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Afrotropical Asilidae (Diptera) 5.* The genus Dasophrys Loew, 1858 (= Hobbyus Bromley, 1952) (Asilinae: Asilini)

by

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SYNOPSIS

The genus *Dasophrys* Loew is reviewed. *Hobbyus* Bromley is synonymised with *Dasophrys*. New species: *boslacus*, *brevistylus*, *bullatus*, *carinatus*, *crenulatus*, *dorattina*, *engeli*, *fortis*, *hysnotos*, *irwini*, *loewi*, *minutus*, *montanus*, *nanus*, *nigroseta*, *oldroydi*, *reburrus*, *saliotragus*, *silvestris*, *swazi*, *umbripennis*. New synonyms: *Dasophrys personatus* Schiner, 1868 & *D. paron* (Walker, 1849) = *D. geniculatus* (Macquart, 1838); *D. flavopilosus* (Ricardo, 1920) = *D. tarsalis* (Ricardo, 1920). New combinations: *D compressus* (Hull, 1967) transferred from *Synolcus* Loew; *D. nigroflavipes* (Hobby, 1933) transferred from *Hobbyus* Bromley; *D. geniculatus* (Macquart, 1838), *D. tarsalis* (Ricardo, 1920) and *D. flavopilosus* (Ricardo, 1920) (= *D. tarsalis*) transferred from *Neolophonotus* Engel. The characters used in the taxonomy of the genus are discussed. Three loosely defined species groups are recognised: the *nigricans* group (7 species), the *geniculatus* group (6–7 species) and the *androclea* group (5 species). The genus appears to be largely confined to southern Africa.

INTRODUCTION

Dasophrys Loew, together with *Dysclytus* Loew, *Synolcus* Loew, *Hobbyus* Bromley and *Neolophonotus* Engel, comprise the *Neolophonotus* group of genera (Oldroyd, 1974). In an effort to elucidate the taxonomy of this large and primarily southern African group I have already published revisions of *Dysclytus* (Londt, 1979) and *Synolcus* (Londt, 1980). I now present a revision of *Dasophrys* which includes *Hobbyus* as a new synonym. This leaves the very large genus *Neolophonotus*, with its five subgenera (sometimes considered as full genera), still in need of detailed study.

Before my study of *Dasophrys* the state of affairs was as portrayed by Oldroyd (1980). Oldroyd listed seven valid *Dasophrys* and two *Hobbyus* species. With the discovery that (i) *Hobbyus nigroflavipes*, *Synolcus compressus*, *Neolophonotus geniculatus*, *N. tarsalis* and *N. flavopilosus* (= *tarsalis*) are species of *Dasophrys*, (ii) *Hobbyus minor* is a good species of *Synolcus* and (iii) *D. personatus* and *D. paron* are synonyms of *D. geniculatus*, I started my study with nine valid, named species of *Dasophrys*. On completion of this work I found it necessary to describe no fewer than 21 new ones. The reason for this big increase is obvious; previous workers had largely ignored characteristics of the male genitalia. The male genitalia of *Synolcus* had, on the other hand, been well studied by previous workers and while there were five valid species at the onset of my revision I was only able to add a single new one. These figures clearly indicate the importance of the male genitalia in the study of some genera of Asilidae.

* Parts 1–4. In *Ann. Natal Mus.* 1977–1980.

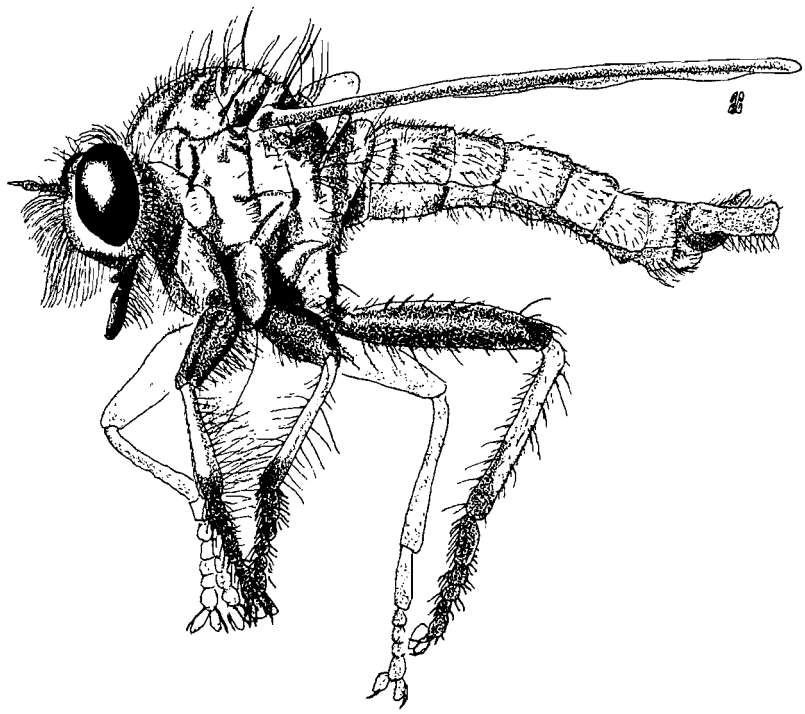


Fig. 1. *Dasophrys fortis* sp. n., lateral aspect of Pietermaritzburg male.

MATERIALS AND METHODS

Wing length measurement was taken between the humeral crossvein and the wing tip. Wings were described as being dilated or expanded when their maximum breadth occurred distal of the anterior crossvein (just anterior to the discal cell); unexpanded wings were broader proximal of the anterior crossvein. Genitalia were in all instances dissected from the specimens, cleared in warm potassium hydroxide, and drawn with the aid of a camera lucida.

The majority of specimens studied are housed in the Natal Museum (NM) but material was also seen from the South African Museum (SAM); National Museum, Bulawayo (NMB); British Museum (Natural History) (BM); Zoologische Staatssammlung, München (ZSM); Naturhistoriska Riksmuseet, Stockholm (NRS); Durban Museum and Art Gallery (DMAG); Naturhistorisches Museum, Wien (NMW); Hope Museum, Oxford (HMO); Muséum National D'Histoire Naturelle, Paris (NMP); Koninklijk Museum voor Midden-Africa, Tervuren (KMT).

Genus *Dasophrys* Loew, 1857

Dasophrys Loew, 1857: 366. Type species: *D. longibarbus* Loew (= *paron* Walker). Monotypic.
Neodasophrys Ricardo, 1920: 440. Type species: *N. natalensis* Ricardo, designated by Hull 1962: 528.
Merogymnus Hobby, 1933: 111. Type species *M. nigroflavipes* Hobby. By original designation.
Hobbyus Bromley, 1952: 21. Change of name for *Merogymnus*—preoccupied Pisces. **Syn. n.**

Dasophrys, like the other genera of the *Neolophonotus* group, is characterised by only one or two unique features and a particular combination of other features. *Dasophrys* possesses a uniquely shaped head profile (Fig. 1) and once the worker has become familiar with this feature specimens can easily be assigned to the genus. In addition *Dasophrys* is characterised by the following combination of characters. 1. The male wing is often dilated. 2. The female ovipositor is usually elongate and laterally compressed. 3. The male claspers are broadly rounded distally and generally of simple shape. 4. Upper occipital setae are long and proclinate. 5. The scutellum usually has at least four marginal bristles. 6. The mystax is well-developed both dorsally and ventrally. 7. The mesonotum is not equipped with a well defined mane. 8. Femora are usually swollen and possess long setae. 9. Vein M4 is not strongly curved (as in *Synolcus*) and the discal cell is therefore not markedly constricted. 10. The male styli are long and thin with an upcurved club-like tip.

Key to species of *Dasophrys* (adult males only)

The following key is presented in the belief that it may assist workers with preliminary identifications of *Dasophrys* specimens. It is, however, deficient in a number of ways. In some instances species are represented by only a few specimens and therefore variation could not be assessed. The key is only designed for males and so females without associated males can not be identified. As some of the couplets deal with male genitalic structures it is imperative that male terminalia be removed from the specimen, cleared in warm potassium hydroxide and carefully studied microscopically. When a specific name is reached it is also important to compare the genitalia with the appropriate illustrations provided in the systematic part of this paper.

1 Wing membrane with a spotted appearance (Fig. 2), being dark-stained in the following regions: distal end of Sc; proximal end of RS; apical crossvein; crossvein at distal end of discal cell; anterior branch of Cu, fork of R_{3+4} .. 2
— Wing membrane of uniform colour and not dark-stained in the regions listed above 9
2 Anterior crossvein situated nearer the distal end of the discal cell and virtually opposite M_3 which closes the fourth posterior cell (Fig. 157) 3
Note: possibly also *androclea*.
— Anterior crossvein not as above (Fig. 151) 6
3 Setae of antennal segments one and two black 4
— Antennal segments one and two with both black and white setae ..... **swazi** sp. n.
4 Tip of aedeagus and clasper as in Fig. 180 ..... **umbripennis** sp. n.
— Tip of aedeagus as in Figs 135 & 161 5

5 Mystax with both black and white setae; genitalia as Figs 158–162 ..... **reburrus** sp. n.
— Mystax entirely black; genitalia as Figs 132–136 ..... **oldroydi** sp. n.
6 Tip of aedeagus well-developed; S-shaped (Fig. 48) ..... **crenulatus** sp. n.
— Tip of aedeagus of more usual development (Fig. 6) and not S-shaped ... 7
7 Wing clearly dilated and with widest point distal to anterior crossvein (Fig. 151) ..... **punctipennis** Engel
— Wing undilated and with widest point proximal to anterior crossvein (Fig. 2) 8
8 Bristles of scutellar margin black; genitalia as Figs 85–89 ..... **loewi** sp. n.
— Bristles of scutellar margin white; genitalia as Figs 3–7 **androclea** (Walker)
9 Wing obviously dilated and with widest point distal to anterior crossvein (Fig. 8) 10
— Wing undilated and with widest point proximal to anterior crossvein (Fig. 32) 17
10 Eighth abdominal sternum U-shaped in ventral aspect (Fig. 17); 5th antennal segment longer than 1st 12
— Eighth abdominal segment with posterior margin almost straight; 5th antennal segment shorter than 1st 11
11 Antennal segments one and two with black and white setae; all setae of forecoxae white; genitalia as Figs 39–43 ..... **compressus** (Hull)
— Antennal segments one and two with black setae only; setae of forecoxae black and white; genitalia as Figs 114–118 ..... **nigricans** (Wiedemann)
12 Metacoxa with at least one fairly well-developed bristle laterally (Fig. 1) 13
— Metacoxa with no bristles laterally; genitalia as Figs 69–73 ..... **hypselopterus** Engel
13 Fine yellowish setae on disc of scutellum and on hind region of mesonotum; genitalia as Figs 120–124 ..... **nigroflavipes** (Hobby)
— Fine white setae on disc of scutellum and hind region of mesonotum 14
14 All setae of antennal segments one and two black 15
— Setae of antennal segments one and two of two different colours 16
15 Anterior surfaces of forecoxae with white setae; genitalia as Figs 138–150 ..... **geniculatus** (Macquart)
— Anterior surfaces of forecoxae primarily with yellow setae; genitalia as Figs 27–31 ..... **carinatus** sp. n.
16 Lateral bristles of mesonotum black; genitalia as Figs 15–19 ..... **brevistylus** sp. n.
— At least presutural bristles yellow; other lateral bristles may also be yellow (ie. there is some variation); genitalia as Figs 96–100 ..... **montanus** sp. n.
17 Bristles of scutellar margin yellow 18
— Bristles of scutellar margin black 20
18 8th sternum U-shaped in ventral aspect (eg. Fig. 11); wing-length usually less than 10 mm 19
— 8th sternum with posterior margin almost straight (Fig. 65); wing-length usually greater than 10 mm; genitalia as Figs 63–67 ..... **fortis** sp. n.

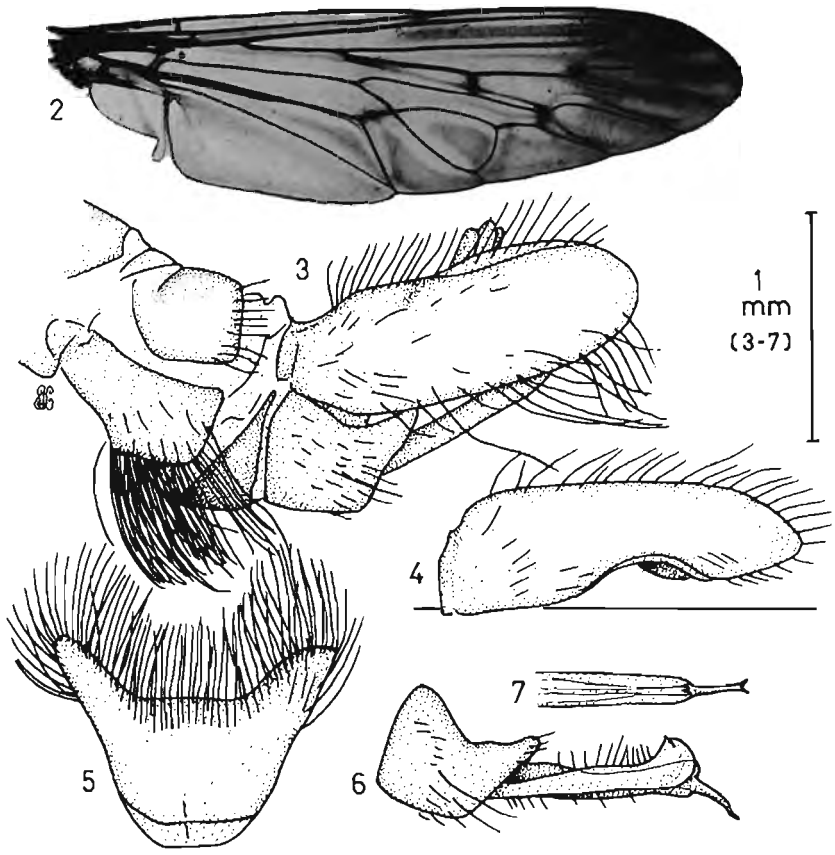
19 Clasper approximately twice as long as broad in lateral aspect (Fig. 9); genitalia as Figs 9–13 ..... **boslacus** sp. n.
— Clasper approximately three times as long as broad in lateral aspect (Fig. 33); genitalia as Figs 33–37 ..... **tarsalis** (Ricardo)
20 Tip of aedeagus characteristically shaped (Fig. 24); south-western Cape Province species; wing-length usually less than 6,5 mm..... 21
— Tip of aedeagus not as above; eastern Cape Province and Natal species; wing-length usually greater than 6,5 mm 25
21 Mystax with white setae above black setae 22
— Mystax with black setae above white setae 23
22 Anterior surface of forecoxa with black setae; genitalia as Figs 126–130.....
nigroseta sp. n.
— Anterior surface of forecoxa with white setae; genitalia as Figs 91–94 .....
minutus sp. n.
23 Anterior surface of forecoxa with black setae; genitalia as Figs 21–25.....
bullatus sp. n.
— Anterior surface of forecoxa with white setae..... 24
24 Metathoracic coxa with bristle laterally; setae of antennal segments one and two black; genitalia as Figs 102–106..... **nanus** sp. n.
— Metathoracic coxa without a lateral bristle; setae of antennal segments one and two mixed black and white; genitalia as Figs 164–167 **saliotragus** sp. n.
25 Fine setae of scutellar disc and posterior region of mesonotum mostly black; genitalia as Figs 106–112; wing-length greater than 13 mm .....
natalensis (Ricardo)
— These setae white; wing-length less than 13 mm..... ... 26
26 Antennal segments one and two with both black and white setae 27
— All setae of antennal segments one and two black 29
27 Metathoracic coxa with a lateral bristle (Fig. 1); genitalia as Figs 80–83.....
irwini sp. n.
— Metathoracic coxa without lateral bristle 28
28 Eighth sternum in ventral aspect with lateral horn-like projections (Fig. 171); genitalia as Figs 169–173 ..... **silvestris** sp. n.
— Eighth sternum in ventral aspect with hind margin almost straight; (Fig. 53); genitalia as Figs 51–55 ..... **dorattina** sp. n.
29 Genitalia as Figs 75–78..... **hysnotos** sp. n.
— Genitalia as Figs 57–61..... **engeli** sp. n.

DESCRIPTIONS AND REDESCRIPTIONS OF SPECIES*

Dasophrys androclea (Walker, 1849) Figs 2–7, 188

Lophonotus androclea Walker, 1849: 411.
Neodasophrys androclea; Ricardo, 1920: 443; Hull, 1962: 529.
Neodasophrys hirsutus Ricardo, 1920: 442–443.
Dasophrys (Neodasophrys) hirsutus; Engel, 1927: 143.
Dasophrys androclea; Oldroyd, 1974: 154; Oldroyd, 1980: 337.

* This paper was typeset before my discovery that *tarsalis* (Ricardo) and *geniculatus* (Macquart) are valid species of *Dasophrys* and do not belong to *Neolophonotus* as indicated by Oldroyd (1980). While I was able to make the necessary adjustments to the text, these upset the alphabetical arrangement originally intended. I apologise for any inconvenience this may cause and draw the reader's attention to the index at the end of the paper.



Figs 2–7. *Dasophrys androclea* (Walker) male. 2. Wing (Montrose: 10,6 mm). 3–7. Genitalia of holotype (S. Africa). 3. Lateral aspect. 4. Dorsal aspect of right clasper. 5. Ventral aspect of S8. 6. Lateral aspect of gonopod, stylus and aedeagus. 7. Ventral aspect of aedeagal tip.

Redescription: Based on holotype ♂ and other material examined. The holotype is in very poor condition.

Head. Antenna dark red-brown; segments one and two with black setae; relative lengths of the segments—3>5>1>2>4. Mystax: upper half setae black, lower half setae white. Frons gold-silver pruinose. Occipital setae: black dorsally, black centrally, white ventrally. Proboscis dark red-brown with white setae ventrally. Palpi dark red-brown with white and black setae.

Thorax. Dark red-brown with red-gold pruinescence. Mesepimeral setae red-brown. Hypopleural setae red-brown. Mesonotal setae: acrosticals fine black; dorsocentrals fine black; humerals fine black and white; presuturals 2 black; supra-alars 3–4 black; postalars 2 black; marginal scutellar bristles 5–8 white or yellow-brown (in few cases the odd black one); scutellar disc setae white; postmesonotal setae white. Wings: 7,3–12,3 mm; undilated; venation and microtrichial distribution as in Fig. 2. Legs: Prothoracic coxa with white setae

anteriorly; metathoracic coxa lacks a lateral bristle. Bristles and setae on legs long, well-developed, black, white and red-brown.

