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# Afrotropical Asilidae (Diptera) 1. The genus Choerades Walker, 1851 and the descriptions of two new genera, Nannolaphria and Notiolaphria, from southern Africa and Malagasy Republic*

by

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SYNOPSIS

The southern African species of *Choerades* Walker (considered by some authors as *Laphria*) are discussed. The male genitalia, considered to be of important diagnostic value are illustrated. Two new genera, *Nannolaphria* (monotypic) and *Notiolaphria* (2 species) are described and their affinities discussed.

## INTRODUCTION

The genus *Choerades* Walker, 1851 was erected for a rather extensive group of species originally included in *Laphria* Meigen, 1803. *Choerades* is, as Hull (1962) explains, characterized only by the possession of fused or semifused setae forming a flat plate-like process on each gonopod of the male terminalia. Hermann (1914), apparently unaware of Walker's genus, erected the genus *Epholkiolaphria* for the same group of species. Although Oldroyd (1974) states that most of the African species of *Laphria* naturally fall into *Choerades* he was unwilling to use this name as he felt that the two genera could not be adequately separated in areas where both occur sympatrically.

In the present study of southern African and Malagasy species I have found the form of these fused setae to be a very useful specific character and their absence in the two described species from Malagasy has contributed to the erection of a new genus. As the genus *Laphria* (*sensu* Oldroyd) is a very large one I feel that Hull's (1962) acceptance of *Choerades* conveniently splits the group up into smaller units on the basis of genitalial characteristics. The use of genitalial or terminalial characters is becoming increasingly important in the defining of genera. One could argue that the status of *Choerades* should be reduced to that of a subgenus or even species group but at present I choose to abide by Hull's acceptance of it as a full genus.

As I have found considerable variation in characters such as leg colour and degree of pubescence I regard Oldroyd's (1974) key as inadequate but at the same time a key to the species based on male genitalial differences is difficult to write as a full appreciation of the differences can only be obtained by studying good illustrations. As male genitalial differences are usually striking and the degree of intraspecific variation remarkably limited I regard these characters as very valuable in the separation of species. Female genitalia, however, are remarkably devoid of outstanding characteristics and I have been unable to find specific differences. For the present I do not intend presenting a key to southern African *Choerades* but instead have given adequate illustrations of male genitalia in the hope that these will serve to separate the species. For females Oldroyd's key can be used provided some of its shortcomings, mentioned in this paper, are borne in mind.

* The term Afrotropical (= Ethiopian) has been adopted following the recent paper of Crosskey & White (*J. nat. Hist.*, 1977, **11**: 541–544).

## Tribe Laphriini

### Genus *Choerades* Walker, 1851

### *Choerades aureopilosa* (Ricardo, 1900) **comb. n.** Fig. 1

*Laphria aureopilosa* Ricardo, 1900 pp. 171–2.
*Laphria variabilis* Bromley, 1947 pp. 112–13.
*Laphria flavipes* Wiedemann, 1821 pp. 238–9 Oldroyd's (1974) Rhodesian records only.

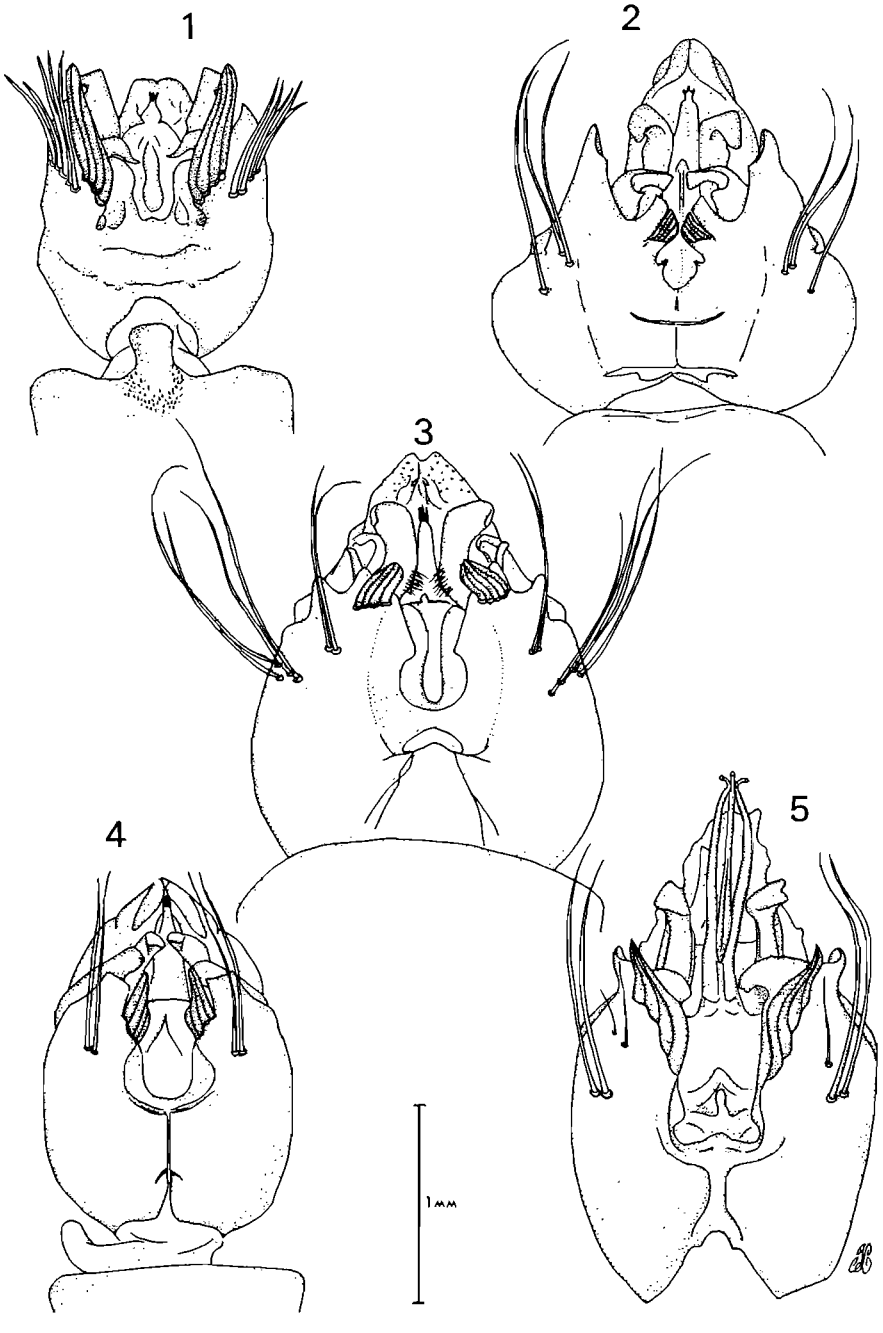
*C. aureopilosa* has been reasonably well described by Ricardo (1900) (as *Laphria*) and Bromley (1947) (as *L. variabilis*) but it appears that the sexual dimorphism which occurs particularly in this species caused a certain amount of confusion in Oldroyd's (1974) work. Male *C. aureopilosa* key out perfectly in Oldroyd's key but females which lack 'recumbent yellow abdominal pilosity' key out as *C. flavipes*. As a result of this Oldroyd's specimens were identified as two different species: the females as *C. flavipes* and the males as *C. aureopilosa*, except for a series of males from Rhodesia which mysteriously bear the label '*Laphria bella* Loew'. There must, in the case of these Rhodesian males, have been an error in labelling the specimens as they are typical *C. aureopilosa*, a species not easily confused with other southern African forms.

