very small, half length of valve, cylindrical, without cornuti. Culcita a simple transverse bar, without hairs or elongated scales.

Female genitalia (Figure 54). Ovipositor rather short, apophyses also rather short, the anterior ones slightly longer than the posterior ones. Antrum and ductus bursae membraneous, the latter about half length of the corpus bursae, the transition between the two gradual. Corpus bursae elongated oval with signa in form of a small triangular plate. Ductus seminalis from corpus bursae, nearer its distal end.

Synoria euglyphella Ragonot (Figure 55, 56).
Synoria euglyphella Ragonot 1888: 27.
Synoria euglyphella Ragonot in Ragonot 1893: 531.
Synoria euglyphella Ragonot in de Joannis 1927: 226.
Synoria euglyphella Ragonot in Vári & Kroon 1986: 33.

Material examined. One preparation of male genitalia, one preparation of female genitalia (Transvaal, Pretoria).

Diagnosis. In forewings R_2 separate from stalk of R_{3+4}. M_2 and M_3 remote. In hindwings cell ⅓ of wing. Dc approaches lower median between Cu_2 and Cu_1. M_2 and M_3 on long stalk. Labial palpi oblique, with third segment bent down. Maxillary palpi scaly. Antennae filiform. Forewings ochre, with rather straight but oblique white antemedial and postmedial band and black discal spot. In male gnathos with obtuse tip. Transtilla continuous across mid-line posteriorly. Anellus without finger-like processes. Sacculus ending in strong short hook. Aedeagus with long thin cornutus. Culcita very simple without hair tufts. In female ductus bursae very thin, membraneous, corpus bursae small, hardly larger than antrum.

Male genitalia (Figure 55). Uncus rounded at posterior end, glabrous. Gnathos in form of blunt hook. Lateral parts of gnathos very broad medially, slender laterally, and with narrow projections caudad, to meet angles of uncus. Components of tegumen broad, but not broadened at anterior ends. Transtilla narrowly joined on mid-line posteriorly, and extending anteriorly in a pair of broad blades; the blades pointed at anterior ends. Anellus in form of crescentic plate, convex posteriorly and with pointed ends. Vinculum convex at anterior end. Valves narrow, curved inwards at anterior end, not reaching tip of uncus. Sacculus ends at about two thirds of the length of valve in a short point. Aedeagus cylindrical as long as the whole genital apparatus, with a single long cornutus, bent at posterior end. Culcita very simple, in form of a crescentic, not strongly sclerotized, plate, convex in posterior direction, with poorly sclerotized triangular blades attached to its ends.

Female genitalia (Figure 56). Ovipositor short. Posterior and anterior apophyses of equal thickness, the posterior slightly shorter than the anterior ones. Antrum bloated, almost as large as the corpus bursae, membraneous. Ductus bursae very narrow, about the same length as the antrum. Corpus bursae narrowing distally and broad proximally, about same volume as antrum, membraneous, without signa. Ductus seminalis from ductus bursae, close to antrum.

Key to *Trachypteryx* species based on male genitalia.

1. Anellus with finger-like processes at ends of transverse plate. Valves without outgrowths or processes protruding beyond contour of valve 2
— Anellus without finger-like processes, or with such processes borne at ends of a thin crescentic rod. Valves with outgrowths or processes protruding beyond contour of valve 3
2. A ridge on inner surface of valve, ending in a rounded thickening bearing bristles. Culcita with a single tuft of hairs at each end ..... *T. albisecta*
— A bulbous outgrowth on inner surface of valve, bearing bristles. Culcita with three bunches of hairs at each side ..... *T. victoriola*
3. Anellus in form of thin crescentic rod, with short finger-like processes bearing bristles at end. Valve with sharp spike on sacculus ..... *T. magella*
— Anellus not as above, no finger-like processes. No sharp spike on sacculus 4
4. A blunt outgrowth bearing bristles on costa of valve. A cornutus bearing comb-like dents on side ..... *T. rubripictella*
— A ridge ending with a sharp point at costa of valve. Small cornified denticles in aedeagus ..... *T. rhodoxantha.*

Key to *Trachypteryx* species based on female genitalia.