Abdomen. Terga black with silver pruinose hind margins and posterior lateral corners; setae long white or yellow laterally, short black dorsally. Sterna similar but with only long white and yellow setae. ♂ genitalia as in Figs 3–7. Ovipositor length : breadth ratio *ca.* 4,9.

Variation: Minimal. There is considerable size variation but shapes and colours of structures and setal numbers are fairly constant.

Material examined: SOUTH AFRICA: 1 ♂ holotype, S. Africa, Dr Andrew Smith, 44.6, (BM). *Natal.* 17 ♂ 21 ♀, Pietermaritzburg, Montrose, xi–v, vii. 1977–79, J. Londt, (NM); 1 ♀, Pietermaritzburg, 29.iii.1979, L. Schoeman, (NM); 1 ♀, Pietermaritzburg, Town Bush, 4.v.1972, M. Irwin, (NM); 1 ♂ Pietermaritzburg, iii.1958, E. Nevill, (NM); 1 ♀, Pietermaritzburg, 10.x.1953, I. Wiese, (NM); 1 ♂, Pinetown, 22.iv.1979, R. Hamilton, (NM); 2 ♀, Kloof, iii.1915 & ii.1930, Marley, (NM); 1 ♂ 1 ♀, Durban, 7.v.1908 & 12.vi.1908, G. Leigh, (NM); 1 ♂, Durban, 20.v.1908, G. Leigh, (ZSM); 1 ♂, Durban, Bluff, 17.v.1917, (BM); 1 ♂, Eshowe, 25.iv.1978, A. Butler, (NM); 3 ♂ 9 ♀, Eshowe, 1–22.iv. 23–30.iv. & 6–31.v.1926, R. Turner, (BM); 1 ♂—holotype of *N. hirsutus*, Port Shepstone, v.1897, G. Marshall, (BM); 1 ♂, Ixopo Dist., Mackston, iv.1977, R. Miller, ex malaise trap, (NM). Distribution as in Fig. 188.

Seasonal incidence: See Table 1. Flies from late summer through autumn.

Prey records: The following records were obtained from collections made in Pietermaritzburg (Montrose). Diptera: Sarcophagidae (1), Tipulidae (2), Asilidae (1)—a ♀ was found feeding on another ♀ of the same species. Hymenoptera: Apidae (1). Coleoptera: ? family (1).

Remarks: A common species in the Pietermaritzburg area where it frequents gardens in the city. The position of the anterior crossvein is sometimes fairly distal suggesting that this should be a member of the group of species including *oldroydi*, *reburrus*, *swazi* and *umbripennis*, although in other respects *androclea* could be considered closely related to *punctipennis* even though the wings of the latter are strongly dilated in the male.

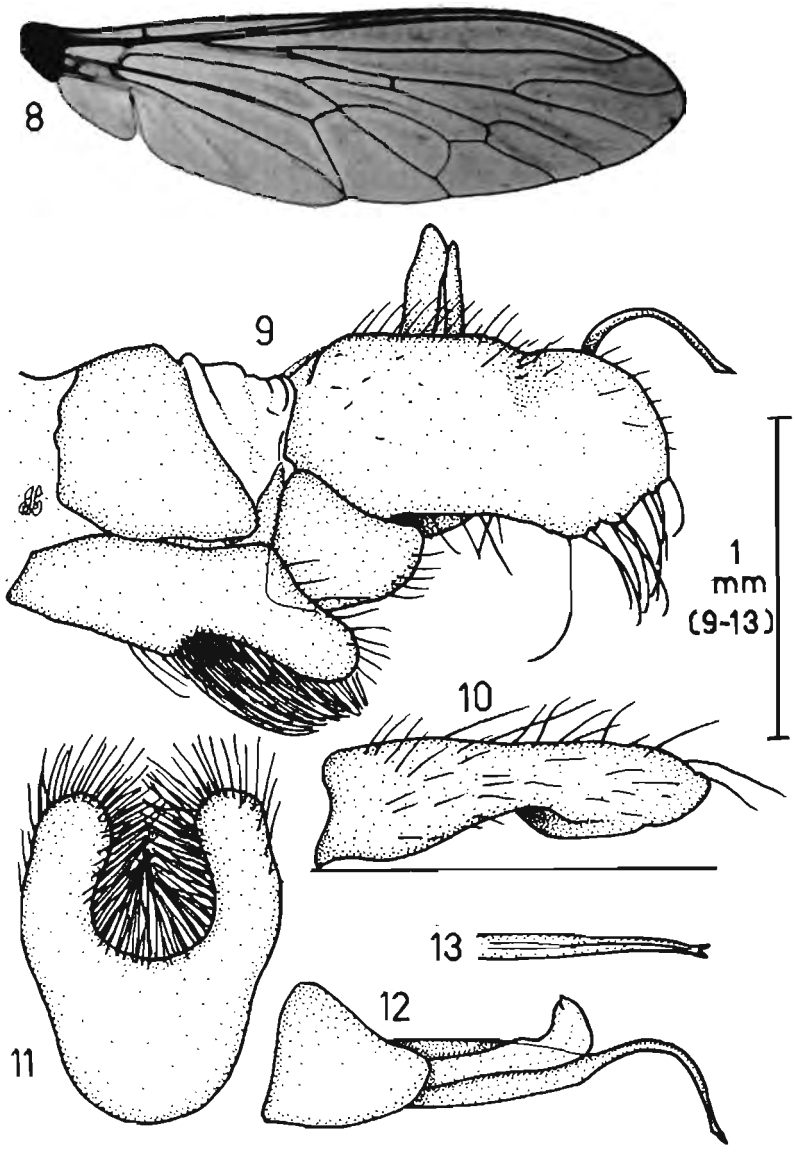
Dasophrys boslacus sp. n. Figs 8–13, 189

Derivation: *Bos*—L. ox (generic name of Buffalo); *lacus*—L. body of standing water. Named after the locality of the holotype—Buffelspoortdam.

Description: Based primarily on holotype but supplemented with information from other specimens examined.

Head. Antenna blackish; segments one and two with black setae; relative lengths of segments—3>5>1>2>4. Mystax: upper half setae black, lower half setae pale yellow-white. Frons gold-silver pruinose. Occipital setae: black and white dorsally, white centrally and ventrally. Proboscis black with white setae.

Thorax. Dark red-brown to black with gold-silver pruinescence. Mesepimeral setae pale yellow. Hypopleural setae pale yellow but one or two black ones may be present. Mesonotal setae; acrosticals moderately well-developed black; dorso-



Figs 8–13. *Dasophrys boslacus* sp. n. holotype male (Buffelspoort Dam). 8. Wing (6,4 mm). 9–13. Genitalia. 9. Lateral aspect. 10. Dorsal aspect of right clasper. 11. Ventral aspect of S8. 12. Lateral aspect of gonopod, stylus and aedeagus. 13. Ventral aspect of aedeagal tip.

centrals black; humerals fine pale yellow and black; presuturals 1 black 1 pale yellow; supra-alars 3–4 pale yellow; postalars 2–3 pale yellow; scutellar marginal bristles 2–6 pale yellow; scutellar disc setae pale yellow-white; postmesonotal setae sparse pale yellow-white. Wings: 6,4 mm (range 6,4–8,2 mm); undilated; venation and microtrichial distribution as in Fig. 8. Legs: prothoracic coxa with yellow-white setae anteriorly; metathoracic coxa with 1–3 lateral bristles. Bristles and setae on legs mostly shortish black, pale yellow and yellow-brown.

Abdomen. Terga dark red-brown with silver-gold pruinescence; setae shortish pale yellow, bristles fairly well-developed. Sterna as terga but with long pale yellow setae only. ♂ genitalia as in Figs 9–13. Ovipositor length : breadth ratio *ca.* 2,3.

Variation: A little variation in size. ♀ has all lateral bristles of mesonotum pale yellow.

Material examined: SOUTH AFRICA: *Transvaal.* 1 ♂ holotype 1 ♀ paratype, Buffelspoortdam area, Magaliesberge, 2.ii.1978, bushveld long grass, J. Londt, (NM); 1 ♂ 1 ♀ paratypes, Entabeni Forest Station, Zoutpansberge, i.1975, B. Stuckenberg, grassland, (NM); 1 ♂ paratype, Argent, 20.xii.1942, A. Capener, (NM); 1 ♂ paratype, Mt. Emlembe near Havelock Mine on Barberton road, montane forest and streams, 7.xi.1970, B. Stuckenberg, 1425 M, (NM). Distribution as in Fig. 189. Natal Museum Type No. 2358.

Seasonal incidence: See Table 1. Probably a midsummer flier.

Dasophrys brevistylus sp. n. Figs 14–19, 189

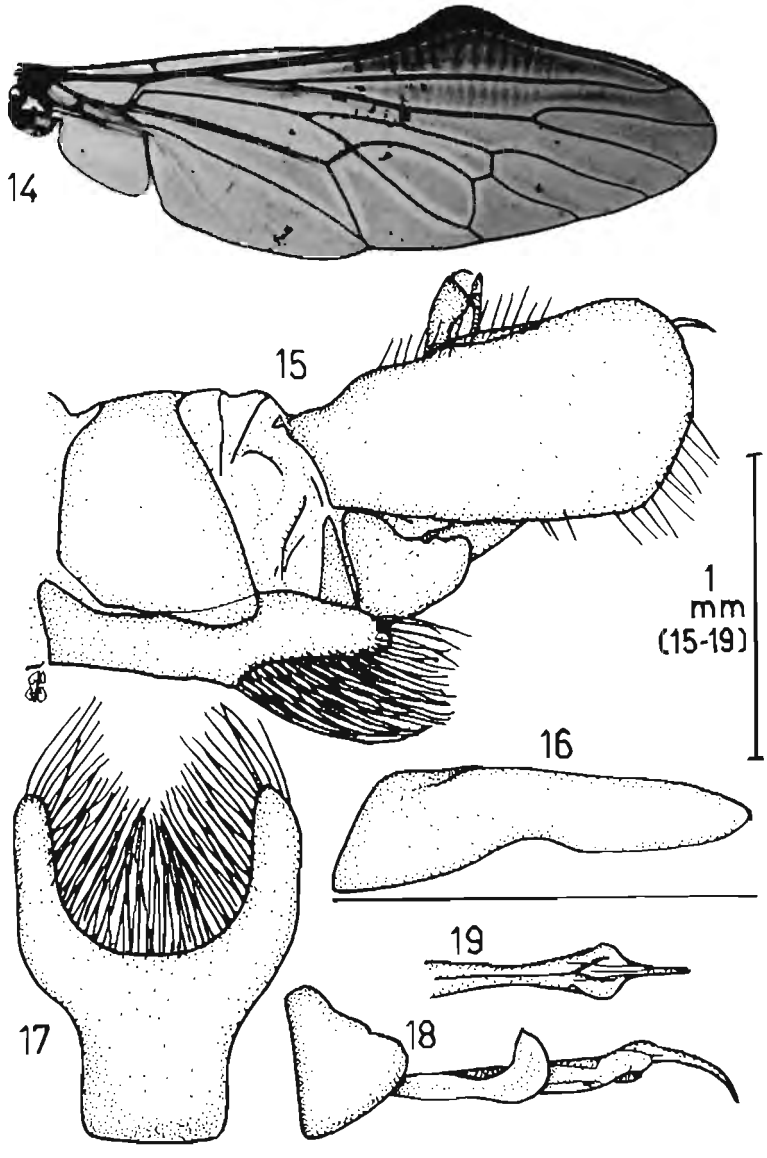
Derivation: *Brevi*—L. short, *style*—part of male genitalia. Name refers to the relatively short style possessed by this species.

Description: Based primarily on holotype but supplemented with information from other specimens examined.

Head. Antenna black; segments one and two with black (ventrally) and white (dorsally) setae; relative lengths of segments—3>5>1 = 2>4. Mystax: black with white setae along epistomal and lower lateral margins. Frons silver pruinose. Occipital setae: black and white dorsally, entirely white centrally and ventrally. Proboscis dark red-brown with white setae ventrally. Palpi dark red-brown with white setae.

Thorax. Dark red-brown with red-gold pruinescence. Mesepimeral setae black (may have a few white). Hypopleural setae sparse black. Mesonotal setae: acrosticals tiny black; dorsocentrals sparse black; humerals fine black and white; presuturals 2 black; supra-alars 2 black; postalars 1 black; scutellar marginal bristles 2 black; scutellar disc setae white; post-mesonotal setae sparse white. Wings: 6,6 mm (range 6,6–9,0 mm); dilated; venation and microtrichial distribution as in Fig. 14. Legs: prothoracic coxa with white setae anteriorly; metathoracic coxa with a single yellow bristle laterally. Bristles mostly black but a few orange-brown, setae shortish mostly white.

Abdomen. Terga dark red-brown to black with silver pruinescence; setae white, lateral bristles yellow-brown. Sterna dark red-brown with red-gold pruinescence;



Figs 14–19. *Dasophrys brevistylus* sp. n. male. 14. Wing of paratype (6,5 mm). 15–16. Genitalia of holotype (Gladdespruit). 15. Lateral aspect. 16. Dorsal aspect of right clasper. 17. Ventral aspect of S8. 18. Lateral aspect of gonopod, stylus and aedeagus. 19. Ventral aspect of aedeagal tip.

few white setae only. ♂ genitalia as in Figs 15–19. Ovipositor length : breadth ratio *ca.* 4,2.

Variation: ♀ paratype has 3 supra-alars and 2 postalars but is otherwise very similar to the holotype.

Material examined: SOUTH AFRICA: *Transvaal.* 2 ♂ holotype and paratype, Gladdespruit River near asbestos mine on Nelspruit–Kaapsehoop road, 4150′, 3.xi.1970, B. Stuckenberg, (NM); 1 ♀ paratype, Noordkaap River at Barberton–Nelspruit road, riverbank bushveld, 7.xi.1970, B. Stuckenberg, (NM). MOZAMBIQUE: 1 ♂ paratype, Vallèe du Muza, Bassin Inf. du Zambèze, 1905, G. Vasse, (MNP). Distribution as in Fig. 189. Natal Museum Type No. 2359.

Seasonal incidence: See Table 1. Probably a midsummer flier.

Dasophrys bullatus sp. n. Figs 20–25, 192

Derivation: *Bullatus*—L. inflated. Refers to the inflated appearance of the male claspers.

Description: Based entirely on the unique holotype.

Head. Antenna black; segments one and two with white setae (also a few black ones); relative length of segments—3>5>1>2>4. Mystax: upper half setae black, lower half setae white. Frons silver pruinose. Occipital setae: black (a few small white ones) dorsally, white centrally and ventrally. Proboscis black with white setae ventrally. Palpi hidden from view.

Thorax. Blackish with patches of silver pruinescence (is slightly greasy). Mes-epimeral setae white. Hypopleural setae white. Mesonotal setae: acrosticals long black; dorsocentrals long black; humerals fine white; presuturals 1 pale yellow 1 black; supra-alars 2 black; postalars 3 long black; scutellar marginal bristles 4 black; scutellar disc setae long white; postmesonotal setae black. Wings: 5,8 mm; undilated; venation and microtrichial distribution as in Fig. 20. Legs: prothoracic coxa with black setae anteriorly; metathoracic coxa without lateral bristles. Bristles of legs mostly pale yellow but some black; setae black and white.

Abdomen. Terga black with silver pruinescence; setae short black dorsally, longer white and pale yellow laterally, bristles pale yellow laterally. Sterna as terga but with long pale yellow-white setae only. ♂ genitalia as Figs 21–25. ♀ unknown.

Variation: Unknown.

Material examined: SOUTH AFRICA: *Cape Province.* 1 ♂ holotype, Cloetes Pass, x.1937, (SAM). Distribution as in Fig. 192.

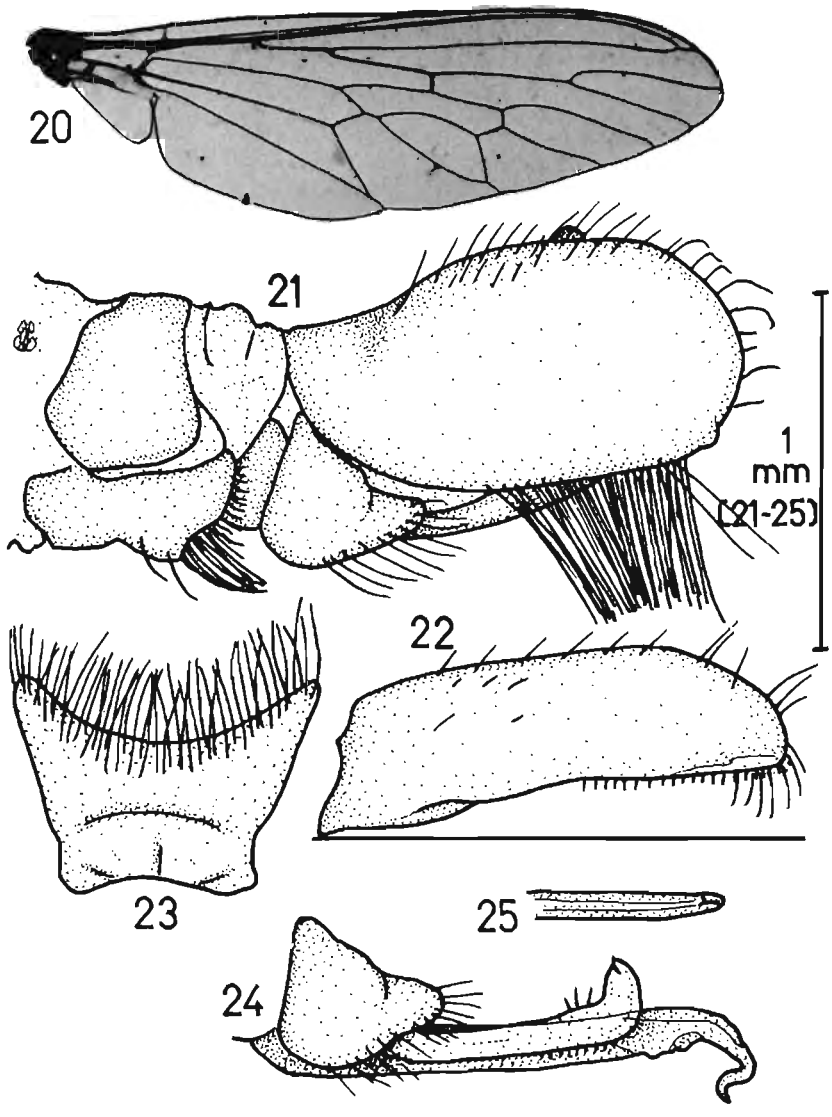
Seasonal incidence: See Table 1. Probably a midsummer flier.