There is, in the Natal Museum, a single male specimen from Ngoye Forest determined by Oldroyd as '*Laphria nigribimba*', a species known only from Zaïre, Cameroon and Liberia. Oldroyd (1974) did not include this species in his key to South African *Laphria* and so I presume that he was doubtful about the determination. The specimen possesses genitalia identical to *C. aureopilosa* but the yellow pubescence so characteristic of this species is not present.

The male genitalia (Fig. 1) of *C. aureopilosa* have not been adequately described. Fused gonopod setae (4 in each group) half as long as genital bulb, well developed, jutting out posteriorly beyond distal margin of proctiger. Five long moderately well-developed setae lie in a straight line laterally and parallel to each group of fused setae. Last abdominal tergum with a mid-dorsal process on hind margin not found in any other southern African species.

The separation of female *C. aureopilosa* and *C. flavipes* is difficult. *C. aureopilosa* has a few small gold setae on the mesonotum; no silver tomentum on the sides of the mesoscutum; darker tipped wings and generally darker legs, although there is some variation in this last character. *C. flavipes*, on the other hand has no gold setae on the mesonotum, possesses two anterolateral silver pollinose spots on the mesonotum and is generally lighter in wing and leg coloration.

*Material examined:* RHODESIA: 5 ♂ 4 ♀, N. Vumba, D. Cookson, 4.IV.1964 (1 ♀), 26.IX.1964 (1 ♂), 4.X.1964 (1 ♂), 7.X.1964 (1 ♀), 8.X.1964 (1 ♂), 13.III.1965 (1 ♂), 15.X.1965 (1 ♀), 30.X.1965 (1 ♂), 21.III.1966 (1 ♀), (Natal Mus.); 1 ♀, Vumba, Umtali Dist., II.1932, P.A.S. (Natal Mus.); 1 ♀, Mt Selinda, 3.II.1954, N. Jimyers (Natal Mus.). SOUTH AFRICA: Natal: 1 ♀, Manguzi River, Near Maputo, XI–XII.1945, H. W. Bell Marley (Durban Mus.); 1 ♂, Ngoye Forest between Eshowe and Empangeni, II.1957, Stuckenberg (Natal Mus.); 1 ♀, Tugela River Mouth, 29.III.1963, T. W. Schofield (Natal Mus.); 1 ♂, Durban Bluff, 8.VIII.1925, H. W. Bell Marley (Natal Mus.); 1 ♂, Durban, Stella, Marley (Natal Mus.); 3 ♂ 2 ♀, Durban Bluff, C. N. Barker, 20.XII,1919 (1 ♂), 12.III.1920 (1 ♂), 4.XII.1920 (1 ♀), 25.III.1921




Figs 1–5. *Choerades* species; dorsal aspect of ♂ genital bulb 1. *C. aureopilosa* (Ricardo). 2. *C. bella* (Loew). 3. *C. flavipes* (Weidemann). 4. *C. nigrescens* (Ricardo) 5. *C. serpentina* (Bezzi).

(1 ♀), 7.XII.1921 (1 ♂) (Durban Mus.); 1 ♂, Durban, Stella, 6.X.1921, C. N. Barker (Durban Mus.); 1 ♂ 1 ♀, Winklespruit, C. N. Barker, 21.XII.1918 (1 ♀), 25.XII.1918 (1 ♂) (Durban Mus.); 1 ♀, Park Rynie, 23.XII.1920, C. N. Barker (Durban Mus.); 1 ♂, Pietermaritzburg, Town Bush, XII.1976, R. M. Miller, ex Malaise Trap (Natal Mus.) 1 ♂ 1 ♀ Durban, 13.IV.1974 (1 ♀), 16.III.1975 (1 ♂), R. K. Brooke (Durban Mus.)