1. Corpus bursae with a small sclerotized plaque at distal end 2
— No plaque, corpus bursae completely membraneous 3
2. Rods in papillae anales conspicuously thick ..... *T. magella*

— Rods in papillae anales not conspicuously thick..... ..... *T. rhodoxantha*

3. Eighth abdominal segment elongated, nearly twice as long as broad..... *T. rubripictella*
— Eighth abdominal segment about as broad as long.....4

4. Distal part of ductus bursae with a double sclerotized collar. Diverticulum of ductus longer than proximal part of ductus..... *T. albisecta*
— Distal part of ductus bursae with single sclerotized collar. Diverticulum of ductus shorter than proximal part of ductus..... *T. victoriola.*

Trachypteryx albisecta Hampson (Figures 57, 63).
Trachypteryx albisecta Hampson 1926: 629.
Trachypteryx albisecta Hampson in Vári & Kroon 1986: 8.

Material examined. Two preparations of male genitalia (Hope Fountain, Zimbabwe, 20 28 BA); one preparation of female genitalia (Smith's drift, Zimbabwe).

Diagnosis. In forewings R_2 separate from stalk of R_{3+4}. M_2 and M_3 remote. In hindwings Sc and Rs closely parallel. Cell about half length of wing. Dc approaches Cu half way between the origin of Cu_2 and the inflection of Cu_1, and becomes the stalk of M_{2+3}. Labial palpi porrect, maxillary palpi scaled. Antennae without touffe. Forewings brown with two broad white transverse bands in about position of the antemedial and postmedial bands. In male gnathos minute. Components of transtilla two broadish plates. Anellus V-shaped. Valves short and narrow. Aedeagus with tiny cornutus. Culcita simple. In female ductus bursae with a diverticulum. Corpus bursae membraneous without signa.

Male genitalia (Figure 57). Uncus rounded posteriorly. Gnathos minute, ending in a tiny point. Lateral parts of gnathos connected by a short outgrowth to angles of uncus, and thinning anteriorly. Components of tegumen broad, with an inwards directed hook at anterior end. Components of transtilla elongated plates, placed far laterally. Anellus a V-shaped plate, convex posteriorly, bearing at lateral ends tiny finger-like processes with a few bristles at ends. Vinculum strongly excavated anteriorly. Valves short, reaching only to half of uncus, and narrow, tapering distally. At about middle of valve a bulbous thickening between costa and sacculus, bearing hairs. Aedeagus cylindrical, twice length of valve, with a tiny cornutus near tip. Culcita simple, consisting of transverse bar with a posteriad tongue in the middle, with a pair of longitudinal plates next to ends of bar, associated with a few long hairs.

Female genitalia (Figure 63). Ovipositor narrow. Posterior apophyses slender and longer than anterior ones almost by a half. The anterior apophyses robust, with expanded posterior ends. Antrum membraneous. Ductus bursae about half length of corpus bursae, consists of two parts: distal part straight, bearing two rings of slight sclerotizations; proximal part curved, membraneous. Attached to this is a sausage-shaped diverticulum, which is longer than this part of the ductus. Corpus bursae conical, with flattened proximal end, membraneous, bearing ductus seminalis near distal end.

Trachypteryx magella (Zeller) (Figures 58, 64).

Myelois magella Zeller 1848: 870.
Trachypteryx magella (Zeller) in Ragonot 1893: 566.
Trachypteryx magella (Zeller) in Janse 1944: 14.
Trachypteryx magella (Zeller) in Vári & Kroon 1986: 52.

Material examined. One preparation of male genitalia (Naboomspruit, Transvaal 24 28 DA), one preparation of female genitalia (Umkomaas, Natal 30 30 BB).

Diagnosis. Labial palpi porrect, maxillary palpi scaled, antennae without touffe. Forewings brown, with a system of black lines which cross the wing obliquely from costal edge, and curve towards outer edge of wing. In male lateral parts of gnathos straight, broad posteriorly. Components of transtilla broadish plates. Anellus semicircular narrow bar with bristles at ends. Valves short and narrow with a spike on inner surface. Aedeagus with tiny cornutus. Culcita simple. In female ductus bursae with a diverticulum. Corpus bursae membraneous without signa.