Dasophrys carinatus sp. n. Figs 26–31, 189

Derivation: *Carinatus*—L. keeled. Refers to the well-developed keel on the internal face of the male clasper.

Description: Based entirely on the unique holotype.

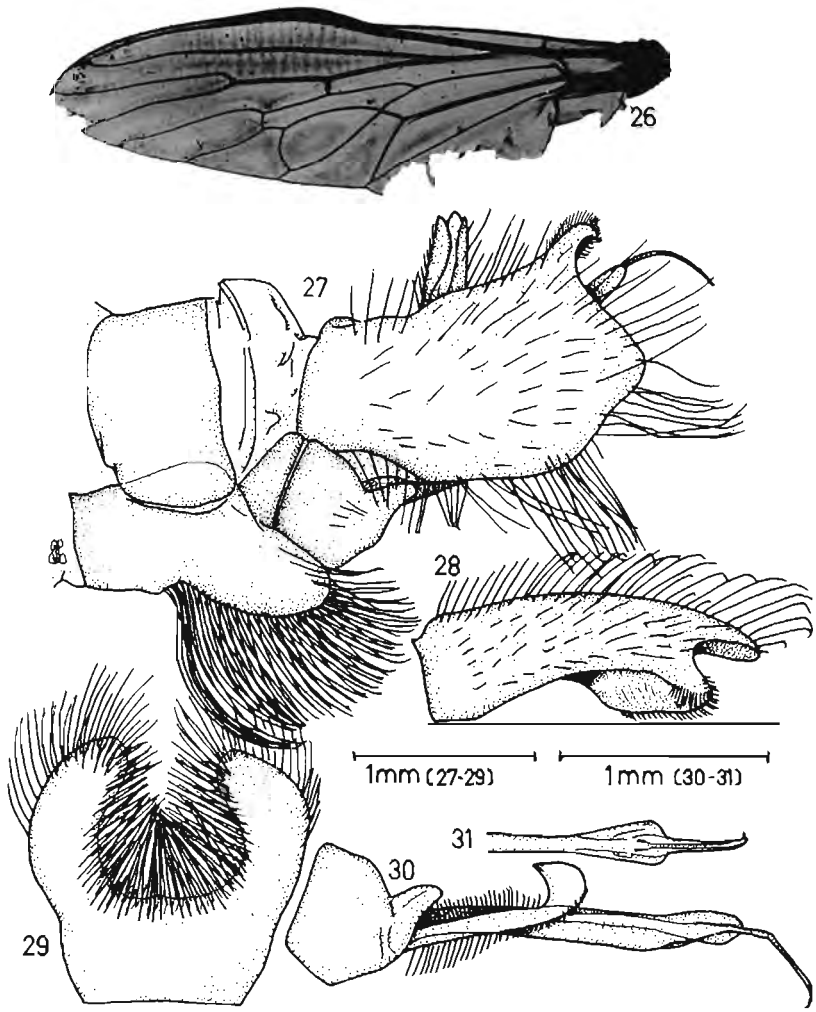
Head. Antenna dark red-brown to black; segments one and two with black setae; relative lengths of segments—3>5>1>2>4. Mystax: black with a few white setae



Figs 20–25. *Dasophrys bullatus* sp. n. holotype male (Cloetes Pass). 20. Wing (5,8 mm). 21–25. Genitalia. 21. Lateral aspect. 22. Dorsal aspect of right clasper. 23. Ventral aspect of S8. 24. Lateral aspect of gonopod, stylus and aedeagus. 25. Ventral aspect of aedeagal tip.

on epistomal margin. Frons silver-gold pruinose. Occipital setae: dark red-brown to black dorsally, dark red-brown and white centrally, white ventrally. Proboscis dark red-brown with white setae ventrally. Palpi dark red-brown with both black and white setae.

Thorax. Dark red-brown with red-gold pruinescence. Mesepimeral setae black. Hypopleural setae black. Mesonotal setae: acrosticals short black; dorsocentrals black; humerals fine black and white; presuturals 2 black; supra-alars 2 black;



Figs 26–31. *Dasophrys carinatus* sp. n. holotype male (Mt. Selinda). 26. Wing (9,9 mm). 27–31. Genitalia. 27. Lateral aspect. 28. Dorsal aspect of right clasper. 29. Ventral aspect of S8. 30. Lateral aspect of gonopod, stylus and aedeagus. 31. Ventral aspect of aedeagal tip.

postalars 2 black; scutellar marginal bristles 10 black; scutellar disc setae long white; postmesonotal setae white. Wings: 9,9 mm; dilated; venation and microtrichial distribution as in Fig. 26. Legs: prothoracic coxa with pale yellow setae anteriorly; metathoracic coxa with a pale yellow bristle laterally. Bristles black, fine setae black, red-brown, pale yellow and white.

Abdomen. Terga dark red-brown with silver and gold pruinescence; setae long and short shiny yellow-white, no bristles. Sterna as terga. ♂ genitalia as in Figs 27–31. ♀ unknown.

Material examined: ZIMBABWE. 1 ♂ holotype, Mt Selinda, xii.1935, G. van Son, (NM). Distribution as in Fig. 189. Natal Museum Type No. 2360.

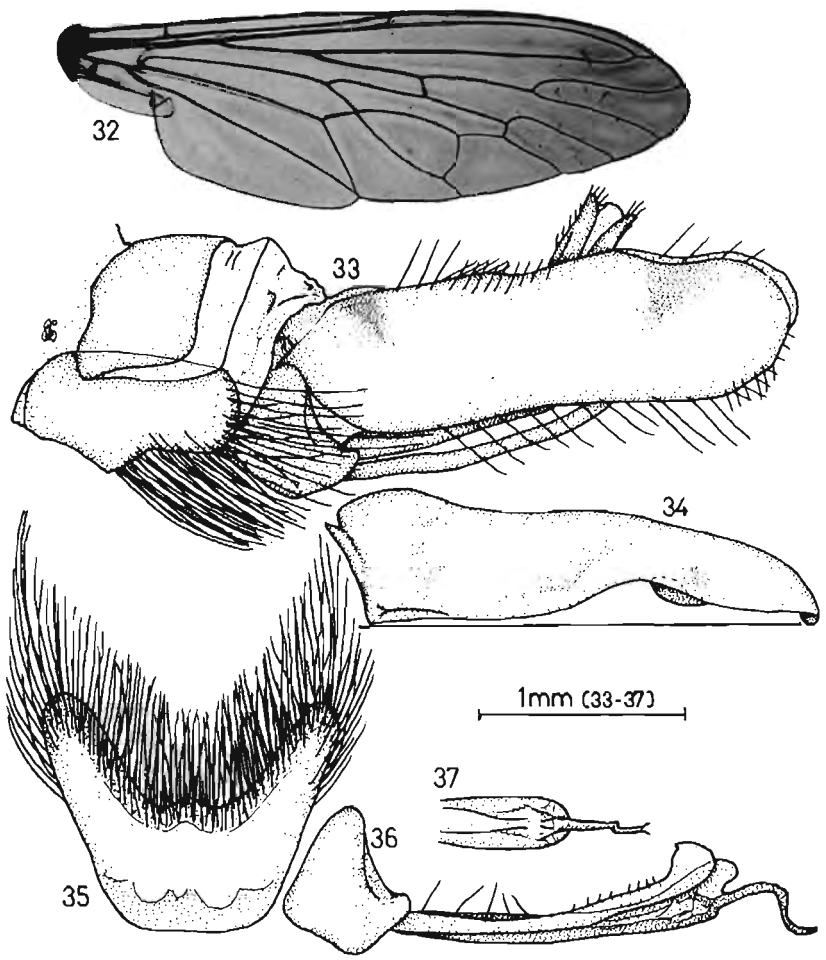
Seasonal incidence: See Table 1. Probably a midsummer flier.

Dasophrys tarsalis (Ricardo, 1920) **comb. n.** sp. n. Figs 32–37, 190

Dysmachus tarsalis Ricardo, 1920: 380.
Dysmachus flavopilosus Ricardo, 1920: 384 **Syn. n.**
Neolophonotus tarsalis; Oldroyd, 1980: 341.
Neolophonotus flavopilosus; Oldroyd, 1980: 340.

Redescription: Based primarily on fresh material collected in Natal. The holotype agrees well with these specimens.

Head. Antenna black; segments one and two with pale yellow setae dorsally, black setae ventrally; relative lengths of segments—3>5 = 1>2>4. Mystax: pale yellow with black setae in upper half and down lateral margins. Frons gold-silver pruinose. Occipital setae: pale yellow (few black) dorsally, pale yellow centrally, yellow-white ventrally. Proboscis dark red-brown with yellow setae ventrally. Palpi dark red-brown with yellow setae.



Figs 32–37. *Dasophrys tarsalis* (Ricardo) male. 32. Wing (Nhlosane: 8,5 mm). 33–37. Genitalia (Nhluzane). 33. Lateral aspect. 34. Dorsal aspect of right clasper. 35. Ventral aspect of S8. 36. Lateral aspect of gonopod, stylus and aedeagus. 37. Ventral aspect of aedeagal tip.

Thorax. Dark metallic black with gold pruinescence. Mesepimeral setae long pale yellow. Hypopleural setae long pale yellow. Mesonotal setae: acrosticals long thin black; dorsocentrals black thin (few pale yellow at hind region); humerals fine pale yellow; presuturals 2 pale yellow; supra-alars 3 pale yellow 1 black; postalars 2 pale yellow; scutellar marginal bristles 5–6 pale yellow; scutellar disc setae fine pale yellow; postmesonotal setae long fine pale yellow. Wings: Length range 7,3–8,9 mm; undilated; venation and microtrichial distribution as in Fig. 32. Legs: prothoracic coxa with pale yellow setae anteriorly; metathoracic coxa without lateral bristles (specimens from Steynsberg possess a single pale yellow bristle). Bristles mostly pale yellow (few black) setae mostly moderately long shiny yellow, there are a few black setae.

Abdomen. Dark metallic blackish with gold pruinescence. Terga with long pale yellow shiny setae and bristles. Sterna as terga. ♂ genitalia as in Figs 33–37. Ovipositor length : breadth ratio *ca*. 4,2.

Variation: There is little variation. The mesonotal setae (especially presuturals and supra-alars) may be black instead of pale yellow.

Material examined: SOUTH AFRICA: *Natal*. 1 ♂ holotype, Willow Grange, R. C. Wroughton, (BM); 1 ♀—holotype of *D. flavopilosus*, Willow Grange, R. C. Wroughton, (BM); 10 ♂ 5 ♀, 10 km S. Dargle on Dargle–Boston road, 26.iii.1980, open grassland, J. Londt, (NM); 8 ♂ 4 ♀, Nhlosane mountain *ca*. 10 km SW. Dargle, open grassland, 26.iii.1980, J. Londt, (NM); 1 ♂, Boston, *ca*. 45 km W. Pietermaritzburg, open grassland, 26.iii.1980, J. Londt, (NM); 1 ♂, Nhluzane (alternative spelling of Nhlosane), 10.v.1959, B. Stuckenberg, (NM); 4 ♂ 2 ♀, Karkloof, open grassy area near forest margin, 24.iv.1980, J. Londt (NM); 1 ♂, The Start, Karkloof, 8.iv.1978, A. Butler, (NM); 1 ♂, Willow Grange (*ca*. 15 km SE. Estcourt), R. C. Wroughton, (BM). *Cape Province*. 1 ♂ 1 ♀, Steynsberg, 1915, R. Ellenberger (MNP). Distribution as in Fig. 190.

Seasonal incidence: See Table 1. Probably an autumn flier.

Remarks: This species is fairly common in grassveld habitats in fairly high altitude areas to the north and north-west of Pietermaritzburg.

Dasophrys compressus (Hull, 1967) **comb. n.** Figs 38–43, 190

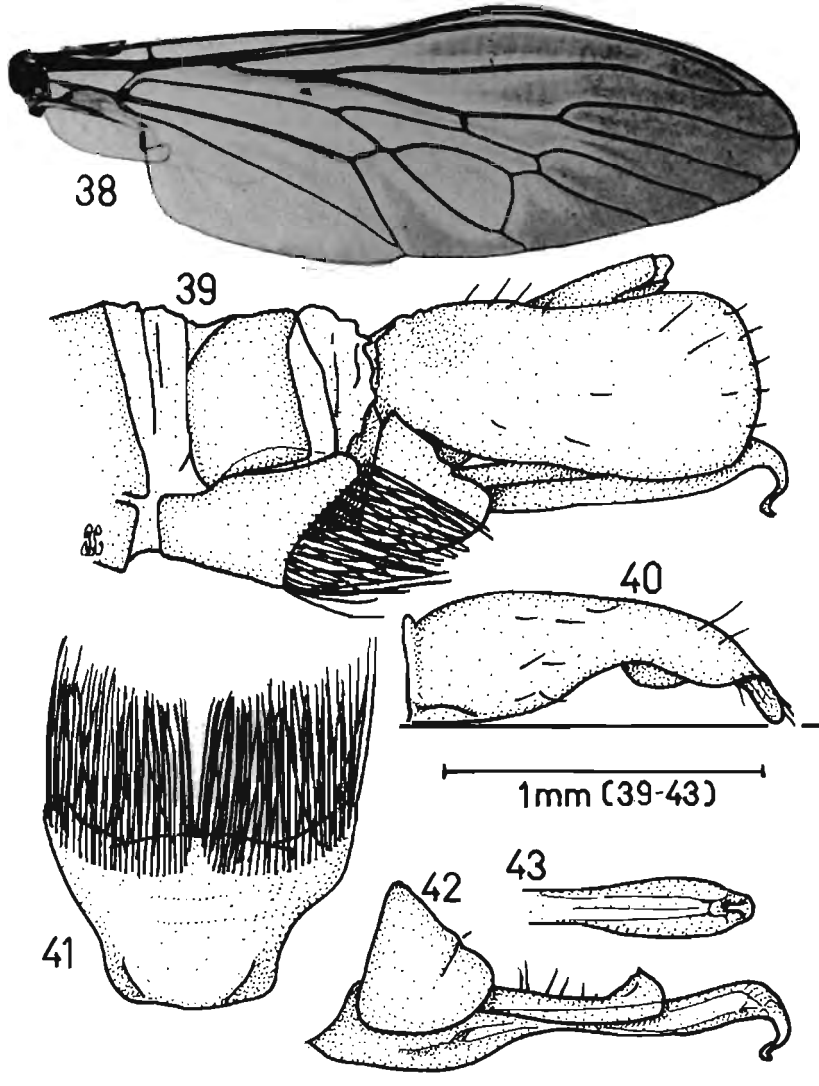
Synolcus compressus Hull, 1967: 261–262; Oldroyd, 1980: 346.

Redescription: Based on a male paratype but supplemented with information from other specimens examined.

Head. Antenna blackish; segments one and two with black and white setae; relative lengths of segments—3>1≥5>2>4. Mystax: largely black but lower third white. Frons silver pruinose. Occipital setae: black and white dorsally, white centrally and ventrally. Proboscis blackish with white setae ventrally. Palpi black with black and white setae.

Thorax. Black with red-silver pruinescence. Mesepimeral setae orange-brown. Hypopleural setae orange-brown and black. Mesonotal setae: acrosticals fine longish black; dorsocentrals fine long black; humerals fine black and white;

presuturals 2 black; supra-alars 1 black; postalars 1 black; scutellar marginal bristles 4 (7–10 in ♀) black; scutellar disc setae long white; postmesonotal setae sparse white. Wings: 5,8 mm (range 5,8–8,5 mm); dilated; venation and microtrichial distribution as in Fig. 38. Legs: prothoracic coxa with white setae anteriorly; metathoracic coxa without lateral bristles. Leg bristles mostly black (few brown), setae short mainly white but black ones also present.



Figs 38–43. *Dasophrys compressus* (Hull) male. 38. Wing (Kirstenbosch: 6,9 mm). 39–43. Genitalia of paratype (Hout Bay). 39. Lateral aspect. 40. Dorsal aspect of right clasper. 41. Ventral aspect of S8. 42. Lateral aspect of gonopod, stylus and aedeagus. 43. Ventral aspect of aedeagal tip.

Abdomen. Black with silver pruinescence. Terga with long white setae. Sterna as terga. ♂ genitalia as in Figs 39–43. Ovipositor length : breadth ratio *ca*. 3,7.

Variation: Minimal. The ♀ may have slightly different setae coloration.

Material examined: SOUTH AFRICA: *Cape Province*. 1 ♂ paratype, Cape Peninsula, Hout Bay, Skoorsteenkop, 14.ii.1951, insect trap, Brink & Rudebeck, Swedish S.A. Exped., (NRS); 1 ♂ (somewhat damaged), Cape Town, Kirstenbosch Gardens, 25.iii.1979, J. Londt, (NM); 1 ♀, Cape Town, Lionshead, E. slopes above Signal Hill road, 29.ix.1979, J. Londt, (NM); 1 ♀, 5 km E. Wellington on Bainskloof Pass, E. slopes, 27.ix.1979, J. Londt, (NM).

Material not examined: SOUTH AFRICA: *Cape Province*. 3 ♂ holotype and paratypes, same data as paratype given above, 2.ii.1951, (NRS); 1 ♂ paratype with same data as paratype given above, (NRS). Distribution as in Fig. 190.

Seasonal incidence: See Table 1. Probably a midsummer flier.

Remarks: Hull (1967) described *compressus* as a *Synolcus*. During my study of *Synolcus* I discovered that Hull had misplaced this species (Londt, 1980).

Dasophrys crenulatus sp. n. Figs 44–49, 190

Derivation: *Crenulatus*—L. minutely crenate (notched). Refers to the minute notch visible on the inner margin of the male clasper when viewed dorsally (Fig. 46) (genitalia should be cleared for this to be obvious).