*Choerades bella* (Loew, 1858) **comb. n.** Fig. 2

*Laphria bella* Loew, 1858 p. 356 (not Oldroyd's 1974 p. 102 Rhodesian records).

The identity of *C. bella* has never been in doubt. Oldroyd (1974) incorrectly labelled a series of *C. aureopilosa* males from Rhodesia as *L. bella* (see under *C. aureopilosa*).

The male genitalia (Fig. 2) have not been properly described. Gonopodal setae small, inwardly directed and appear to be fused for only half their length. Distal margin of gonopod extended forming two processes; one being close to the gonopodal setae the other situated more laterally (Fig. 2). Hypandrium long and narrow viewed ventrally.

*Material examined:* SOUTH AFRICA: Transvaal: 4 ♀, Pietersburg, Malta Forest, G. v. Son, 3.II.1927 (1 ♀), I.1928 (3 ♀); 1 ♀, Lydenburg Dist., 1896, P. A. Krantz; 1 ♂, Mac Mac Pools, 20.XI.1975, J. G. H. Londt; 1 ♂ 1 ♀, Louis Trichardt Dist., Entabeni Forest, I.1975, Stuckenberg; 1 ♂ 1 ♀, Louis Trichardt Dist., Verakop Forest, I.1975, Stuckenberg. Natal: 1 ♂ 1 ♀, Pietermaritzburg, Town Bush XI.1959, B. & P. Stuckenberg; 1 ♀, Pietermaritzburg, Town Bush Valley, XI.1976, R. M. Miller, ex Malaise Trap. Cape Province: 1 ♀, East London, 11.XI.,1924, H. K. Munro. TRANSKEI: 1 ♀ Port St Johns, X.1916, H. H. Swinny; 1 ♀, Port St Johns Dist., Coastal Forest, 16–17.X.1959, B. & P. Stuckenberg; 1 ♀, Port St Johns, 16.I.1970, B. & P. Stuckenberg. (All specimens in Natal Mus.)

*Choerades flavipes* (Weidemann, 1821) **comb. n.** Fig. 3

*Laphria flavipes* Weidemann, 1821 pp. 238–9 (not Oldroyd's 1974 p. 102 South Africa (Tongaat), Mozambique and Rhodesia records).
?*Dasythrix nigrapex* Bigot, 1878 p. 229.

*C. flavipes* was described from a female specimen from 'Prom. bon. sp.' (probably Table Mountain, Cape Town) and as my records show the species to be confined to the Cape Province from the Cape Peninsula to the eastern Cape Province I have little doubt that males subsequently identified as *C. flavipes* are truly the males of this species. Oldroyd (1974) places *Dasythrix nigrapex* Bigot in his list of synonymy but since the type locality of this species is in Natal there is a strong possibility that this species is not the same as *C. flavipes*. I have not seen Bigot's material; if *D. nigrapex* is indeed a *Choerades* there is the possibility that it is *C. aureopilosa* in which case Bigot's name will have precedence over that of Ricardo.

The male terminalia (Fig. 3) of *C. flavipes* are illustrated for comparison with other species. Fused gonopodal setae (4 or 5 in number) are short and inwardly directed. Two groups of well-developed setae lie posteriorly of the gonopodal setae. The first group contains two setae the second group four.

*Material examined:* SOUTH AFRICA: Cape Province: 1 ♂, Cape Town; 1 ♂, Muizenberg, 27.X.1934, G. v. Son; 1 ♂, Montagu Pass, 20.I.1922, Dr Brauns; 1 ♀,

Knysna, 1.I.1910, Dr Brauns; 1 ♀, George, 10.XI.1912, Dr Brauns; 1 ♂, Knysna Forest, 1911, Miss Rex; 1 ♀, Uniondale, 25.XII.1909, Dr Brauns; 1 ♀, Mossel Bay, XII.1934, R. E. Turner; 1 ♀, Karreedouw Mountains, W. of Humansdorp, 14.X.1959, B. & P. Stuckenberg; 2 ♂, Storms River Pass, Tsitsikama Area, 8.XII.1967, B. & P. Stuckenberg; 1 ♂, Van Staden's River, 1924, Dr Brauns; 1 ♂, Willowmore, I.1908, Dr Brauns; 1 ♂, Cradock, 28.XI.1968, J. G. H. Londt. (All specimens in Natal Mus.)

*Choerades multipunctata* (Oldroyd, 1974) **comb. n.**

*Laphria multipunctata* Oldroyd, 1974 p. 102.

I have seen a single female specimen of this distinctive species. The type, from Matjiesfontein, sex not stated by Oldroyd, has not been studied.

*Material examined:* SOUTH AFRICA: Cape Province: 1 ♀ Seven Weeks Poort 17.XI.1940, G. v. Son (Natal Mus.)

*Choerades nigrescens* (Ricardo, 1925) **comb. n.** Fig. 4

*Laphria nigrescens* Ricardo, 1925 pp. 279–80

This distinctive species was originally described from Malawi. The male terminalia (Fig. 4) have not been adequately described before.

Fused gonopodal setae (4 in each group) short, straight and inwardly directed. Inner setae shorter than outer setae giving the fused group a characteristic shape (Fig. 4). Distal processes of gonopods blunt and inwardly directed.

*Material examined:* MOZAMBIQUE: 1 ♀, Marromeu, Lower Zambezi River, Salone Forest, XII.1959, Stuckenberg (Natal Mus.). SOUTH AFRICA: Natal: 1 ♂, 1 ♀, Manguzi River, near Maputa, XI–XII. 1945, H. W. Bell Marley (Durban Mus.); 3 ♀, 16 km. N. Josini, XI.1971, M. E. & B. J. Irwin, dry forest, 246 m elevation (Natal Mus.)