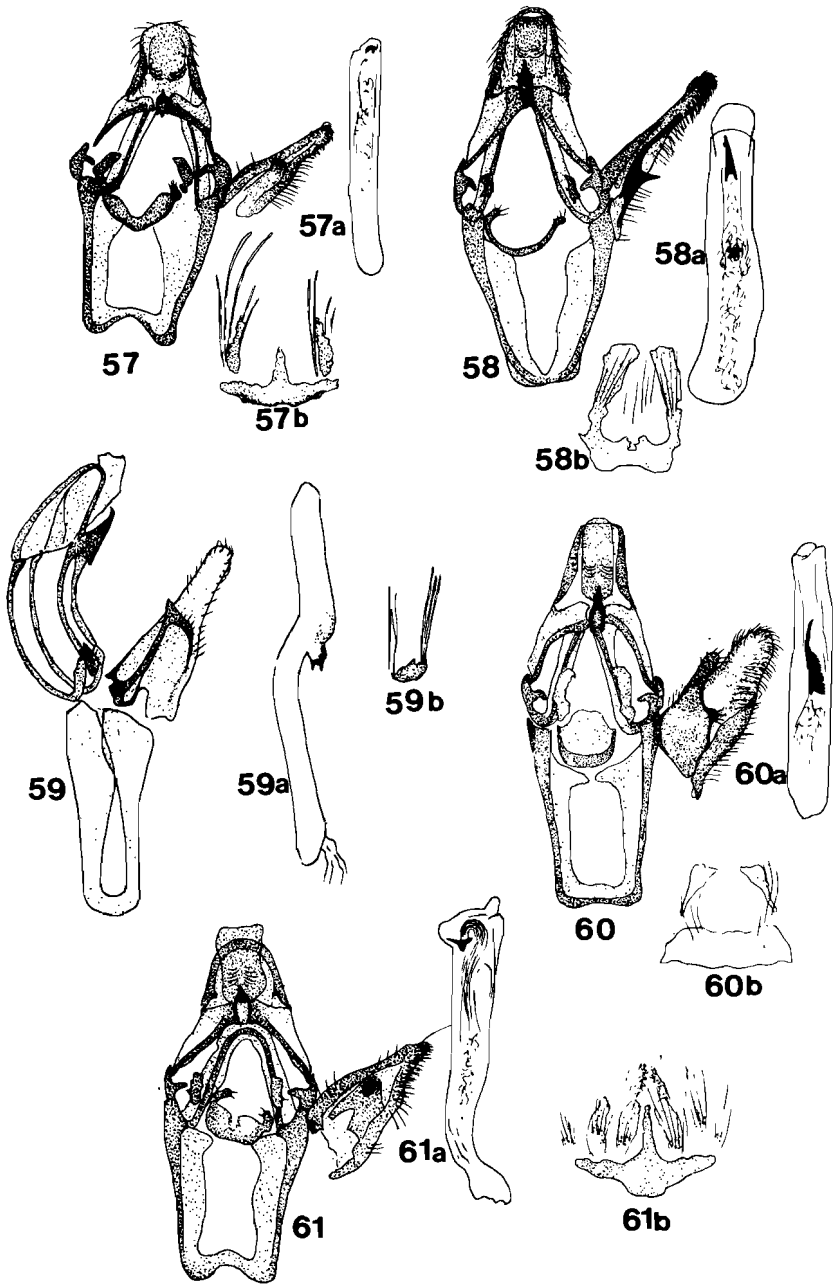
Male genitalia (Figure 58). Uncus rounded at tip. Gnathos with a small point. Lateral parts of gnathos straight, broad posteriorly. Components of tegumen with inwards directed hook at anterior end. Components of transtilla a pair of elongated plates placed far laterally. Anellus a semicircular strongly sclerotized rod, concave posteriorly with small knobs at ends, bearing bristles. Vinculum transverse anteriorly. Valves short (not reaching tip of uncus) and narrow, especially towards end, with a strong spike on a ridge between costa and sacculus, the spike at about one quarter of valve from proximal end of costa. Aedeagus cylindrical, very long (about 8/10 of length of whole sex apparatus), with a very small short cornutus at distal end. Culcita simple: a transverse not strongly sclerotized plate with posteriad directed extensions at ends and in the middle, bearing a few hairs.

Female genitalia (Figure 64). Rods in papillae anales conspicuously thickened. Ovipositor rather narrow. Posterior apophyses longer than anterior ones by about a third. Antrum with plates with coarse granulations. Ductus bursae about same length as corpus bursae, and consists of two parts: the longer distal section a straight rather narrow and apparently stiff tube, the proximal section — also narrow but twisting, and at the junction between the two — a diverticulum, broadening somewhat towards its blunt end. Corpus bursae oval, membraneous, with a small roughly triangular sclerotized plaque near its distal end. Ductus seminalis from distal end of corpus bursae.

Trachypteryx rhodoxantha Hampson (Figures 59, 65).
Trachypteryx rhodoxantha Hampson 1926: 629.
Trachypteryx rhodoxantha Hampson in Vári & Kroon 1986: 76.