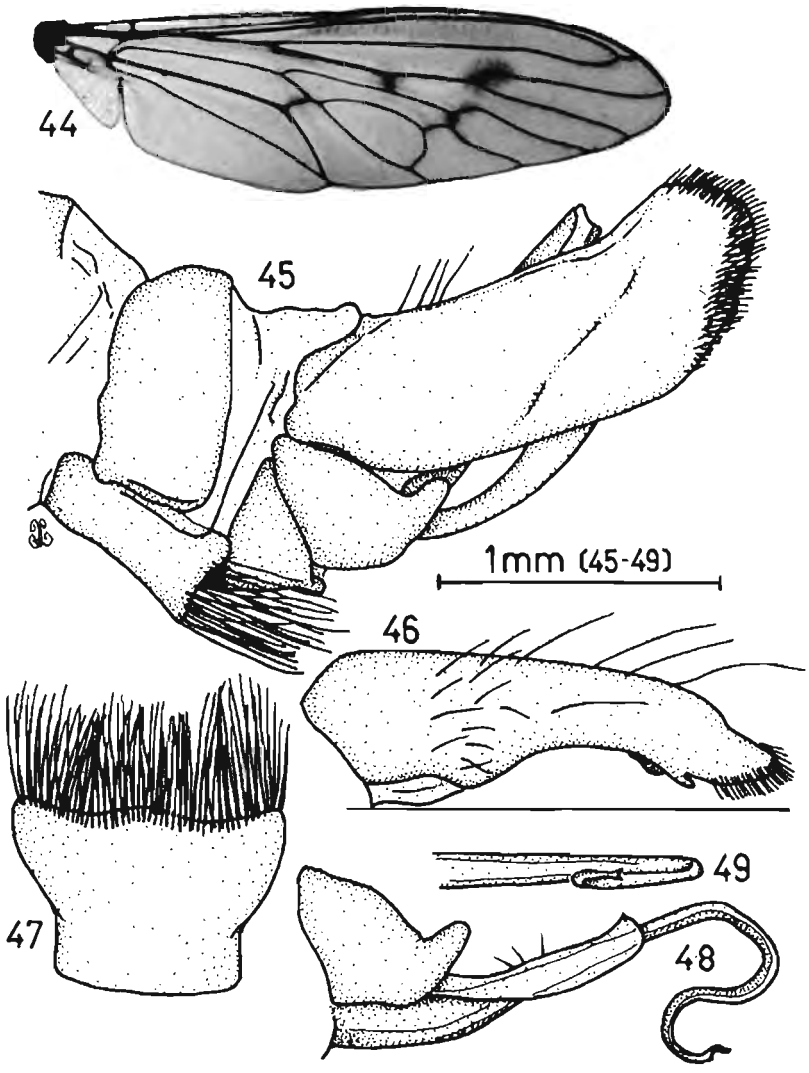
Description: Based primarily on the holotype but supplemented with information from other specimens examined.

Head. Antenna black; segments one and two with black (ventrally) and white (dorsally) setae; relative lengths of segments—3>5>1>2>4. Mystax: black with a narrow strip of white setae running vertically down the centre. Frons silver pruinose. Occipital setae: black dorsally; black and white centrally; white ventrally. Proboscis blackish with white setae ventrally. Palpi black with white setae.

Thorax. Dark red-brown with red-gold and silver pruinescence. Mesepimeral setae pale yellow (a few black). Hypopleural setae pale yellow-white. Mesonotal setae: acrosticals short black; dorsocentrals longer black; humerals fine white; presuturals 2 black (1 may be pale yellow); supra-alars 3 black; postalars 2 black; scutellar marginal bristles 2–5 pale yellow (a few specimens have the odd black one); scutellar disc setae yellow-white; postmesonotal setae sparse blackish. Wings: 7,2 mm (range 6,1–7,5 mm); undilated; venation and microtrichial distribution as in Fig. 44. Legs: prothoracic coxa with white setae anteriorly; metathoracic coxa lacking lateral bristles. Leg bristles pale yellow-brown and black; setae short black and white.

Abdomen. Dark red-brown with silver and gold pruinescence. Terga with short black setae dorsally, longer white setae laterally, pale yellow bristles laterally. Sterna with long white setae only. ♂ genitalia as in Figs 45–49 (paratype illustrated). Ovipositor length : breadth ratio *ca*. 3,8.

Variation: Minimal. Males from Lesotho may not possess the small notch on the clasper but all other features appear identical.



Figs 44–49. *Dasophrys crenulatus* sp. n. male. 44. Wing of paratype (Cathedral Peak: 6,5 mm). 45–49. Genitalia of paratype (Giant's Castle). 45. Lateral aspect. 46. Dorsal aspect of right clasper. 47. Ventral aspect of S8. 48. Lateral aspect of gonopods, stylus and aedeagus. 49. Ventral aspect of aedeagal tip.

Material examined: SOUTH AFRICA: *Natal*. 17 ♂ holotype and paratypes 5 ♀ paratypes, Cathedral Peak area, grassland, 16–18.xii.1977, J. Londt, (NM); 7 ♂ 4 ♀ paratypes, Cathedral Peak area, grassland, 6000', 20.xi.1979, J. Londt, (NM); 3 ♂ 2 ♀ paratypes, Drakensberg, Giant's Castle Reserve, 5800', 18.x.1971, Stuckenberg & Irwin, (NM); 2 ♂ 1 ♀ paratypes, Karkloof, 12.xii.1978, J. Londt, (NM). LESOTHO: 1 ♂ 1 ♀ paratypes, Mamathes, i.1957, D. Cuthbertson, (DMAG); 1 ♂ paratype, Rafanyane Valley, 2.i.1947, L. Bevis, (DMAG). TRANSKEI: 2 ♂ paratypes, Dangerhoek on Telle River, 35 km E. Sterkspruit,

10.i.1979, Londt & Stuckenberg, (NM); 1 ♀ paratype, Lundean's Nek, summit of pass, open grass and roadside vegetation, 10.i.1979, Londt & Stuckenberg, (NM). Distribution as in Fig. 190. Natal Museum Type No. 2362.

Seasonal incidence: See Table 1. Flies in midsummer.

Prey records: A female collected in the Cathedral Peak area was feeding on a small Dipteran (family Muscidae).

Remarks: Oldroyd labelled one of the Giant's Castle males as possibly *D. punctipennis*. As this species is quite different it would appear that Oldroyd had not seen any true specimens of *punctipennis* with which to make comparisons. This species is apparently limited to high altitude areas of the Natal, Lesotho and Transkei foothills of the Drakensberg Mountains, where it occupies a grassveld habitat.

Dasophrys dorattina sp. n. Figs 50–55, 188

Derivation: *Doratos*—L. spear; *attina*—L. stonewall boundary. Refers to the Zulu name for the Drakensberg Mountains which translated into English is 'Barrier of Spears'.

Description: Based primarily on the holotype but supplemented with information from other specimens examined.

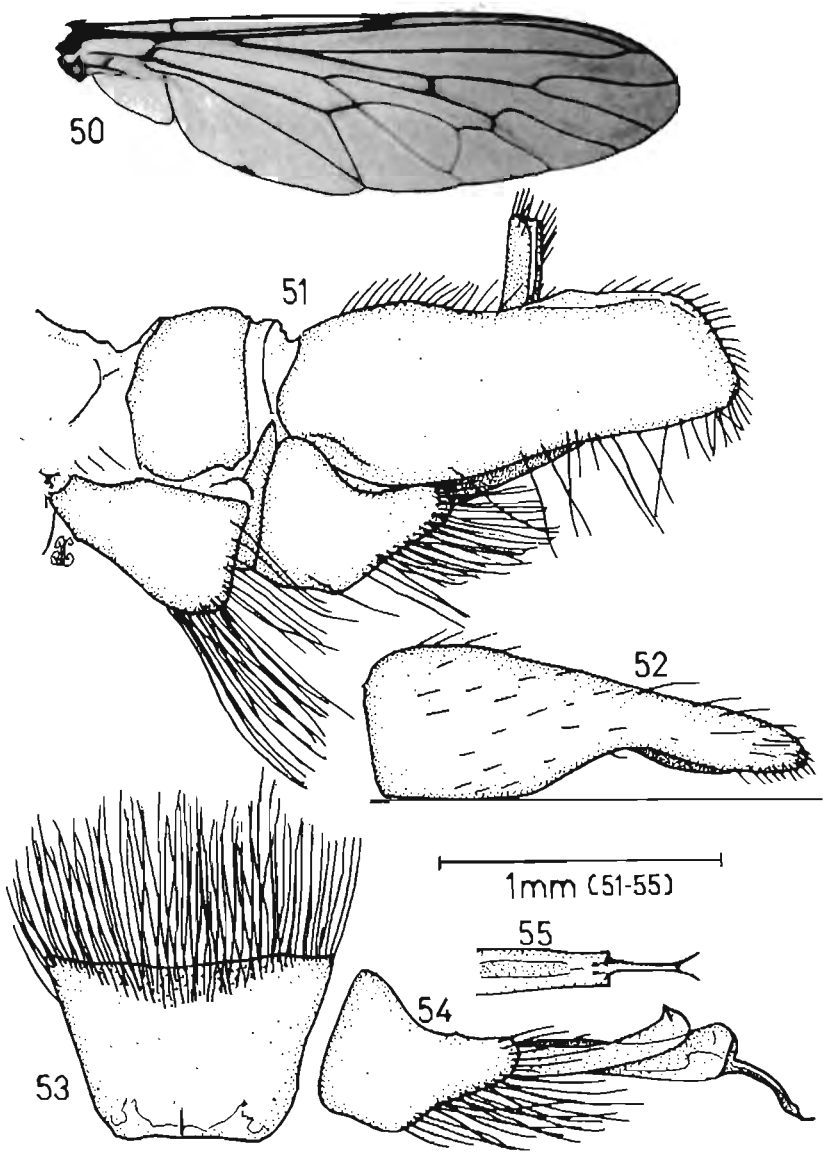
Head. Antenna dark red-brown to black; segments one and two with black setae; relative lengths of segments—3>5>1>2>4. Mystax: white with black setae in upper half and down lateral margins. Frons silver pruinose. Occipital setae: black and white dorsally and centrally; white ventrally. Proboscis dark red-brown with white setae ventrally. Palpi dark red-brown with black and white setae.

Thorax. Dark red-brown to black with fine gold and silver pruinescence. Mes-epimeral setae long pale yellow. Hypopleural setae long pale yellow. Mesonotal setae: acrosticals long black anteriorly white posteriorly; dorsocentrals black; humerals fine pale yellow (a few black); presuturals 2 long black; supra-alars 3 long black; postalars 2–3 long black; scutellar marginal bristles 4–6 long black; scutellar disc setae long white; postmesonotal setae white. Wings: 6,7 mm (range 6,2–8,0 mm); undilated; venation and microtrichial distribution as in Fig. 50. Legs: prothoracic coxa with white setae anteriorly; Metathoracic coxa without lateral bristles. Leg setae black and shiny yellow, bristles black (few orange-brown) longish.

Abdomen. Dark red-brown with fine gold pruinescence. Terga with long shiny pale yellow setae, few short black ones dorsally. Sterna with long shiny pale yellow setae only. ♂ genitalia as in Figs 51–55. Ovipositor length:breadth ratio *ca.* 3,7.

Variation: Minimal.

Material examined: SOUTH AFRICA: *Natal.* 4 ♂ holotype and paratypes 5 ♀ paratypes, Cathedral Peak Forest Reserve, iii.1959, B. Stuckenberg, Fire Look-out, Grassland on steep slopes 7500–7700′, (NM); 4 ♂ 4 ♀ paratypes, Cathedral Peak area, 1800 m, 4–11.iv.1977, J. Londt, (NM); 1 ♂ 1 ♀ paratypes, Cathedral Peak Forest Reserve, Indumeni River headwaters, 8500–9200′, iii.1959,



Figs 50–55. *Dasophrys dorattina* sp. n. holotype male (Cathedral Peak). 50. Wing (6,7 mm). 51–55. Genitalia. 51. Lateral aspect. 52. Dorsal aspect of right clasper. 53. Ventral aspect of S8. 54. Lateral aspect of gonopod, stylus and aedeagus. 55. Ventral aspect of aedeagal tip.

B. Stuckenberg, (NM); 1 ♂ paratype, Cathedral Peak area, 7700′, 20.iii.1955, B. Stuckenberg (NM); 3 ♂ 1 ♀ paratypes, Giant's Castle Reserve, 5800′, i.xi.1972, M. Irwin, (NM); 2 ♂ 3 ♀ paratypes, Giant's Castle Reserve, 5800′, ii.1962, C. Tinley, (NM); 1 ♂ paratype, Lotini (Loteni), 6.iv.1972, M. Irwin, (NM). Distribution as in Fig. 188. Natal Museum Type No. 2363.

Seasonal incidence: See Table 1. Primarily a late summer flier.

Dasophrys engeli sp. n. Figs 56–61, 190

Derivation: Named in honour of Dr E. O. Engel in recognition of his outstanding contributions to the study of Afrotropical Asilidae.

Description: Based primarily on the holotype but supplemented with information from other specimens examined.

Head. Antenna black; segments one and two with black setae; relative lengths of segments—3>5>1>2>4. Mystax: black with a few yellow-brown setae on epistomal margin. Frons silver pruinose. Occipital setae: black dorsally, black and white centrally, white ventrally. Proboscis dark red-brown with white setae ventrally. Palpi dark red-brown with white setae.

Thorax. Dark red-brown with gold pruinescence. Mesepimeral setae dark red-brown. Hypopleural setae dark red-brown. Mesonotal setae: acrosticals tiny black; dorsocentrals black; humerals fine white and black; presuturals 1–3 (usually 2) black; supra-alars 1 black; postalars 2 black; scutellar marginal bristles 2–3 black; scutellar disc setae long white; postmesonotal setae few white. Wings: 9,2 mm (range 6,9–9,2 mm); slight dilation but to be considered as undilated; venation and microtrichial distribution as in Fig. 56. Legs: prothoracic coxa with pale yellow-brown setae anteriorly; metathoracic coxa lacking lateral bristles. Leg bristles mainly dark red-brown; setae longish red-brown and short white.

Abdomen. Dark red-brown with silver pruinescence. Terga with short black setae dorsally, long white and yellow-brown setae laterally. Sterna with long yellow-white setae only. ♂ genitalia as in Figs 57–61. Ovipositor length : breadth ratio *ca.* 4,5.

Variation: Minimal.

Material examined: SOUTH AFRICA: *Cape Province.* 2 ♂ paratypes, Jonkersberg, xi.1941, G. van Son, (NM); 1 ♂ 1 ♀ paratypes, Somerset East, xi.1930, R. Turner, (BM); 1 ♂ paratype, Mossel Bay, iv.1921, R. Turner, (BM); 1 ♀ paratype, Port Elizabeth, 21.xi.1937, (BM). Distribution as in Fig. 190. Natal Museum Type No. 2364. 3 ♂ holotype and paratypes 3 ♀ paratypes, Knysna Forest, 9.xii.1979, Londt & Stuckenberg, (NM).

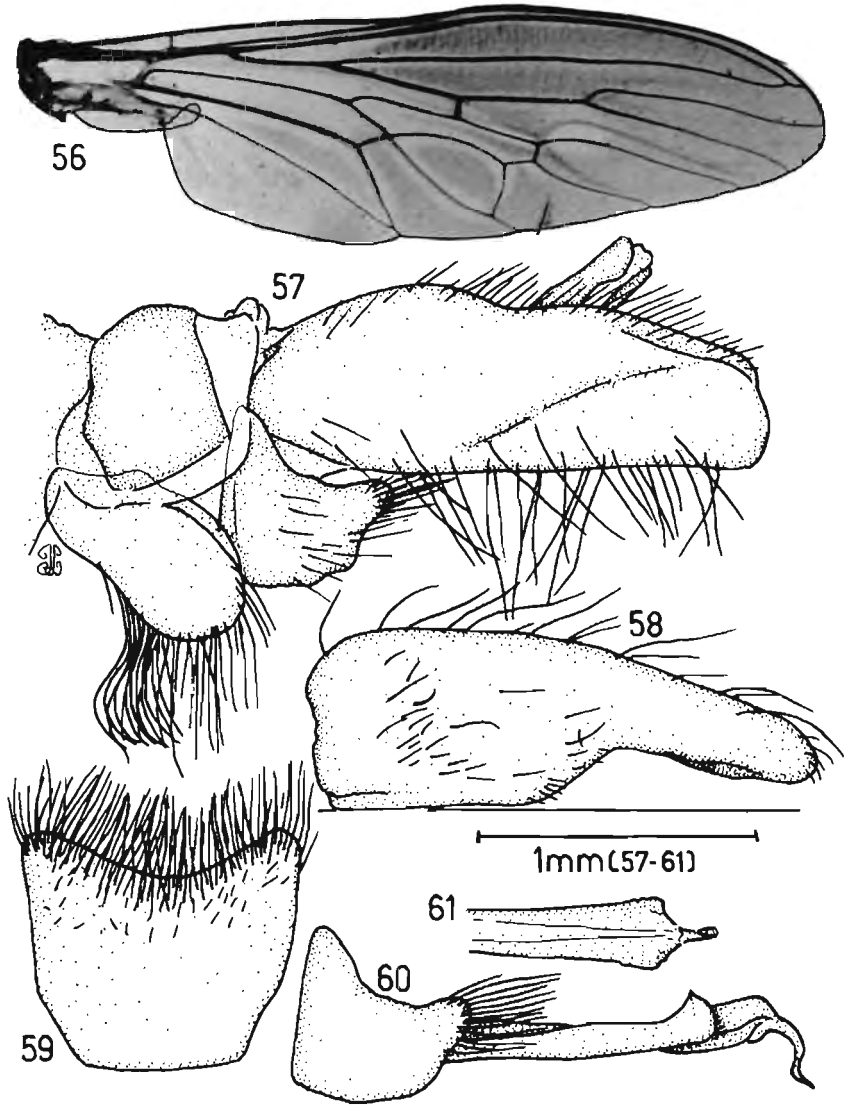
Seasonal incidence: See Table 1. Probably a midsummer flier.