*Choerades serpentina* (Bezzi, 1908) **comb. n.** Fig. 5

*Laphria serpentina* Bezzi, 1908 p. 378

Oldroyd (1974) doubtfully assigned specimens from Malawi, Mozambique and South Africa to this species. I here present an illustration of the male genital bulb drawn from the only specimen available to me (Fig. 5). Fused gonopodal setae curved in an S-like manner with distal points pointing outwards. Aedeagal structure very well developed and extended posteriorly.

The male terminalia of the specimen studied are quite distinctive and there should be no trouble recognizing this species. A comparison with the type specimens should reveal whether southern African specimens are indeed *C. serpentina.*

*Material examined:* SOUTH AFRICA: Natal: 1 ♂, Dukuduku, 22–24.III.1968, Potgieter & Goode (Natal Mus.)

Genus **Nannolaphria** gen. n.

*Derivation:* Gr. Ναvος = dwarf; Λαφρια = cult term meaning Forager.

*Type species: Nannolaphria niger* sp. n.

*Diagnosis:* Mystax composed of numerous black setae only. Proboscis not laterally compressed and shorter than antenna. Wing membrane completely covered with

fine black microsetae. Stalk of closed marginal cell bent forwards towards anterior margin of wing. Genital bulb sub-spherical, not rotated; claspers and pseudoclaspers poorly developed. Presently monotypic.

**Nannolaphria niger** sp. n. Figs 6–9

*Diagnosis:* See generic diagnosis.

*Description:* Based on 10 ♂, 21 ♀ pinned.

*Holotype ♂: Head:* Lateral aspect illustrated (Fig. 7). Antennae black, segment 1 a little longer than 2; 3 not quite twice as long as 1 + 2 (1,7 : 1,0). Segments 1 and 2 equipped with long black setae; segment 3 bare, pollinose, without microsegment but possessing a single apical seta situated within a small pit. Face shiny black and plain except for a slight swelling above the mouthparts. Mystax composed of numerous black setae as long as antenna. Vertex with a number of moderately long, black setae. Ocellarium high, rounded apically and equipped with 2 strong divergent setae and a few weaker setae. Dorsal half of occiput possesses numerous black setae while ventral half possesses pale, whitish setae. Proboscis black, short, only a little longer than antennal segment 3.

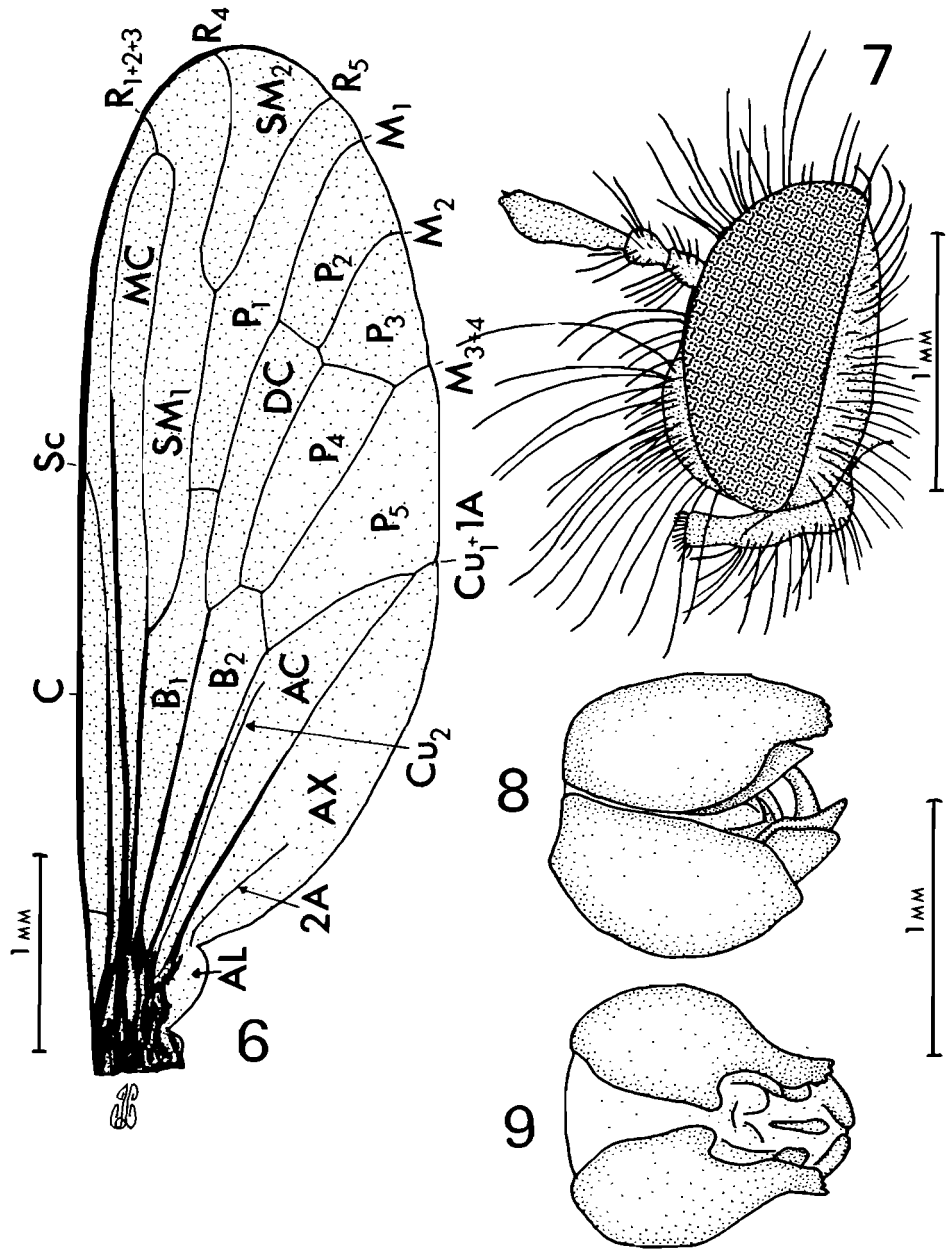
*Thorax:* Black, laterally dull and finely grey pollinose. Pronotum with black setae dorsally. Mesopleuron with a number of fine, black setae dorsally, mesepimeron equipped with many long, black setae. Mesonotum and scutellum shiny black, covered with moderately long, black setae. Acrostical, dorsocentral and inter-alar setae not clearly differentiated. Supra-alar setae moderately well developed, 10–12 scutellar setae arranged marginally. Metanotal calosities bare but finely gold pollinose. Halteres pale yellow-brown. Wing membrane iridescent, completely covered with fine, black microsetae which give the wings a dark grey appearance. Venation (Fig. 6) black; marginal, fourth posterior and anal cells closed; costa extends around entire wing margin; alula moderately well developed. Legs black, equipped with numerous black setae. Pulvilli, claws and empodium present.