Material examined. One preparation of male genitalia (Hope Fountain, Zimbabwe 20 28 BA). Two preparations of female genitalia (Naboomspruit, Transvaal 24 28 DA, Waterberg district, Transvaal 24 28 AB).

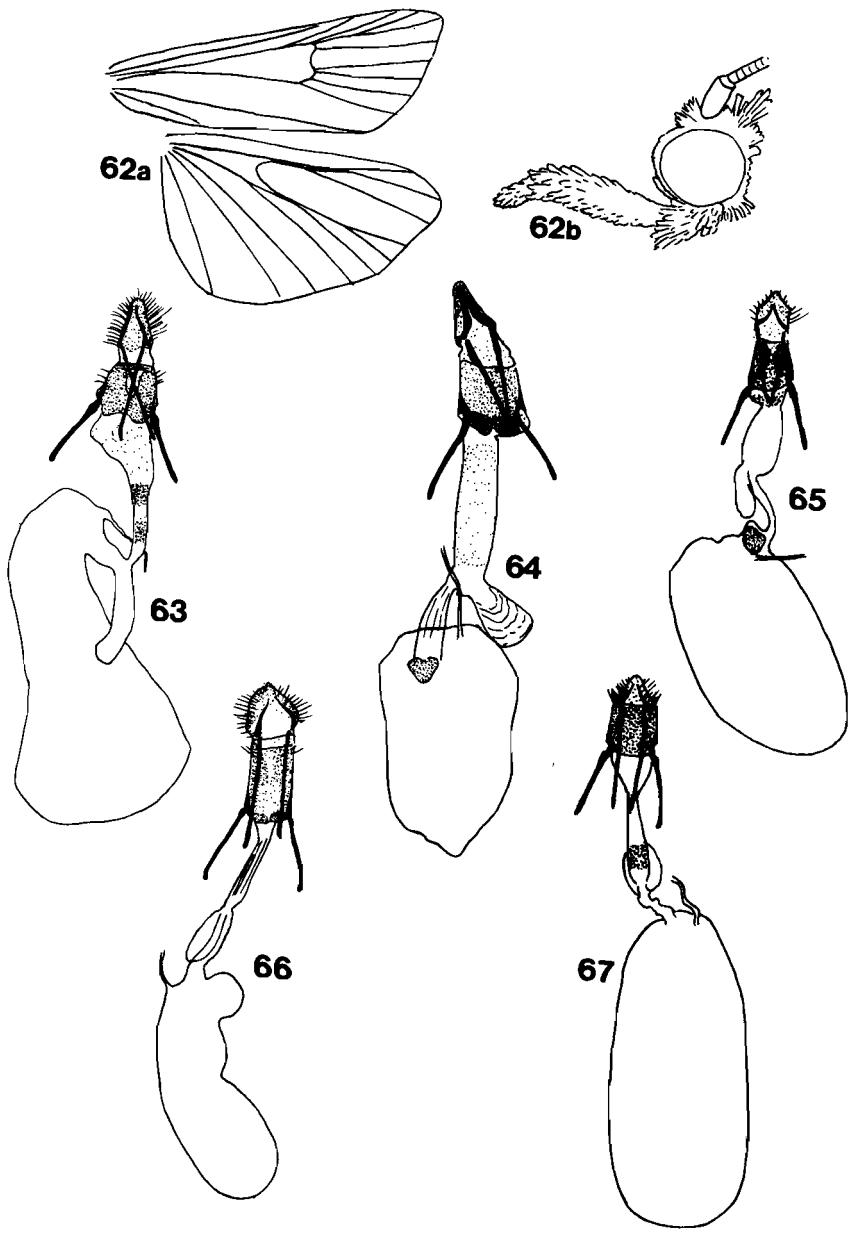
Diagnosis. Ground colour of forewings is described by Hampson as rose-red. In available specimens it is rather light-brown, with at most a pinkish tinge. Two oblique



Figures 57–61 **57.** *Trachypteryx albisecta* Hampson, male genitalia. **57a** — aedeagus, **57b** — culcita. **58.** *Trachypteryx magella* (Zeller), male genitalia. **58a** — aedeagus, **58b** — culcita. **59.** *Trachypteryx rhodoxantha* Hampson, male genitalia. **59a** — aedeagus, **59b** — culcita. **60.** *Trachypteryx rubripictella* Hampson, male genitalia. **60a** — aedeagus, **60b** — culcita. **61.** *Trachypteryx victoriola* sp. nov., male genitalia. **61a** — aedeagus, **61b** — culcita.