Dasophrys fortis sp. n. Figs 1, 62–67, 190

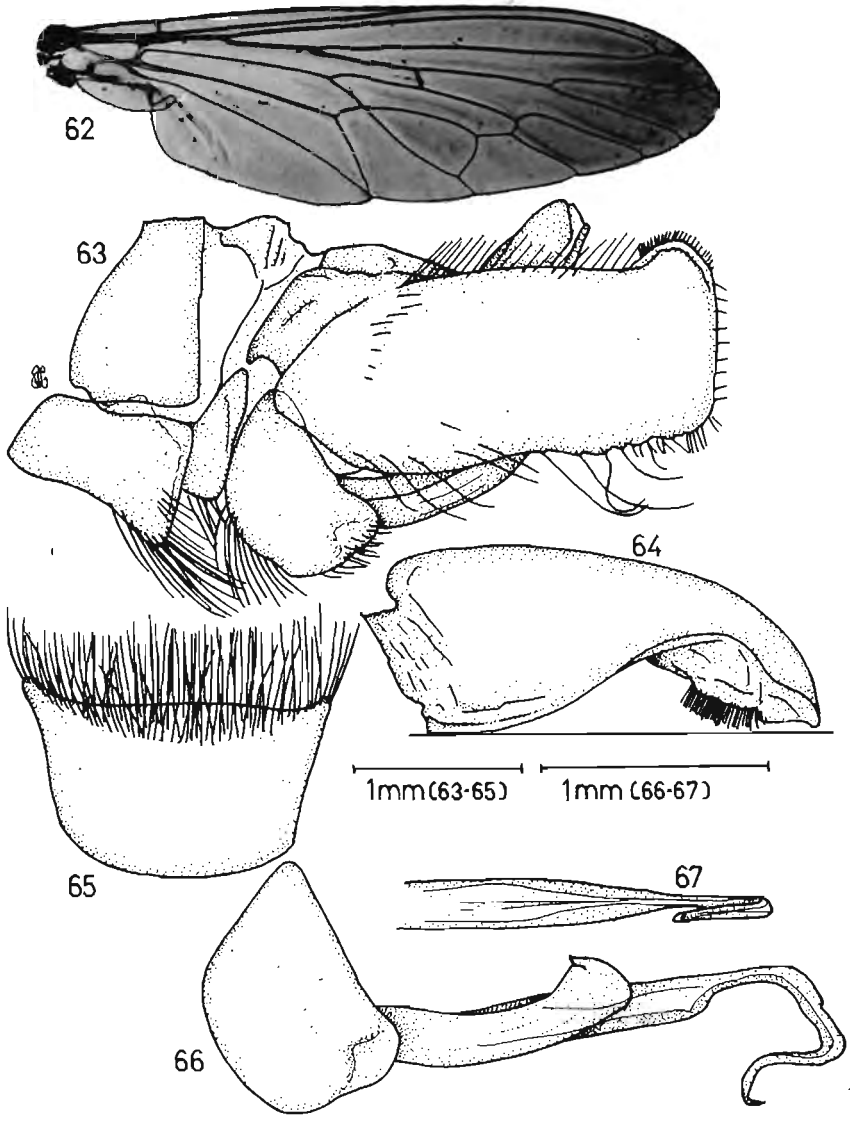
Derivation: *Fortis*—L. powerful/strong. Refers to this species' large robust appearance.

Description: Based primarily on holotype but supplemented with information from other specimens examined.

Head. Antenna black; segments one and two with black setae; relative lengths of segments—3>5>1>2>4. Mystax: primarily yellow but with a few black setae dorsally and along upper lateral margins. Frons gold pruinose. Occipital setae: black and pale yellow dorsally, pale yellow centrally and ventrally. Proboscis dark red-brown with pale yellow setae ventrally. Palpi dark red-brown with pale yellow setae.



Figs 56–61. *Dasophrys engeli* sp. n. (Jonkersberg) male. 56. Wing of paratype (8,9 mm). 57–61. Genitalia of paratype. 57. Lateral aspect. 58. Dorsal aspect of right clasper. 59. Ventral aspect of S8. 60. Lateral aspect of gonopod, stylus and aedeagus. 61. Ventral aspect of aedeagal tip.



Figs 62–67. *Dasophrys fortis* sp. n. male. 62. Wing of paratype (Pietermaritzburg: 10,5 mm). 63–67. Genitalia of paratype (Ntabambomvu Hills). 63. Lateral aspect. 64. Dorsal aspect of right clasper. 65. Ventral aspect of S8. 66. Lateral aspect of gonopod, stylus and aedeagus. 67. Ventral aspect of aedeagal tip.

Thorax. Dark red-brown with gold pruinescence. Mesepimeral setae pale yellow-brown. Hypopleural setae pale yellow-brown. Mesonotal setae: acrosticals black, stopping at level of suture; dorsocentrals black with a few yellow ones in hind region; humerals pale yellow; presuturals 2 yellow-brown; supra-alars 4 yellow-brown (may be dark brown in some cases); postalars 3 yellow-brown; scutellar marginal bristles 6–7 pale yellow-brown; scutellar disc setae thin pale yellow; postmesonotal setae sparse pale yellow. Wings: 11,6 mm (range 10,5–11,9 mm); undilated; venation and microtrichial distribution as in Fig. 62. Legs: prothoracic coxa with pale yellow setae anteriorly; metathoracic coxa with a lateral bristle. Leg bristles yellow, yellow-brown and black; setae shortish yellow.

Abdomen. Dark red-brown with gold pruinescence. Terga with longish yellow setae and bristles. Sterna as terga. ♂ genitalia as in Figs 63–67. Ovipositor length : breadth ratio *ca*. 2,6.

Variation: Minimal.

Material examined: SOUTH AFRICA: *Natal*. 1 ♂ holotype 1 ♀ paratype, Ingwavuma, grassy area with bushes, 21.ii.1979, J. Londt, (NM); 1 ♂ paratype, Itala Nature Reserve, 2 km N. Louwsburg, 20.ii.1979, J. Londt, (NM); 1 ♂ paratype, Nongoma, 8.iv.1968, T. Schofield, (NM); 1 ♂ paratype, Lions River, 8.iii.1973, C. Mercer, (NM); 3 ♂ 1 ♀ paratypes, Pietermaritzburg, Town Bush, grass, 27.iii.1980, J. Londt, (NM); 1 ♂ paratype, Pietermaritzburg, 800 m, 2.i.1978, T. Martin (NM); 5 ♂ 5 ♀ paratypes, Balgowan, open grassland, 21.iii.1980, J. Londt, (NM). *Transvaal*. 1 ♀ paratype, Carolina, 5.ii.1943, H. v. Heerden (SAM). Distribution as in Fig. 190. Natal Museum Type No. 2365.

Seasonal incidence: See Table 1. Probably a late summer flier.

Prey records: A female collected at Balgowan was captured while feeding on a Pentatomid bug (Heteroptera).

Remarks: This large species is often taken in close proximity to and at the same time of year as *D. natalensis*. *D. fortis* is, however, a grassveld species while *natalensis* is found in forest patches.

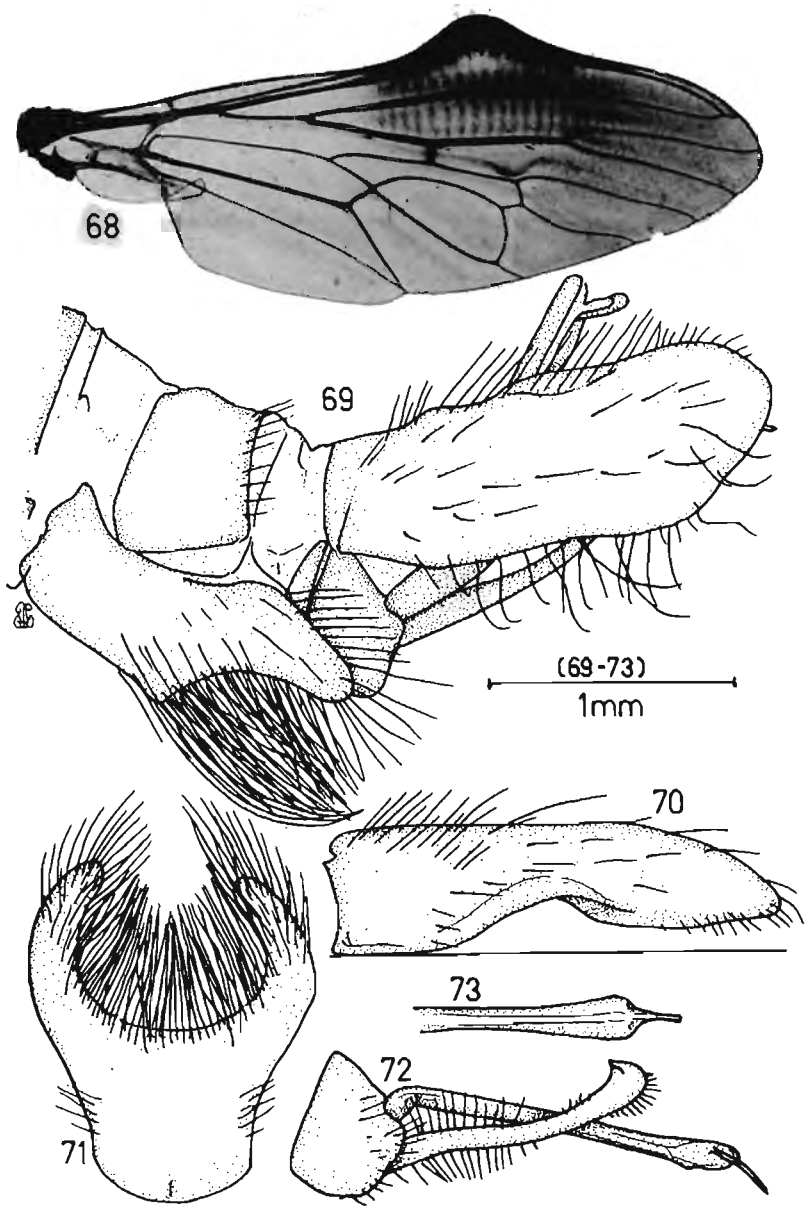
Dasophrys hypselopterus Engel, 1929 Figs 68–73, 188

Dasophrys hypselopterus Engel, 1929: 155–156; Hull. 1962: 528; Oldroyd, 1974: 154; Oldroyd, 1980: 337.

Redescription: Based primarily on the lectotype but supplemented with information from other material examined.

Head. Antenna dark red-brown to black; segments one and two with black setae; relative lengths of segments—3>5>1>2>4. Mystax: black with 4–5 white setae on epistomal margin (these may be missing in some specimens). Frons silver-gold pruinose. Occipital setae: black dorsally and centrally, white ventrally. Proboscis dark red-brown to black with white setae ventrally. Palpi black with black and white setae.

Thorax. Dark red-brown with red-gold pruinescence. Mesepimeral setae black. Hypopleural setae black. Mesonotal setae: acrosticals short black; dorsocentral short black, longer behind suture; humerals fine black; presuturals 2 black;



Figs 68–73. *Dasophrys hypselopterus* Engel male. 68. Wing (Vumba: 9,5 mm). 69–73. Genitalia of Lectotype (Vumba). 69. Lateral aspect. 70. Dorsal aspect of right clasper. 71. Ventral aspect of S8. 72. Lateral aspect of gonopod, stylus and aedeagus. 73. Ventral aspect of aedeagal tip.

supra-alars 2 black; postalars 3 black; scutellar marginal bristles 6 black; scutellar disc setae white; postmesonotal setae white. Scutellum and postmesonotum silver pruinose. Wings: 7,7–10,4 mm; strongly dilated; venation and microtrichial distribution as in Fig. 68. Legs: prothoracic coxa with white and yellow setae anteriorly; metathoracic coxa lacking lateral bristles. Leg bristles all black; setae longish black with a few white ones.

Abdomen. Black with silver pruinose hind margins and postero-lateral corners. Terga with short black setae dorsally, long black white and yellow setae laterally. Sterna with long white setae only. ♂ genitalia as in Figs 69–73. Ovipositor length:breadth ratio *ca*. 6,2.

Variation: Minimal.

Material examined: ZIMBABWE. 1 ♂ lectotype 1 ♀ paralectotype, Vumba mountains, x.1926, Rhodesian Museum, (BM); 2 ♀ paralectotypes, Chirinda Forest, x.1926, Rhodesian Museum, (BM); 1 ♂ paralectotype (now defective), Vumba mountains, x.1926, Rhodesian Museum (ZSM); 2 ♂ 2 ♀, Vumba mountains, 20.x.1935, A. Cuthbertson, (BM & ZSM); 1 ♀ now defective, Chirinda Forest, xi.1930, Rhodesian Museum (ZSM); 1 ♂, Vumba, xi.1937, G. van Son, (NM). SOUTH AFRICA: *Transvaal*. Entabeni Forest Station, Zoutpansberge, Matiwa summit, i.1975, B. Stuckenberg, (NM). Distribution as in Fig. 188. I have also seen 5 ♂ 6 ♀ captured at Vumba Mountains (NMB) but dates and other label information are not available.

Seasonal incidence: See Table 1. Probably flies in early to midsummer.

Remarks: Engel (1929) neglected to designate a holotype and so I hereby designate one of the Vumba males housed in the BM as lectotype. The other specimens studied by Engel are all paralectotypes. Although Engel states that the types are in the BM, one male labelled 'cotype' and bearing the same collection data as the lectotype was found in the ZSM collections.

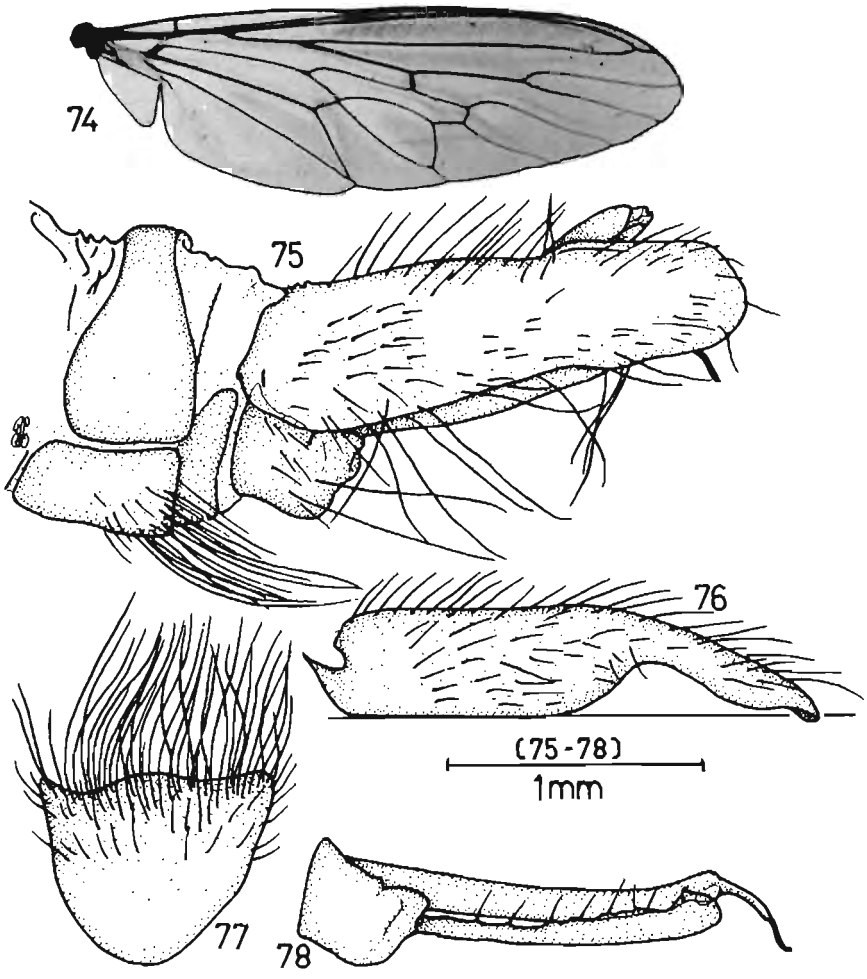
Dasophrys hysnotos sp. n. Figs 74–78, 191.

Derivation: *Hys*—Gr. hog; *notos*—Gr. back. Named after the locality of the unique holotype—Hogsback.

Description: Based on unique holotype specimen.

Head. Antennal segments one and two yellow-brown with black setae, segments 3–5 dark red-brown; relative lengths of segments—3>5>1>2>4. Mystax: black with pale yellow-brown setae on epistomal margin. Frons silver pruinose. Occipital setae: black dorsally, black and white centrally, white ventrally. Proboscis dark red-brown with white setae ventrally. Palpi dark red-brown with white setae.

Thorax. Dark brown with fine silver pruinescence. Mesepimeral setae dark red-brown. Hypopleural setae dark red-brown. Mesonotal setae: acrosticals fine black; dorsocentrals black; humerals fine black and white; presuturals 2 black; supra-alars 2 black; postalars 2 black; scutellar marginal bristles 4 black; scutellar disc setae fine silver-white; postmesonotal setae sparse fine silver-white. Wings: 7,0 mm; undilated; venation and microtrichial distribution as in Fig. 74. Legs:



Figs 74–78. *Dasophrys hysnotos* sp. n. holotype male (Hogsback). 74. Wing (7,0 mm). 75–78. Genitalia. 75. Lateral aspect. 76. Dorsal aspect of right clasper. 77. Ventral aspect of S8. 78. Lateral aspect of gonopod, stylus and aedeagus.

prothoracic coxa with silver-white setae anteriorly; metathoracic coxa lacking lateral bristles. Bristles and setae dark red-brown.

Abdomen. Dark brown with silver pruinose hind margins. Terga with fine silvery setae and longer black setae and bristles. Sterna with fine silver-white setae only. ♂ genitalia as in Figs 75–78. ♀ unknown.

Variation: Unknown.

Material examined: SOUTH AFRICA: *Cape Province*. 1 ♂ holotype, Hogsback—N. of Alice, 2–3.xi.1964, B. Stuckenberg, (NM). Distribution as in Fig. 191. Natal Museum Type No. 2366.

Seasonal incidence: See Table 1. Probably a midsummer flier.

Dasophrys irwini sp. n. Figs 79–83, 191

Derivation: Named for Dr Mike Irwin who through his collecting activities has added greatly to the Natal Museum's collection of Diptera.

Description: Based on the holotype alone.