*Abdomen:* Terga and sterna shiny black, covered, especially laterally, with short to moderately long, fine, black setae. Postmetacoxal area membranous but distinctly narrowed immediately posterior to the coxae. Genital bulb (Figs 8–9) shiny black, rounded, and not rotated (otherwise rotated through 360°). Clasper reduced to small lobe; gonopod produced distally possibly functioning as clasper; aedeagus long, thin and upturned distally.

*Dimensions:* Body length 7,5 mm; wing length 5,4 mm; width of head across eyes 2,0 mm; antenna length 0,9 mm; proboscis length 0,6 mm.

*Paratypes:* 9 ♂, 21 ♀. Agree well with holotype. Females slightly larger than males otherwise no sexual dimorphism apart from genitalia.

*Type specimens* (N.M. T2100): SOUTH AFRICA: holotype ♂, 1 ♂ and 3 ♀ paratypes, Natal, Pietermaritzburg, Town Bush, forest margin, 26.XI.1976, J. G. H. Londt; 5 ♂ 14 ♀ paratypes, same data but 7.XII.1976; 3 ♂ 3 ♀ paratypes, Pietermaritzburg, Town Bush, 18.XII.1961 (1 ♂ 1 ♀), 27.XII.1961 (1 ♂ 2 ♀), 21.XI.1962 (1 ♂), B. & P. Stuckenberg. TRANSKEI: 1 ♀ paratype, Port St Johns, 22–25.XI.1961, B. & P. Stuckenberg. All specimens in Natal Museum, Pietermaritzburg, except for a pair




Figs 6–9 *Nannolaphria niger* gen. et sp. n. (N.M. T2100) Holotype ♂. 6. Right wing. 7. Lateral aspect of head. 8–9 Genital bulb. 8. Lateral aspect. 9. Dorsal aspect.
Abbreviations: A = anal veins (1–2), AC = anal cell, AL = alula, AX = axillary cell, B = basal cells (1–2), C = costa, Cu = cubital veins (1–2), DC = discal cell, M = branches (1–4) of media vein, MC = marginal cell, P = posterior cells (1–5), R = branches (1–5) of radius, Sc = sub costa, SM = submarginal cells (1–2).

of paratypes deposited in each of the following museums; British Museum (Natural History), Paris Museum and United States National Museum, Washington.

*Habitat:* Specimens collected by the author were taken on low dicotyledonous plants on the margin of indigenous, montane, gallery forest. The flies appeared to like sunny positions and perched openly on leaves where, because of their shiny black colour, they were easily seen. One individual was collected with prey which in this instance was a tiny homopteran. Collection data suggests that the species is active in the adult phase in midsummer.

*Remarks:* Oldroyd labelled specimens of this species '*Goneccalypsis* ? sp. nov.', but none of these specimens possess the characteristic venation of the tribe Atomosiini to which *Goneccalypsis* Hermann belongs. These specimens key out instead to the tribe Laphriini. Using both Oldroyd's (1963) and Hull's (1962) keys to African and World genera one arrives at the genera *Smeryngolaphria* Hermann and *Ichneumolaphria* Carrera, respectively. Checking Hull's (1962) detailed generic descriptions and Bromley's (1935) description of *S. pallida* the only known record of the genus in the Ethiopian region, it is clear that both the newly described species and *S. pallida* do not belong to either of these primarily Neotropical genera. Although the erection of monotypic genera has been queried (Platnick 1976) *Nannolaphria niger* is so distinctive in genitalial form that I feel sure that time will give justification to the erection of this genus.

## Genus **Notiolaphria** gen. n.

*Derivation:* Gr. Νοτιος = southern; Λαφρια = cult term meaning Forager.

*Type Species: Laphria macra* Bigot, 1859

*Diagnosis:* Mystax with dorso-ventrally flattened setae. Proboscis as long or longer than antenna or width of head in lateral view. Wing membrane not entirely covered with black microsetae. Stalk of closed marginal cell bent away from anterior margin of wing. Genital bulb elongate oval, rotated through 180°; claspers and pseudo-claspers well developed; fused gonopodal setae absent. Presently contains 2 species.

*Description: Head:* Face plain, but moderately inflated immediately above mouth-parts; mystax composed of long setae overlaid by dorso-ventrally flattened, silver-gold, shiny setae. Face below antennae shiny gold pollinose. Region immediately behind ocellarium and occiput silver pollinose. Proboscis at least as long as antenna and not laterally compressed.