stripes, white with yellowish tinge run across wing from costa to anal edge. First stripe starts before middle of costa and runs to anal edge. Second stripe starts from about middle of costa and runs to termen. In male gnathos in form of long slender hook. Lateral parts of gnathos and components of tegumen strongly elongated. Transtilla absent. Valves narrowing towards tip, with a spike about middle. Aedeagus with three tiny spikes at base of erectible penis. Culcita simple, with two tufts of hairs. In female ductus bursae of two parts: a dilated distal part, and narrowed proximal part; a membraneous diverticulum from near margin between two. Corpus bursae with a small sclerotized plaque at its distal end.

Male genitalia. (Figure 59). Uncus elongated triangular with rounded tip. Gnathos in form of long slender hook. Lateral parts of gnathos slender, elongated. Components of tegumen slender and very elongated. Transtilla absent. Anellus apparently small, not clearly discernible in available preparation. Vinculum with transverse anterior end. Valves broadest proximally, narrowing towards end. Costa slight; ventrally from costa a sclerotized ridge, reaching slightly beyond middle of valve, and ending in a small spine. A ridge from this spine extended to sacculus. Aedeagus narrow, with three small spines at border with erectible part. Culcita simple with tufts of hairs at lateral ends.



Figures 62–67 **62.** *Trachypteryx victoriola*, sp. nov. **62a** — venation, **62b** — head with palpi and antenna of male. **63.** *Trachypteryx albisecta* Hampson, female genitalia. **64.** *Trachypteryx magella* (Zeller) female genitalia. **65.** *Trachypteryx rhodoxantha* Hampson, female genitalia. **66.** *Trachypteryx rubripictella* Hampson, female genitalia. **67.** *Trachypteryx victoriola* sp. nov., female genitalia.

Female genitalia (Figure 65). Posterior apophyses slender, slightly longer than anterior ones. Antrum with some granulations. Ductus bursae of two parts: a dilated distal part and a narrow proximal part; a membraneous diverticulum from near margin between proximal and distal part. Corpus bursae large, oval, membraneous, with a small sclerotized plaque at distal end. Ductus seminalis from corpus bursae, near its distal end.

Trachypteryx rubripictella Hampson (60, 66).
Trachypteryx rubripictella Hampson, in Ragonot 1901: 558.
Trachypteryx rubripictella Hampson, in Vári & Kroon 1986: 77.

Material examined. Three preparations of male genitalia (East London, Cape Province, 33 27 BB, Namibia, Maltahöhe, 24 27 CC. Zimbabwe, Sawmills, 19 28 CA). One preparation of female genitalia (Pietermaritzburg Natal 29 30 CB).

Diagnosis. Labial palpi porrect, maxillary palpi scaly, antennae without touffe. Forewings brown, with black lines forming semicircles with concavity facing costa, and with a conspicuous longitudinal white spot in proximal part of wing. Gnathos with pointed tip posteriorly. Components of transtilla in form of a pair of elongated plates, placed far laterally. Anellus a roughly rounded plate with strongly sclerotized anterior edge and without finger-like processes or bristles. Valves short with two blunt outgrowths on inner surface, bearing bristles. Aedeagus with a cornutus with comb-like teeth on side. Culcita simple. In female ductus bursae long, with a diverticulum. Corpus bursae without signa, membraneous.

Male genitalia (Figure 60). Uncus with blunted posterior tip. Gnathos ending posteriorly in small hook. Lateral parts of gnathos broad posteriorly, narrowing anteriorly. Components of tegumen with inwardly directed hooks at anterior ends. Components of transtilla a pair of elongated plates placed far laterally. Anellus rounded and strongly sclerotized anteriorly, and poorly sclerotized and with somewhat irregular edge posteriorly, without finger-like processes, and without bristles. Vinculum with transverse anterior edge. Valves short, not reaching tip of uncus, with a strongly sclerotized area on inner surface, ending distally in two blunt outgrowths bearing bristles at end, a longer one near costa, and a shorter one nearer sacculus. Aedeagus long cylindrical, with a cornutus situated in the middle (in the unerected state). The cornutus has a pointed tip distally, and a series of comb-like outgrowths on one side, the tips of the outgrowths inclined in proximal direction. Culcita simple, consisting of a rather broad transverse plate and a pair of poorly sclerotized longitudinal plates on sides, and a few hairs.