Head. Antenna black; segments one and two with black setae; relative lengths of segments—3>5=1>2>4. Mystax: yellowish-white with black setae dorsally and along lateral margins. Frons silver pruinose. Occipital setae: black and white dorsally, white centrally and ventrally. Proboscis dark red-brown with white setae ventrally. Palpi dark red-brown with white (and a few black) setae.

Thorax. Dark red-brown to black with silver and gold pruinescence. Mesepimeral setae dark red-brown. Hypopleural setae dark red-brown with a few yellow-brown. Mesonotal setae: acrosticals short black stopping at level of suture; dorsocentrals black; humerals fine white (a few black); presuturals 2 black; supra-alars 4 black; postalars 3 black; scutellar marginal bristles 2 black; scutellar disc setae fine white; postmesonotal setae sparse fine white. Wings: 10,9 mm; undilated; venation and microtrichial distribution as in Fig. 79. Legs: prothoracic coxa with yellow-white setae anteriorly; metathoracic coxa with a lateral bristle. Leg bristles mostly black (a few yellow-brown), setae mostly shortish shiny yellow but a few long black ones.

Abdomen. Dark red-brown to black with fine silver pruinescence. Terga with all setae and bristles pale yellow. Sterna as terga. ♂ genitalia as in Figs 80–83. ♀ (tentatively assigned to this species) ovipositor length : breadth ratio *ca.* 4,0.

Variation: Unknown.

Material examined: SOUTH AFRICA: *Natal.* 1 ♂ holotype, 10 m W. Jozini, dry Forest, 880', 27.xi.1971, M. Irwin, (NM). I have also seen 1 ♀ merely labelled '3506', 'ex Coll. Tvl. Mus.', '859'; as there are no definite locality data I hesitate even to associate this female with the Jozini male but as it seems probable that this specimen may belong to this new species I list it here out of interest alone. The specimen has not been given any type status. Distribution as in Fig. 191. Natal Museum Type No. 2367.

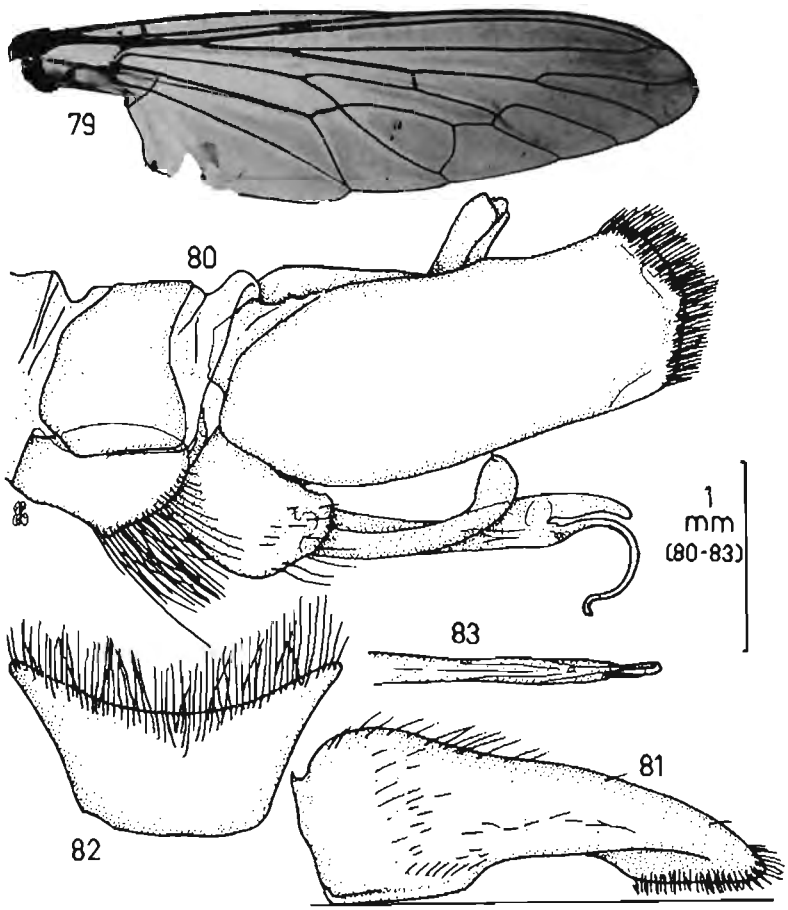
Seasonal incidence: See Table 1. Probably a midsummer flier.

Dasophrys loewi sp. n. Figs 84–89, 190

Derivation: Named in honour of Dr H. Loew in recognition of his outstanding pioneering work on Afrotropical Asilidae.

Description: Based primarily on the holotype but supplemented with information from other specimens examined.

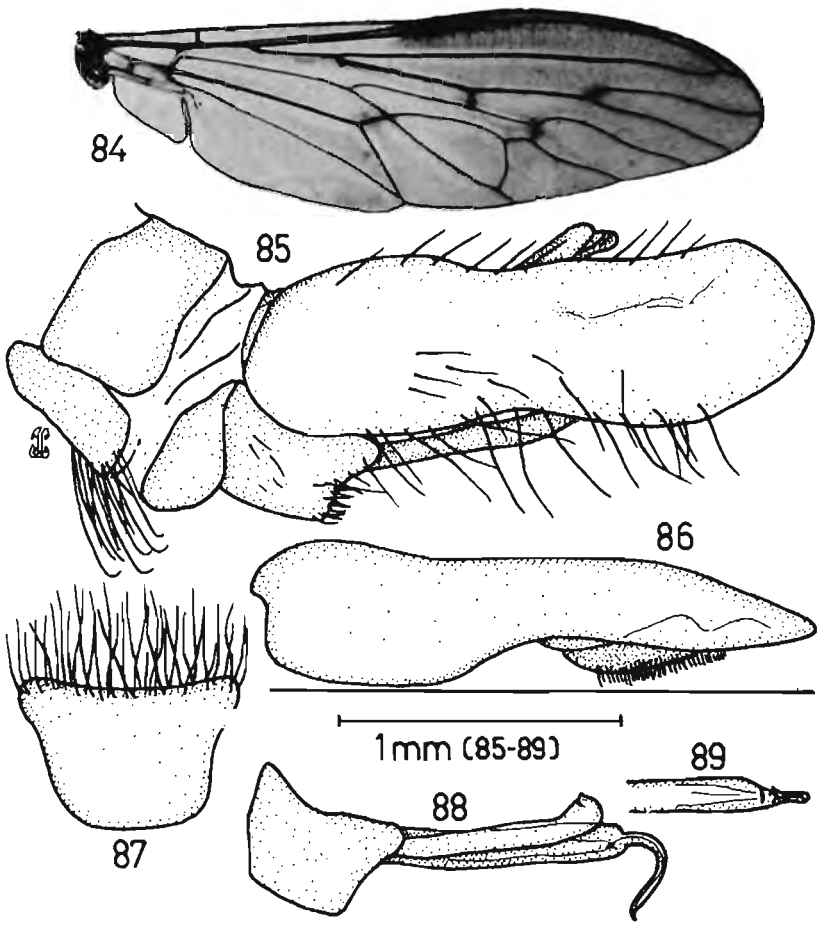
Head. Antenna black; segments one and two with black setae; relative lengths of segments—3>5>1>2>4. Mystax: black with few white setae on epistomal margin. Frons silver pruinose. Occipital setae: black dorsally (a few brown behind the black ones); black and white centrally; white ventrally. Palpi black with black and white setae.



Figs 79–83. *Dasophrys irwini* sp. n. holotype male (Jozini). 79. Wing (10,9 mm). 80–83. Genitalia. 80. Lateral aspect. 81 Dorsal aspect of right clasper. 82. Ventral aspect of S8. 83. Ventral aspect of aedeagal tip.

Thorax. Dark red-brown with silver pruinescence. Mesepimeral setae dark red-brown. Hypopleural setae dark red-brown. Mesonotal setae: acrosticals short black; dorsocentrals longer black; humerals black and white; presuturals 2 black; supra-alars 1 black; postalars 1 black; scutellar marginal bristles 2 black; scutellar disc setae white; postmesonotal setae sparse white. Wings: 7,6 mm (range 6,4–9,1 mm); slightly dilated but to be considered as undilated; venation and microtrichial distribution as in Fig. 84. Legs: prothoracic coxa with white setae anteriorly; metathoracic coxa without lateral bristles. Leg bristles dark red-brown; setae both short and long, white and dark red-brown.

Abdomen. Dark red-brown with silver pruinescence. Terga with short black setae dorsally, long shiny white setae laterally, pale-yellow bristles laterally. Sterna with long shiny white setae only. ♂ genitalia as in Figs 85–89. Ovipositor length : breadth ratio *ca*. 4,5.



Figs 84–89. *Dasophrys loewi* sp. n. (Pondoland) male. 84. Wing of paratype (7,0 mm). 85–89. Genitalia of holotype. 85. Lateral aspect. 86. Dorsal aspect of right clasper. 87. Ventral aspect of S8. 88. Lateral aspect of gonopod, stylus and aedeagus. 89. Ventral aspect of aedeagal tip.

Variation: The Pietermaritzburg material possesses somewhat darker wings and more setae on the legs. Genitalia however conform well.

Material examined: TRANSKEI: 3 ♂ holotype and paratypes, 'Pondoland', x.1917, H. Swinny, (NM); 1 ♀ paratype, Port St Johns, viii.1916, H. Swinny, (NM). SOUTH AFRICA: *Natal*. 1 ♂ 1 ♀ paratypes, Pietermaritzburg, Town Bush, 14.xi.1979, J. Londt, (NM); 2 ♀ paratypes, Hluhluwe Reserve, ex. Malaise trap, viii.1977, J. Londt, (NM); 1 ♀ paratype, Ndumu Game Reserve, 26.x.1972, M. Irwin, (NM). I have also got 1 ♀ collected in MOZAMBIQUE, Inhaca Island, 20–25.ix.1959, L. Vári, (NM), which I place in this species but as it is a little bigger and more bristly than the other specimens I hesitate to give it type status. This specimen had previously been identified as *D. paron* by Oldroyd. Distribution as in Fig. 190. Natal Museum Type No. 2369.

Seasonal incidence: See Table 1. This species may be an early summer flier.

Remarks: Oldroyd (1974) included the Transkei material under *Hobbyus minor* but made an incorrect assessment of the material. Bromley's (1947) species, *minor*, is actually a valid species of *Synolcus* (Londt, 1980) whereas the Transkei specimens clearly belong to *Dasophrys*.

Dasophrys minutus sp. n. Figs 90–94, 192

Derivation: *Minutus*—L. small. Refers to the size of this species.

Description: Based on the unique holotype.

Head. Antenna black; segments one and two with white setae; relative lengths of segments—3>5=1>2>4. Mystax: black with white setae dorsally. Frons silver pruinose. Occipital setae; black and white dorsally, white centrally and ventrally. Proboscis dark red-brown with white setae ventrally. Palpi dark red-brown with white setae.

Thorax. Blackish with silver pruinescence. Mesepimeral setae white. Hypopleural setae white. Mesonotal setae: acrosticals longish black; dorsocentrals long black; humerals fine white; presuturals 2 pale yellow; supra-alars 1 black; postalars 1 black; scutellar marginal bristles 6 black; scutellar disc setae shiny black and white; postmesonotal setae fairly numerous black. Wings: 4,2 mm; undilated; venation and microtrichial distribution as in Fig. 90. Legs: prothoracic coxa with white setae anteriorly; metathoracic coxa without lateral bristles. Leg bristles black and white; setae black and white.

Abdomen. Dark red-brown to black with silver pruinose hind margins and postero-lateral corners of terga. Terga with short black setae dorsally and long pale yellow bristles and setae laterally. Sterna with few longish white setae. ♂ genitalia as in Figs 91–94. ♀ unknown.

Variation: Unknown.

Material examined: SOUTH AFRICA: *Cape Province.* 1 ♂ holotype, Pakhuis Pass, Clanwilliam district, 950 m, 17–19.x.1964, B. Stuckenberg, (NM). Distribution as in Fig. 192. Natal Museum Type No. 2369.

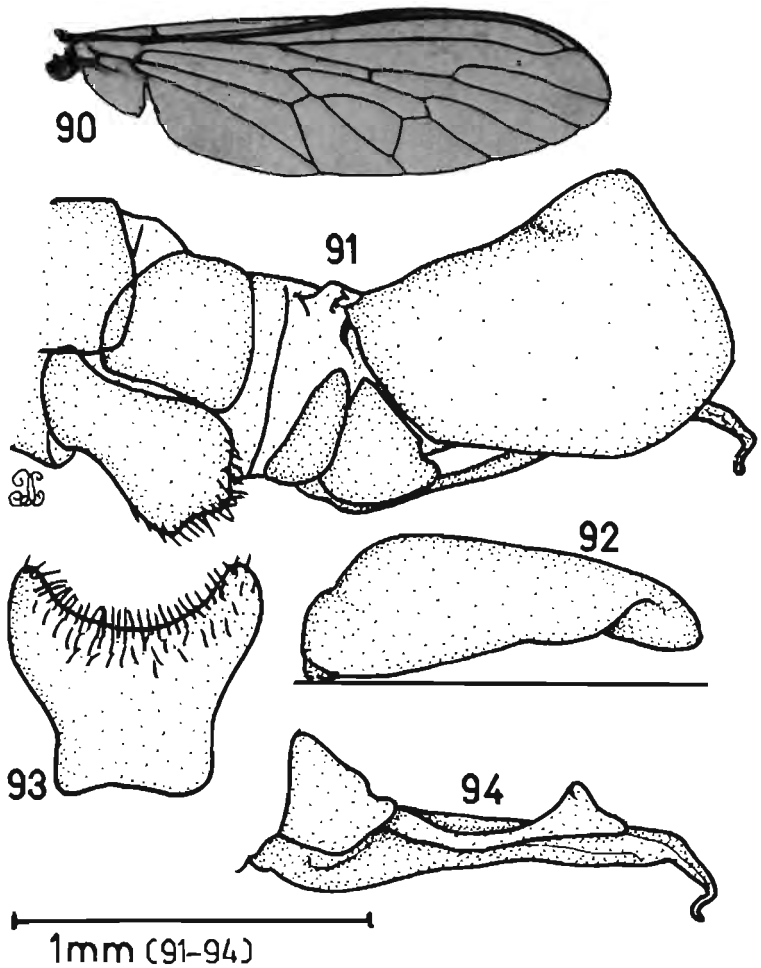
Seasonal incidence: See Table 1. Possibly an early summer flier.

Dasophrys montanus sp. n. Figs 95–100, 191

Derivation: *Montanus*—L. mountain. Refers to the fact that this species was taken in montane areas.

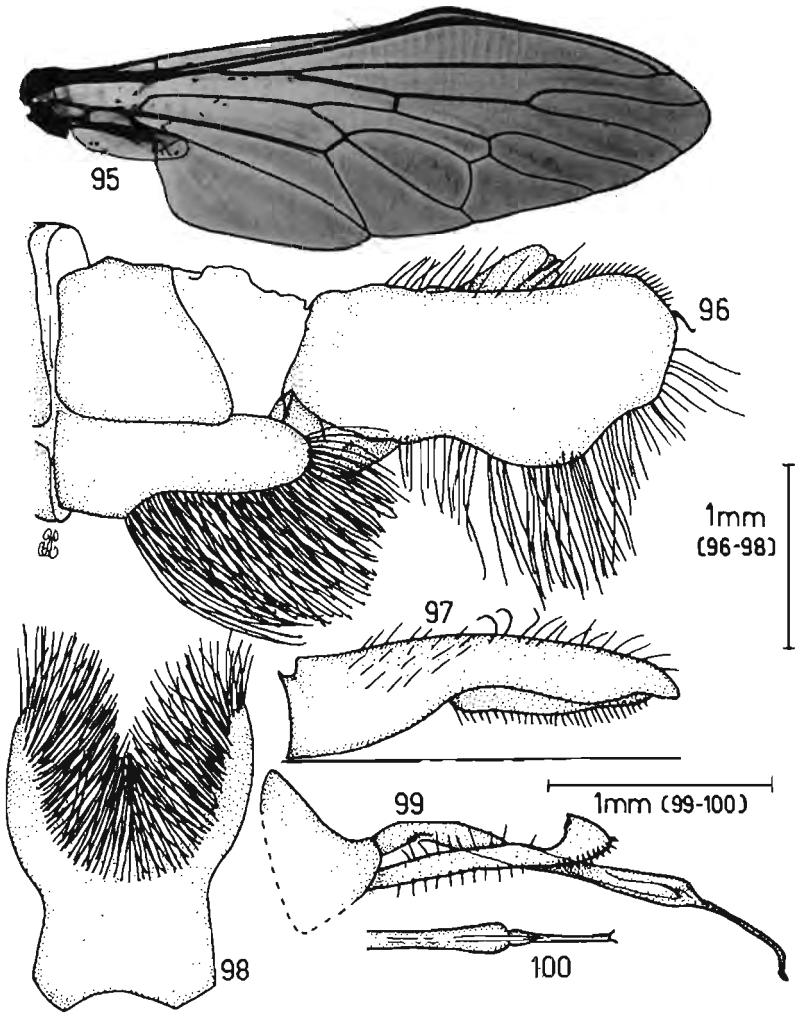
Description: Based on the holotype but supplemented with information from other specimens examined.

Head. Antenna dark red-brown to black; segments one and two mainly with white setae (a few black ones may be present); relative lengths of segments—3>5>1>2>4. Mystax: yellow-white with a few black setae just below antennal bases. Frons silver pruinose. Occipital setae: all white (may be a few black ones in dorsal region in some specimens). Proboscis dark red-brown with pale yellow setae ventrally. Palpi dark red-brown with pale yellow setae.



Figs 90–94. *Dasophrys minutus* sp. n. holotype male (Pakhuis Pass). 90. Wing (4,2 mm). 91–94. Genitalia. 91. Lateral aspect. 92. Dorsal aspect of right clasper. 93. Ventral aspect of S8. 94. Lateral aspect of gonopod, stylus and aedeagus.