*Thorax:* Black, laterally dull and finely silver-grey pollinose. Mesopleural setae fine and pale, a few long black setae on hind margin. Mesepimeral setae predominantly black but a few white. Mesonotum and scutellum shiny black. Mesonotum with two anterolateral gold or silver pollinose spots; two similar, but smaller, spots on transverse suture and a gold pollinose hind margin. Metanotal calosities bare but silver-gold pollinose. Halteres pale yellow-brown. Wing membrane iridescent and covered in part with black microsetae such that the distal region has a dark grey appearance. Stalk of closed marginal cell bent away from anterior margin of wing.

*Abdomen:* Terga and sterna shiny black. A number of long setae placed laterally on T2 and sometimes one or two similar setae on subsequent terga (numbers variable).

Genital bulb elongate oval, rotated through 180°; gonopods without fused setae; claspers and pseudoclaspers well developed, aedeagus of moderate length, not upturned distally as in *Nannolaphria*.

*Notiolaphria macra* (Bigot, 1859) **comb. n.** Figs 10–15

*Laphria macra* Bigot, 1859 pp. 415–16.
*Laphria nusoides* Bromley, 1930 pp. 287–8 **syn. n.**

*Diagnosis:* Very similar to next species but differs in following respects. Thoracic markings distinct; microsetal distribution on wing more extensive, covering a greater part of the proximal region of the wing; gonopods of male possess distinctive distal projections.

*Redescription:* Based on 23 ♂ 20 ♀ pinned.

*Male: Head:* Lateral aspect (Fig. 11). Eye in lateral aspect considerably broader dorsally than ventrally. Face below antennae shiny gold pollinose and lower half swollen. Mystax composed of long black, or black and white setae and a number of overlaying, short, silver-gold, shiny, dorso-ventrally flattened setae. Proboscis a little longer than antenna.

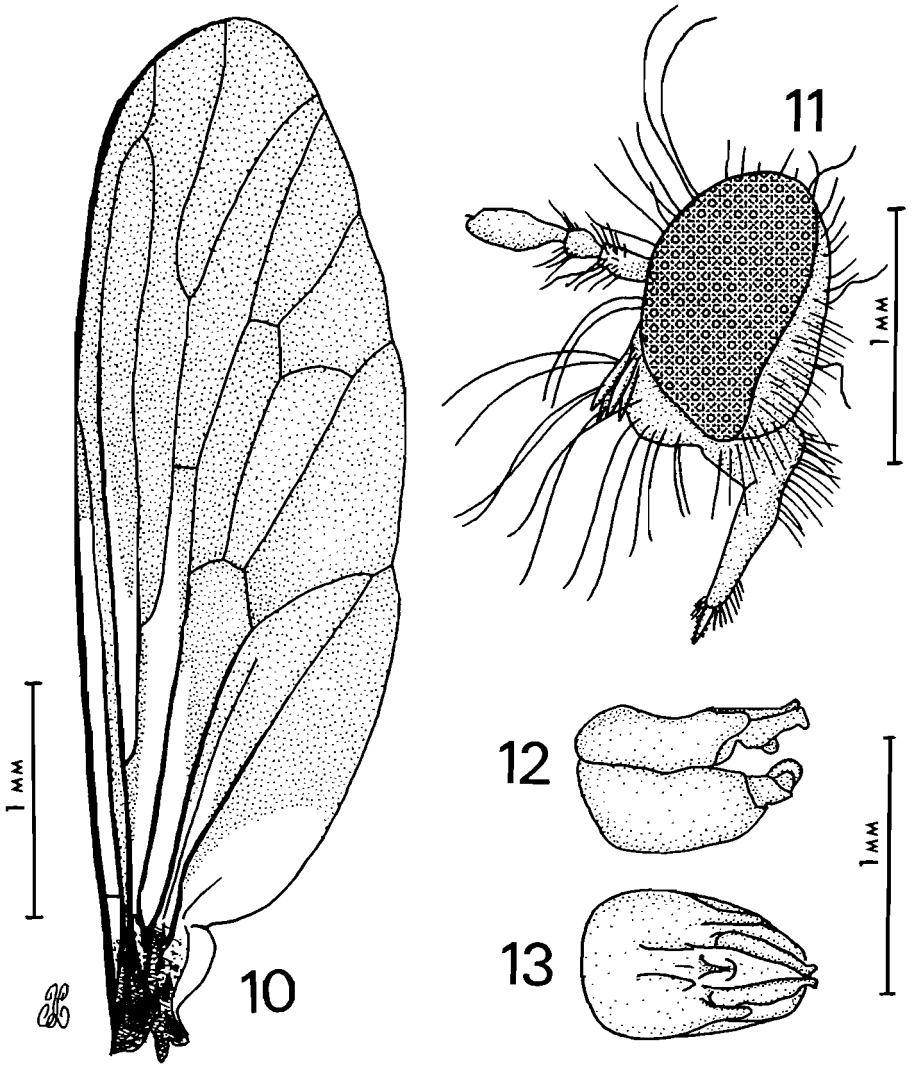
*Thorax:* Pollinose markings of mesonotum clearly evident especially in larger specimens which also have fine gold microsetae over most of the mesonotum. Wing (Fig. 10) covered with black microsetae except for the most proximal regions.

*Abdomen:* A number of pale macrosetae laterally on T2 and one or two in a similar position on each subsequent tergum. Genital bulb (Figs 12–13, small male) (Figs 14–15, large male) elongate oval, rotated through 180°; gonopods lack fused setae dorsally; claspers long with a downturned pointed tooth apically; pseudoclaspers strongly developed and usually held in an upright position; gonopoda with distal margin produced distally, aedeagus with two lateral penis guides.

*Dimensions:* Body length ♂ 7,0–19,0 mm, ♀ 7,0–19,0 mm; wing length ♂ 5,0–14,0 mm, ♀ 5,0–14,5 mm.