Female genitalia (Figure 66). Eighth abdominal segment longer than broad. Posterior apophyses longer than anterior ones. Antrum membraneous. Ductus bursae ¾ length of corpus bursae, consisting of two parts: a narrower distal part, showing longitudinal striation, and a wide proximal part. A diverticulum at junction between the two. Corpus bursae elongated ovoid, membraneous, without signa. Ductus seminalis from distal end of corpus bursae.

Trachypteryx victoriola sp. nov. (Figures 3, 61, 62, 67).

Material examined. One male Mamagalies Kraal, genitalia prepration 490. Two females Zwart Water, Potgietersrus District, (24 29 AA), one female Chunnies Poort (24 29 BA), genitalia preparation 844.

External characters. Wing-span male 24 mm, females 24–25 mm. Labial palpi porrect, 2¾ width of eye, second segment more than three times length of third. Maxillary palpi scaled, appressed to frons. Antennae in both sexes filiform. Head thorax and abdomen above brownish-yellow. Below and legs light brown. Forewings fawn with slight metallic pinkish sheen, and a pattern of dark brown and silvery white lines. Main dark brown line forms a broad V, starting from costa about ⅓ from wing base, going straight to anal edge to about ¼ from torus, and then again to costa to nearly tip of wing. The brown line is bordered proximally and distally by silvery white lines, the proximal line broader than distal. A dark brown line, with a streak of silvery white along its middle, transverses base of wing from near beginning of costa to about ⅔ of anal edge. A dark brown discal spot. Space between discal spot and distal part of the V transversed by six longitudinal dark brown streaks, and similar, but lighter streaks transverse the space between the V and edge of wing. Hindwings almost white, with narrow light brown edge and a stripe along costal edge.

Venation (Figure 62a). In forewings R_2 separate from stalk of R_{3+4}. M_2 and M_3 remote. In hindwings Sc and Rs closely parallel. Cell equal to half wing length. Dc touches lower median just before Cu_1, but does not fuse with it and becomes stalk of $M_2 + M_3$.

Male genitalia (Figure 61). Uncus broader than long, evenly rounded posteriorly. Gnathos small, with small point. Lateral parts of gnathos broad posteriorly, where they contact angles of uncus, tapering anteriad. Components of tegumen rather broad, continuous across mid-line posteriorly, with inwardly directed hooks at anterior ends. Components of transtilla roughly quadrangular elongated plates, ⅔ length of anellus, with tiny spikes laterally. Anellus with a cleft posteriorly, and at each end a short finger-like process, bearing bristles. Vinculum convex anteriorly. Valves roughly triangular, broad anteriorly, pointed posteriorly, with a bulbous thickening on inner surface, just beyond middle of valve, bearing bristles. Aedeagus long, nearly as long as the whole genital apparatus, without a cornutus, but with a small triangular cornification near distal end. Culcita consisting of transverse rod, broadened in the middle, and extended in a narrow tongue posteriad, and with three pairs of hairs, borne on separate small plates.

Female genitalia (Figure 67). Eighth abdominal segment as long as broad. Posterior apophyses slender and longer than anterior ones in ratio of 8 : 5. Anterior more robust. Antrum membraneous, narrowing anteriad. Ductus bursae a little over a third of corpus bursae, consisting of three parts: a longer straight part, sclerotized in its middle, a shorter winding part, adjoining the corpus bursae, and at junction of the two — a short rounded soft diverticule. Corpus bursae roughly cylindrical, membraneous, without signa. Ductus seminalis from distal end of corpus bursae.

Holotype male: Mamagalies Kraal 14.10.1925 (Lingnau), genitalia preparation 490. Paratype female: Chunnies Poort, Transvaal (24 29 BA), 8.III.1954 (Janse), genitalia preparation 844. Types in Transvaal Museum.

Remark. The present species differs from other species of the genus *Trachypteryx* above all by the pattern of the forewings, with a very conspicuous broad V figure, for which the species is given its name. The male genitalia of the new species differ from all examined *Trachypteryx* species by a combination of characters, and especially by the structure of valves, as seen in Figures 57–61. The closest resemblance is with *Trachypteryx albisecta* — a species with the greatest difference in the pattern of wings. Female genitalia bear the greatest resemblance to *Trachypteryx albisecta* and *Trachypteryx rubripictella*, but already as mentioned, *T. albisecta* is most different in wing pattern, while in *T. rubripictella* the eighth abdominal segment is elongated, whereas in the new species it is as long as broad. The male of *T. rubripictella* has genitalia, which are most different from those in the new species.

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