Thorax. Dark red-brown with gold and silver pruinescence. Mesepimeral setae pale yellow. Hypopleural setae pale yellow. Mesonotal setae: acrosticals short black; dorsocentrals longer black; humerals pale yellow; presuturals 2 pale yellow; supra-alars 3 black or pale yellow; postalars 3 pale yellow (one may be black); scutellar marginal bristles 4 black (one or two may be pale yellow); scutellar disc setae fine white; postmesonotal setae sparse fine white. Wings: 8,3 mm (range 6,6–10,3 mm); dilated (see variation); venation and microtrichial distribution as in Fig. 95. Legs: prothoracic coxa with pale yellow setae anteriorly; metathoracic coxa with one well-developed lateral bristle. Leg bristles mostly pale yellow but a few dark red-brown; setae pale yellow and dark red-brown.



Figs 95–100. *Dasophrys montanus* sp. n. male. 95. Wing of paratype (Naudésnek: 9,1 mm). 96–100. Genitalia of paratype (Rhodes). 96. Lateral aspect. 97. Dorsal aspect of right clasper. 98. Ventral aspect of S8. 99. Lateral aspect of gonopod, stylus and aedeagus (bent downwards for illustration). 100. Ventral aspect of aedeagal tip.

Abdomen. Dark red-brown with silver pruinescence. Terga with setae and bristles pale yellow. Sterna with setae long pale yellow. ♂ genitalia as in Figs 96–100. Ovipositor length : breadth ratio *ca*. 4,0.

Variation: Little variation is evident. The males collected near Rhodes have wings which are somewhat less dilated than those of the males from Naudésnek summit. The reason for this variation is not known. The genitalia agree in all respects and so there is little doubt that all the specimens belong to the same species.

Material examined: SOUTH AFRICA: *Cape Province*. 7 ♂ holotype and paratypes 11 ♀ paratypes, Naudésnek summit, 15 km E. Rhodes, grassland,

8–9.i.1979, J. Londt & B. Stuckenberg, (NM); 2 ♂ 5 ♀ paratypes, Rhodes area, grassveld, 9–10.i.1979, J. Londt & B. Stuckenberg, (NM).

Distribution as in Fig. 191. Natal Museum Type No. 2370.

Seasonal incidence: See Table 1. Probably a midsummer flier.

Dasophrys nanus sp. n. Figs 101–106, 191

Derivation: *Nanus*—L. dwarf. Refers to the very small size of this species.

Description: Based on holotype, but supplemented with information from other specimens examined.

Head. Antenna black; segments one and two with black setae; relative lengths of segments—3>1>5>2>4. Mystax: black with a few yellow-white setae on epistomal margin. Frons silver pruinose. Occipital setae: black dorsally (with white setae behind), white centrally and ventrally. Proboscis black with white setae ventrally. Palpi black with white setae.

Thorax. Black with a reddish sheen, silver and gold pruinose. Mesepimeral setae yellowish. Hypopleural setae black (one or two white ones may be present). Mesonotal setae: acrosticals long black; dorsocentrals long black; humerals fine black and white; presuturals 2 black; supra-alars 1 black; postalars 1 black; scutellar marginal bristles 2–4 black; scutellar disc setae pale yellow; postmesonotal setae sparse pale yellow. Wings: 3,8 mm (range 3,8–5,2 mm); undilated; venation and microtrichial distribution as in Fig. 101. Legs: prothoracic coxa with white setae anteriorly; metathoracic coxa with a poorly developed bristle laterally. Leg bristles black and pale yellow; setae mostly white but a few black.

Abdomen. Dark red-brown with silver pruinescence. Terga with few tiny black setae dorsally; more yellow and white setae and bristles laterally. Sterna with long white and pale yellow setae only. ♂ genitalia as in Figs 102–106. Ovipositor length : breadth ratio *ca.* 3,8.

Variation: Minimal. Females tend to be a little larger than males.

Material examined: SOUTH AFRICA: *Cape Province.* 2 ♂ 4 ♀ holotype and paratypes, Silver Sands, 2 km W. Betty's Bay, dune macchia, 23.ix.1979, J. Londt, (NM); 1 ♀ paratype, Kleinmond, swept from vegetation on banks of river, 23.ix.1979, J. Londt, (NM); 1 ♂ paratype, Ysterfontein, 9.60 (? ix.1960), South African Museum, (SAM).

Distribution as in Fig. 191. Natal Museum Type No. 2371.

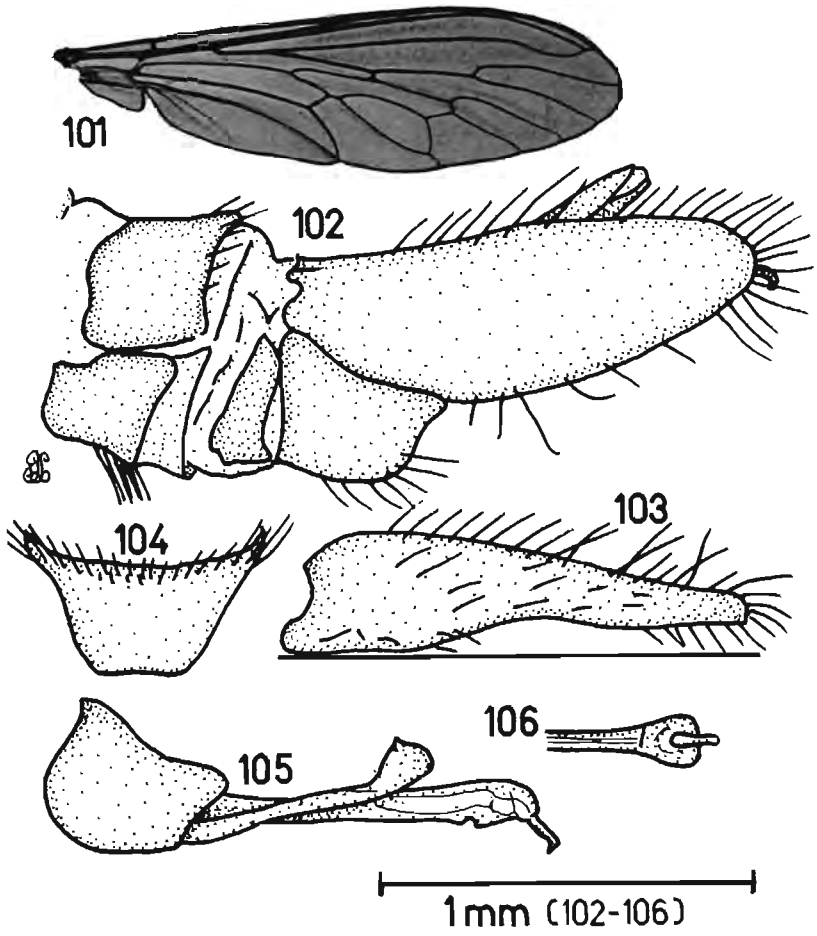
Seasonal incidence: See Table 1. Possibly a spring flier.

Dasophrys natalensis (Ricardo, 1920) Figs 107–112, 192

Neodasophrys natalensis Ricardo, 1920: 440–442, Hull, 1962: 529.
Dasophrys (Neodasophrys) natalensis; Engel, 1927: 141.
Dasophrys natalensis; Oldroyd, 1974: 152; Oldroyd, 1980: 337.

Redescription: Based on lectotype but supplemented with information from other specimens examined.

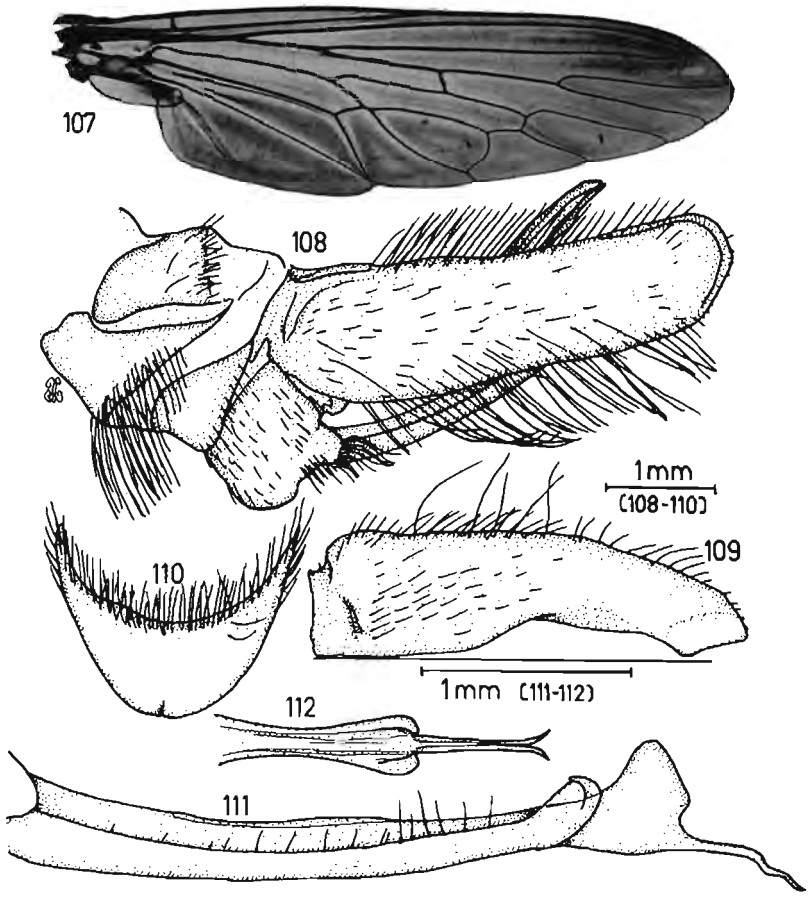
Head. Antenna dark red-brown; segments one and two with black setae; relative lengths of segments—3>5>1>2>4. Mystax: black with pale yellow setae on



Figs 101–106. *Dasophrys nanus* sp. n. (Betty's Bay) male. 101. Wing of paratype (4,3 mm). 102–106. Genitalia of holotype. 102. Lateral aspect. 103. Dorsal aspect of right clasper. 104. Ventral aspect of S8. 105. Lateral aspect of gonopod, stylus and aedeagus. 106. Ventral aspect of aedeagal tip.

epistomal margin. Frons gold-silver pruinose. Occipital setae: black dorsally (may be a few yellow), black and yellow centrally, yellow-white ventrally. Proboscis dark red-brown with pale yellow setae ventrally. Palpi dark red-brown with black and pale yellow setae.

Thorax. Dark red-brown with gold and silver pruinescence. Mesepimeral setae black; Hypopleural setae black and yellow. Mesonotal setae: acrosticals small black; dorsocentrals black; humerals fine black and yellow; presuturals 2 black; supra-alars 3–4 black; postalars 3 black; scutellar marginal bristles 4–8 black; scutellar disc setae fine shiny black; postmesonotal setae fine black. Wings: 12,3–14,3 mm; undilated; venation and microtrichial distribution as in Fig. 107. Legs: prothoracic coxa with pale yellow setae anteriorly; metathoracic coxa lacking lateral bristles. Leg bristles black; setae long black and yellow.



Figs 107–112. *Dasophrys natalensis* (Ricardo) male. 107. Wing (Pietermaritzburg: 14,0 mm). 108–112. Genitalia of lectotype, (Karkloof). 108. Lateral aspect. 109. Dorsal aspect of right clasper. 110. Ventral aspect of S8. 111. Lateral aspect of stylus and aedeagus. 112. Ventral aspect of aedeagal tip.

Abdomen. Black with much gold pruinescence, seventh segment and terminalia shiny black and without pruinescence. Terga with long shiny yellow setae only. Sterna as terga. ♂ genitalia as in Figs 108–112. Ovipositor length : breadth ratio *ca*. 5,0.

Variation: Remarkably little.

Material examined: SOUTH AFRICA: *Natal*. 1 ♂ lectotype 2 ♀ paralectotypes, Karkloof, ii.1897, G. Marshall, (BM); 1 ♂, Nkandla Forest, 20′ above ground in tree, 9.iv.1979 P. Reavell, (NM); 2 ♂ 1 ♀, Pietermaritzburg, Town Bush, 7.xii.1979 & 27.iii.1980, J. Londt, (NM); 2 ♂ 2 ♀, Balgowan, forest margin, 21.iii.1980, J. Londt. (NM). Distribution as in Fig. 192.

Seasonal incidence: See Table 1. Probably flies from mid to late summer.

Prey records: A female collected at Town Bush was caught feeding on a large species of Nemestrinidae (Diptera).

Remarks: This, the largest of all *Dasophrys* species, is found in forest patches in Natal. It is not uncommon at localities where I have collected it but is notoriously difficult to catch. The species lives in the tree canopy or along the margins of forests and appears to like sunny spots where it can bask amongst twigs and branches. Patrick Reavell collected a specimen at least 20 feet (*ca.* 6 metres) above the ground by means of a long-handled net especially designed to catch canopy-dwelling butterflies.

Dasophrys nigricans (Wiedemann, 1821) Figs 113–118, 192

Asilus nigricans Wiedemann, 1821: 195.
Dasophrys nigricans; Schiner, 1866: 685; Engel, 1927: 142; Hull, 1962: 528; Oldroyd, 1980: 337.

Redescription: Based on both lectotype and paralectotype females and a male from Somerset West which I regard as representing the male of this species.

Head. Antenna blackish; segments one and two with black setae; relative lengths of segments—3>1>5>2>4. Mystax: black. Occipital setae: black and white dorsally and centrally, white ventrally. Proboscis dark red-brown with white setae ventrally. Palpi dark red-brown with white setae.

Thorax. Dark red-brown to black with silver pruinescence. Mesepimeral setae black. Hypopleural setae black. Mesonotal setae: acrosticals long fine black; dorsocentrals long fine black; humerals fine black and white; presuturals 2 black; supra-alars 1 black; postalars 3 black; scutellar marginal bristles 8 black; scutellar disc setae fine yellow-white; postmesonotal setae black. Wings: 6,4 mm (range 5,5–7,6 mm); male wing dilated; venation and microtrichial distribution as in Fig. 113. Legs: prothoracic coxa with black and white setae anteriorly; metathoracic coxa without lateral bristles. Leg bristles black; setae black.

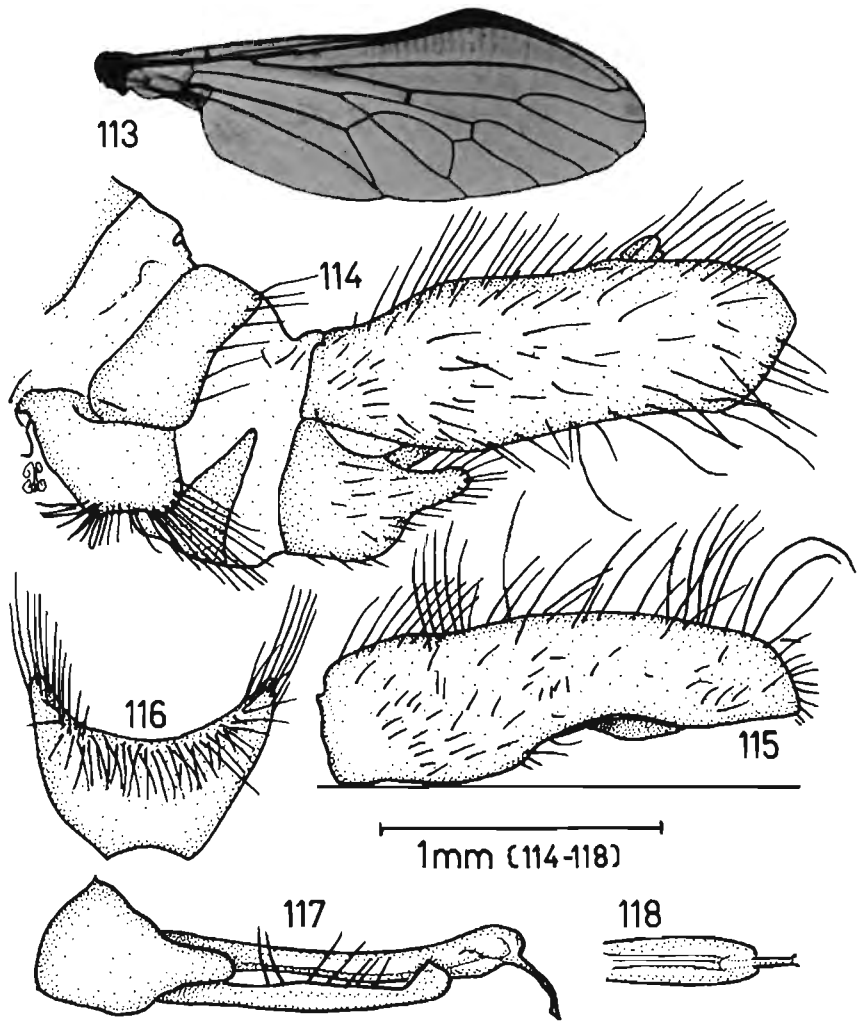
Abdomen. Dark red-brown to black with silver pruinescence. Terga with long yellow and black setae. Sterna as terga. ♂ genitalia as in Figs 114–118. Ovipositor length:breadth ratio *ca.* 3,6.

Variation: Minimal but largely unknown.

Material examined: SOUTH AFRICA: *Cape Province.* 1 ♀ lectotype, 'Cap', Coll. Winthem, (NMW); 1 ♀ paralectotype, 'Capland Mund S.', 2139, (ZMB); 1 ♂, Somerset West, 7.vii.1944, (NM); 1 ♀ (now defective), Cape Town, Driehoek, ix.1922, Brauns, (NM). Distribution as in Fig. 192.

Seasonal incidence: See Table 1. Is possibly a spring flier.

Remarks: Oldroyd (1974) followed Engel (1927) in placing *nigricans* together with *natalensis* in his key (which was derived partly from that of Engel). Oldroyd had not seen *nigricans* and Engel had not seen *natalensis*. These two species are quite distinct. Although Oldroyd (1974) placed *nigricans* tentatively as a synonym of *natalensis*, he retained it as a valid species in the Afrotropical Diptera Catalogue (1980). The type locality is still a matter for debate. Wiedemann (1821) states 'Prom. bon. sp.' indicating the Cape Peninsula as type locality but the specimens available to me, which are apparently cotypes or syntypes are merely labelled 'Cap' and 'Capland' respectively. As I have one damaged specimen, which is probably *nigricans*, from Cape Town I here restrict the type locality to



Figs 113–118. *Dasophrys nigricans* (Wiedemann) (Somerset West) male. 113. Wing (5,5 mm). 114–118. Genitalia. 114. Lateral aspect. 115. Dorsal aspect of right clasper. 116. Ventral aspect of S8. 117. Lateral aspect of gonopod, stylus and aedeagus. 118. Ventral aspect of aedeagal tip.