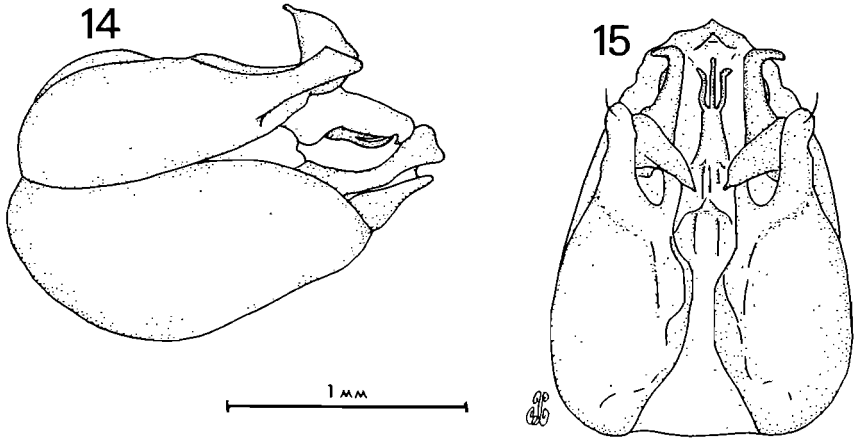
*Material examined:* MALAGASY REPUBLIC: 3 ♀, Ivontaka 15 m, dct Mananara, 10–14.III.1958, B. Stuckenberg; 1 ♂ 1 ♀, Sahasoa Fampanambo, 80 m, dct Maroantsetra, 26–29.III.1958, B. Stuckenberg; 1 ♂, Antanambe, 8 m, 1.IV.1958, B. Stuckenberg; 4 ♂ 1 ♀, Montagne d'Ambre, 1 000 m, dct Diego Suarez, 23.XI–4.XII.1958, B. Stuckenberg; 2 ♂ 3 ♀, Lambomakandro, 550 m, dct Sakaraha, 4–10.II.1957, B. Stuckenberg; 1 ♂ 2 ♀, Route d'Anosibe, 840 m, dct Moramanga, 18–24.XII.1957, B. Stuckenberg; 2 ♂ 2 ♀, Sambirano, Lakobe, Nossi-Bé, 6 m, 9–23.XI.1957, B. Stuckenberg; 1 ♂, Vakoana, 1 520 m, Andringitra Ambalavao, 21–24.I.1957, B. Stuckenberg; 1 ♂, Ambohitantely, 1 600 m, dct Ankazobe, 6.I.1958, B. Stuckenberg; 3 ♂ 2 ♀, Perinet, XII.1955, B. Stuckenberg; 1 ♂, Tsaramandroso, Ankarafantsika Forest, I.1956, B. Stuckenberg. MAURITIUS: 1 ♂ 2 ♀, Le Pouce Mtn., 20.I.1961 (♂), 29.XI.1962 (♀), 30.XI.1962 (♀), C. M. Courtois. (All specimens in Natal Mus.). MALAGASY REPUBLIC: 5 ♂ 4 ♀, E. Madagascar, Forest, 600–1 200 m, XII.1930–II.1931, C. H. Lamberton (Durban Mus.).

*Remarks:* I have, among the specimens studied, 2 ♂ and 3 ♀ identified as *L. nusoides* Bromely while the rest are identified as *L. macra* (all studied by Oldroyd). The




Figs 10–13. *Notiolaphria macra* (Bigot) gen. n. Small ♂. 10. Right wing. 11. Lateral aspect of head. 12–13. Genital bulb. 12. Lateral aspect. 13. Dorsal aspect. (Note: Genital bulb, normally rotated through 180°, is drawn as if unrotated.)

specimens labelled as *L. nusoides* are all large individuals from the eastern parts of Malagasy Republic (Sahasoa Fampanambo, Ivontaka and Antanambe). I can find no differences in morphology between these and the other smaller specimens identified as *L. macra*. I therefore come to the conclusion that there is a single widespread species with considerable size variation. One of the smaller specimens has the same label data as two of the larger specimens (Ivontaka) and therefore the possibility of sub-species is ruled out. Although I have not seen the types of *L. macra* or *L. nusoides* I believe the synonymy is justified based on the Oldroyd identified material before me.




Figs 14–15 *Notiolaphria macra* (Bigot) gen. n. Genital bulb of large ♂. 14. Lateral aspect. 15. Dorsal aspect.

**Notiolaphria africana** sp. n. Figs 16–19

*Diagnosis:* Similar to *N. macra.* Thoracic markings faint; microsetal distribution confined to distal half of wing only; gonopods of male narrowly rounded distally and lacking the finger-like projection characteristic of *N. macra.*

*Description:* Based on 3 ♂ 3 ♀ pinned.

*Holotype male: Head:* Lateral aspect (Fig. 17) similar to *N. macra* except: Face more inflated; mystax composed of long black setae overlayed by numerous long, dorso-ventrally flattened, shiny, gold setae. Proboscis as long as antenna.

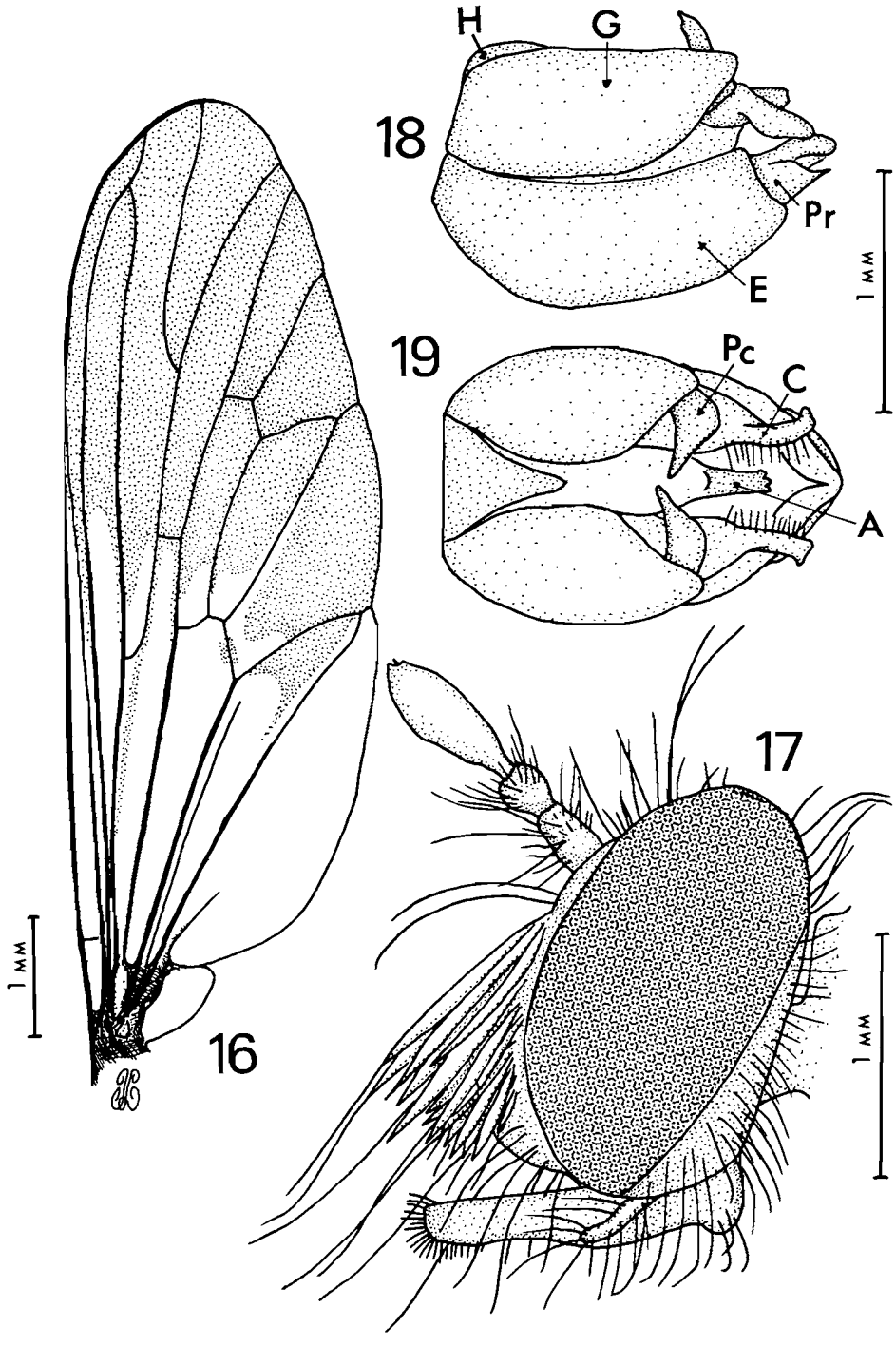
*Thorax:* Mesonotum and scutellum shiny black with a dark, greenish-blue, metallic appearance. Wing (Fig. 16) as in *N. macra* but distribution of microsetae confined to distal half of wing.

*Abdomen:* Terga and sterna shiny black with the same dark, greenish-blue, metallic appearance as the mesonotum and scutellum. Two long black macrosetae on T2, other terga lack lateral macrosetae. Genital bulb (Figs 18–19) elongate oval, rotated through 180°, claspers and pseudoclaspers as in *N. macra*; gonopods narrowly rounded distally and lacking the characteristic finger-like projections seen in *N. macra.*

*Dimensions:* Body length 9,3 mm; wing length 8,3 mm; width of head across eyes 3,6 mm; antenna length 1,1 mm; proboscis length 1,2 mm.

*Paratypes:* 2 ♂ 3 ♀. Agree with holotype. Females have fewer and shorter gold setae in mystax. Dimensions: Body length ♂ 9,5–10,0 mm, ♀ 8,5–10,5 mm; wing length ♂ 7,5–8,0 mm, ♀ 7,5–8,5 mm.

*Type specimens:* (N.M. T2101) MOZAMBIQUE: Holotype ♂ and 2 ♂ paratypes, Gorongoza Mountain, Manica Sofala Dist., Port. East Africa, 840 m, gallery forest, IX.1957, Stuckenberg. RHODESIA: 2 ♀ paratypes, Mt Selinda, 3.II.1954, N. J. Myers; 1 ♀ paratype, N. Vumba, 19.XI.1964, D. Cookson. (All specimens in Natal Mus.)




Figs 16–19. *Notiolaphria africana* gen. et sp. n. (N.M. T2101) Holotype ♂. 16. Right wing. 17. Lateral aspect of head. 18–19. Genital bulb. 18. Lateral aspect. 19. Dorsal aspect (Note: Genital bulb, normally rotated through 180°, is drawn as if unrotated) Abbreviations: A = aedeagus, C = clasper, E = epandrium, G = gonopod, H = hypandrium, Pc = pseudoclasper, Pr = proctiger.

*Remarks:* Oldroyd labelled the above specimens 'Stands in B.M. drawer 141 as *coerulescens* Macq. ? n. gen. et sp. ?' As *coerulescens* was described as a species of *Laphria* and these specimens lack the characteristic laterally flattened proboscis of *Laphria* there is no doubt that they are not *Laphria* or *Choerades*. *N. africana* possesses a genitalial form very similar to *N. macra* and clearly belongs to the same genus.

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