Cape Town. I hereby designate the female in the NMW as lectotype and the other female (ZMB) as paralectotype. As far as I am aware no other syntypes exist.

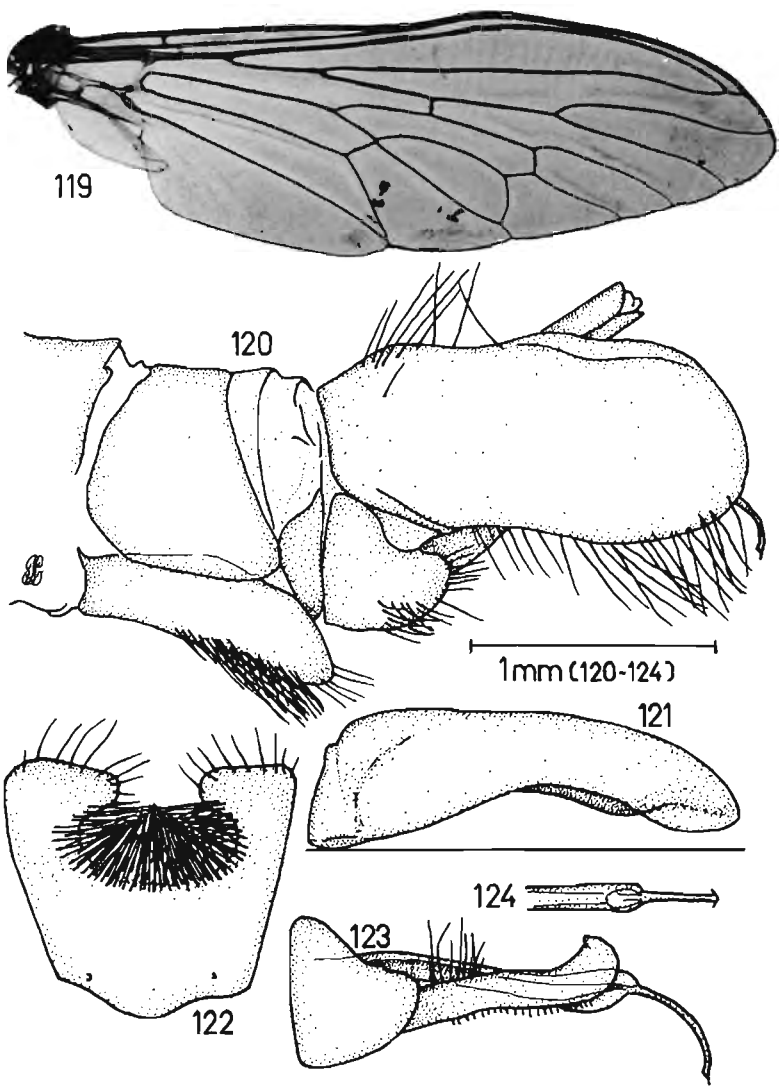
Dasophrys nigroflavipes (Hobby, 1933) **comb. n.** Figs 119–124, 189

Merogymnus nigroflavipes Hobby, 1933: 112; Bromley, 1947: 115.
Hobbyus nigroflavipes; Bromley, 1952: 21; Hull, 1962: 527; Oldroyd, 1974: 158–159; Oldroyd, 1980: 338.

Redescription: Based on holotype female, allotype male and supplemented with information taken from other material examined.

Head. Antenna black; segments one and two with black setae; relative lengths of segments—3>5>1>2>4. Mystax: yellow with black setae in upper half. Frons gold pruinose. Occipital setae: yellow dorsally (a few small black ones interspersed), yellow centrally, yellow-white ventrally. Proboscis dark red-brown with yellow setae ventrally. Palpi dark red-brown with yellow setae.

Thorax. Dark red-brown with gold pruinescence. Mesepimeral setae yellow. Hypopleural setae yellow. Mesonotal setae: acrosticals tiny black; dorsocentrals black; humerals fine yellow; presuturals 2 (1 black anterior, 1 yellow posterior);



Figs 119–124. *Dasophrys nigroflavipes* (Hobby) male. 119. Wing (Ingwavuma: 8,5 mm). 120–124. Genitalia of allotype (Mt. Chirinda). 120. Lateral aspect. 121. Dorsal aspect of right clasper. 122. Ventral aspect of S8. 123. Lateral aspect of gonopod, stylus and aedeagus. 124. Ventral aspect of aedeagal tip.

supra-alars 5 yellow; postalars 3 yellow; scutellar marginal bristles 2–4 yellow; scutellar disc setae short yellow; postmesonotal setae sparse short yellow. Wings: 9,9 mm (5,7–9,9 mm); slightly dilated and considered as being dilated; venation and microtrichial distribution as in Fig. 119. Legs: prothoracic coxa with yellow-white setae anteriorly; metathoracic coxa with yellow lateral bristle. Leg bristles black and yellow-brown; setae yellow.

Abdomen. Dark red-brown with gold pruinescence. Terga with yellow bristles and setae. Sterna with yellow setae only. ♂ genitalia as in Figs 120–124. Ovipositor length : breadth ratio *ca*. 2,1.

Variation: There is some variation in size and in mesonotal bristle coloration. Genitalia display only slight variation.

Material examined: ZIMBABWE. 1 ♂ allotype 1 ♀ holotype, Mt Chirinda, Gazaland, 25.ii.1912 (♂) 22.ii.1912 (♀), Swynnerton, (HMO); 1 ♂ 1 ♀, Selukwe, 1915, A. Ellenberger, (MNP). SOUTH AFRICA: *Transvaal*. 1 ♀, Rosslyn (Pretoria), xi.1921, A. Roberts, (NM); 1 ♀, Johannesburg, 7.xii.1942, E. Anderson (SAM); 1 ♀, Pretoria, 25.xii.1912, H. Munro (BM). *Natal*. 1 ♂ 2 ♀, 14 km SE. Ingwavuma, 21.ii.1979, J. Londt, (NM); 1 ♂ Ingwavuma, grassy area with bushes, 21.ii.1979, J. Londt, (NM); 2 ♂ 1 ♀, Ingwavuma, 10.xii.1963, B. Stuckenberg, (NM); 1 ♀, 20 m S. Ndumu Game Reserve Camp, dry scrub forest, 320′, 29.xi.1971, M. Irwin, (NM); 2 ♂ 1 ♀, Estcourt, 11/96 (? xi.1896), (NM); 1 ♀, Karkloof range, Geekie's farm, 1500′, 4.i.1962, B. Stuckenberg, (NM); 4 ♂ 3 ♀, Ashburton, 15 m SE. Pietermaritzburg, grassland, xii.1978, J. Londt, (NM); 1 ♂, Pietermaritzburg, 11.viii.1952, R. Impey, (NM); 2 ♂ 1 ♀, Pateni, Richmond district, temp. forest, 18.xi.1971, Stuckenberg & Irwin, (NM); 1 ♂, Pietermaritzburg, Otto's Bluff, 28.xi.1979, grassland, J. Londt, (NM); 1 ♀, Coedmore, Durban, 22.xi.1953, L. Bevis, (DMAG); 4 ♂ 4 ♀, Cathedral Peak area, grassland, 16–18.xii.1977, J. Londt, (NM); 2 ♀, Cathedral Peak Forest Reserve, Little Berg summits, *Themeda* grassland, 5500–6000′, iii.1959, B. Stuckenberg, (NM); 1 ♂ 1 ♀, Loteni Nature Reserve, 6.iv.1972, M. Irwin, (NM); 1 ♀, Estcourt, xii.1896, (BM); 1 ♀, Estcourt, i.1897, G. Marshall (BM); 1 ♀, Frere, 8.xi.1913, D. Dibben (BM). *Cape Province*. 1 ♂, Kimberley, xi.1896, (BM). TRANSKEI. 4 ♂ 2 ♀, Pitseng Pass, Banks of Luzi River, open grassland, 11.i.1979, J. Londt & B. Stuckenberg, (NM); 1 ♂ Naudésnek summit, 8–9.i.1979, J. Londt & B. Stuckenberg (NM). Distribution as in Fig. 189.

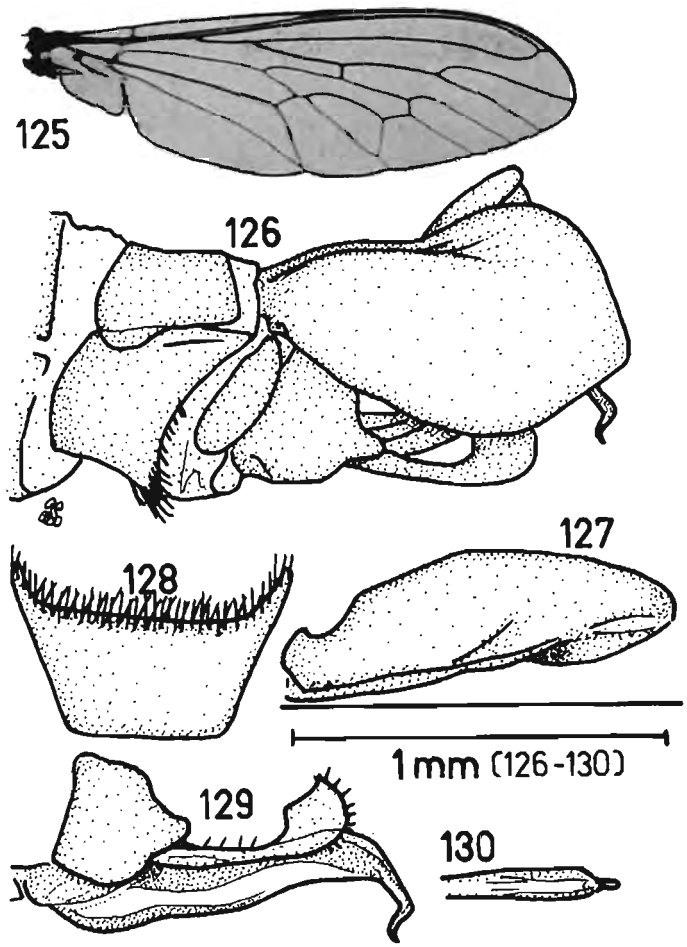
Seasonal incidence: See Table 1. Apparently flies throughout summer.

Remarks: This is the type species of Bromley's genus *Hobbyus*. As this genus is no longer recognised as distinct from *Dasophrys*, *nigroflavipes* becomes a valid species of *Dasophrys*. The species is apparently confined to grassveld habitats.

Dasophrys nigroseta sp. n. Figs 125–130, 192

Derivation: *Nigro*—L. to be black; *seta*—L. hair. Refers to the black setae found on the anterior surfaces of the forecoxae.

Description: Based on the holotype but supplemented with information from other specimens examined.



Figs 125–130. *Dasophrys nigroseta* sp. n. (Franschhoek) male. 125. Wing of paratype (4,0 mm). 126–130. Genitalia of holotype. 126. Lateral aspect. 127. Dorsal aspect of right clasper. 128. Ventral aspect of S8. 129. Lateral aspect of gonopod, stylus and aedeagus. 130. Ventral aspect of aedeagal tip.

Head. Antenna black; segments one and two with white setae; relative lengths of segments—3>1>5>2>4. Mystax: black with a few white setae just below antennal bases. Frons fine silver pruinose. Occipital setae: black and white dorsally, white centrally and ventrally. Proboscis black with black setae ventrally. Palpi black with black setae.

Thorax. Black with silver pruinescence. Mesepimeral setae yellow. Hypopleural setae yellow. Mesonotal setae: acrosticals short black; dorsocentrals black; humerals fine white; presuturals 2 yellow-brown; supra-alars 1 black; postalars 1 black; scutellar marginal bristles 4 black; scutellar disc setae white; post-mesonotal setae fine black. Wings: 4,7 mm (range 4,0–5,0 mm); undilated; venation and microtrichial distribution as in Fig. 125. Legs: prothoracic coxa with black setae anteriorly; metathoracic coxa without lateral bristles. Leg bristles

black and pale yellow; setae black and pale yellow; mid-tibia possesses a large well-developed black bristle ventrally.

Abdomen. Dark red-brown to black with silver pruinescence. Terga with short white setae and longer pale yellow setae laterally. Sterna with white and pale yellow setae. ♂ genitalia as in Figs 126–130. Ovipositor length:breadth ratio *ca*. 2,4.

Variation: Minimal.

Material examined: SOUTH AFRICA: *Cape Province*. 2 ♂ holotype and paratype, Franschhoek Pass, 7–8.x.1959, B. Stuckenberg, (NM); 2 ♂ 1 ♀ paratypes, Bainskloof, Wellington District, *c*. 2000', 4–5.x.1959, B. Stuckenberg, (NM). Distribution as in Fig. 192.

Seasonal incidence: See Table 1. Possibly a spring flier.

Dasophrys oldroydi sp. n. Figs 131–136, 188

Derivation: Named in honour of Mr Harold Oldroyd who has contributed so meaningfully to the study of Afrotropical Asilidae.

Description: Based on the holotype but supplemented with information from other specimens examined.

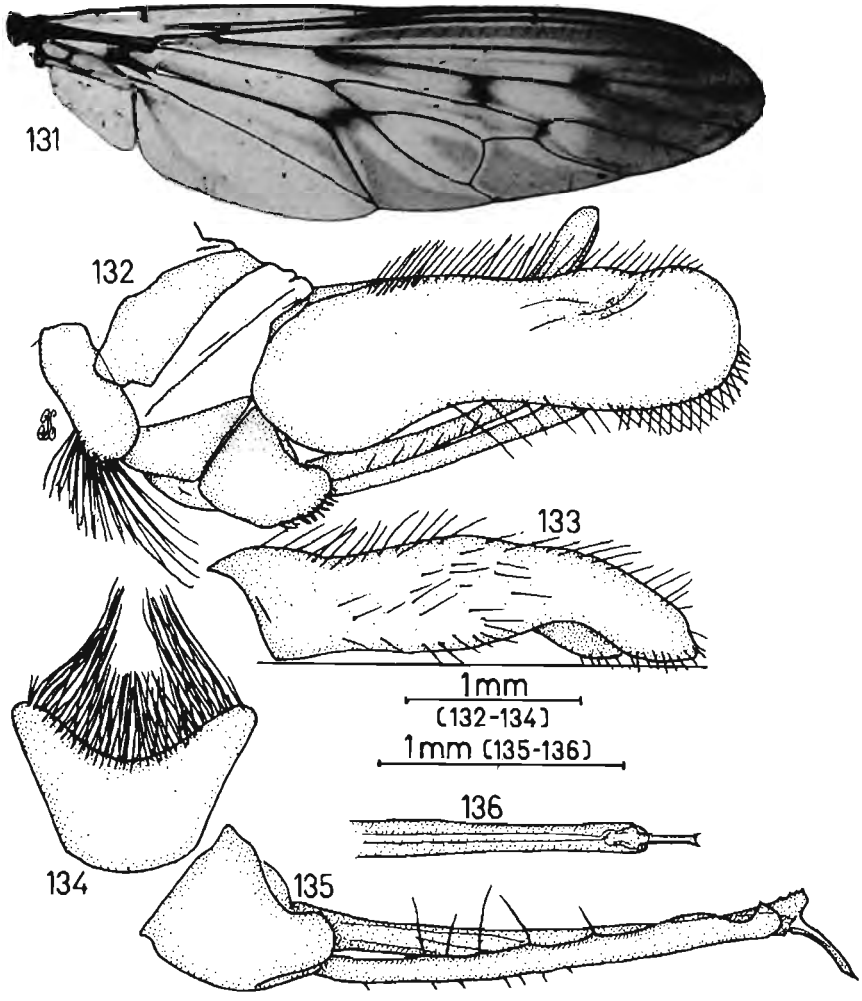
Head. Antenna black; segments one and two with black setae; relative lengths of segments—3>5>1>2>4. Mystax: black (may have one or two white setae). Frons silver-gold pruinose. Occipital setae: black dorsally (with orange-brown behind), black and white centrally, white ventrally. Proboscis black with shiny orange-brown and white setae ventrally. Palpi black with black setae.

Thorax. Dark red-brown to black with gold pruinescence. Mesepimeral setae orange-brown. Hypopleural setae orange-brown. Mesonotal setae: acrosticals short black; dorsocentrals black; humerals fine white and orange-brown; presuturals 2 orange-brown; supra-alars 1 orange-brown; postalars 2–3 orange-brown; scutellar marginal bristles 4–7 orange-brown (a few may be dark red-brown); scutellar disc setae shiny orange-brown; postmesonotal setae white. Wings: 8,6 mm (range 7,7–10,1 mm); undilated; venation and microtrichial distribution as in Fig. 131. Legs: prothoracic coxa with white and orange-brown setae anteriorly; metathoracic coxa without lateral bristles. Leg bristles dark red-brown and orange-brown; setae long orange-brown and short black.

Abdomen. Dark red-brown to black with silver pruinose hind margins and postero-lateral corners of terga. Terga with long orange-yellow setae and bristles (there are a few white setae). Sterna as terga. ♂ genitalia as in Figs 132–136. ♀ unknown.

Variation: Setal coloration varies somewhat. Some specimens have more white setae in the mystax.

Material examined: SOUTH AFRICA: *Transvaal*. 1 ♂ holotype, De Hoek Forestry (reserve), 17–18.ix.1960, Van Son & Vári, (NM); 2 ♂ paratype, Marieps Mountain, iv.1932, G. van Son (NM). *Natal*. 1 ♂ paratype, Karkloof, Geekie's farm, 1500 m, 14.iii.1962, B. Stuckenberg, (NM). Distribution as in Fig. 188. Natal Museum Type No. 2373.



Figs 131–136. *Dasophrys oldroydi* sp. n. holotype male (De Hoek). 131. Wing (8,6 mm). 132–136. Genitalia. 132. Lateral aspect. 133. Dorsal aspect of right clasper. 134. Ventral aspect of S8. 135. Lateral aspect of gonopod, stylus and aedeagus. 136. Ventral aspect of aedeagal tip.

Seasonal incidence: See Table 1. Collected in autumn and spring.

Remarks: Oldroyd labelled the holotype '*Dasophrys (Neodasophrys) ?* sp. n.' and my study supports his suggestion.

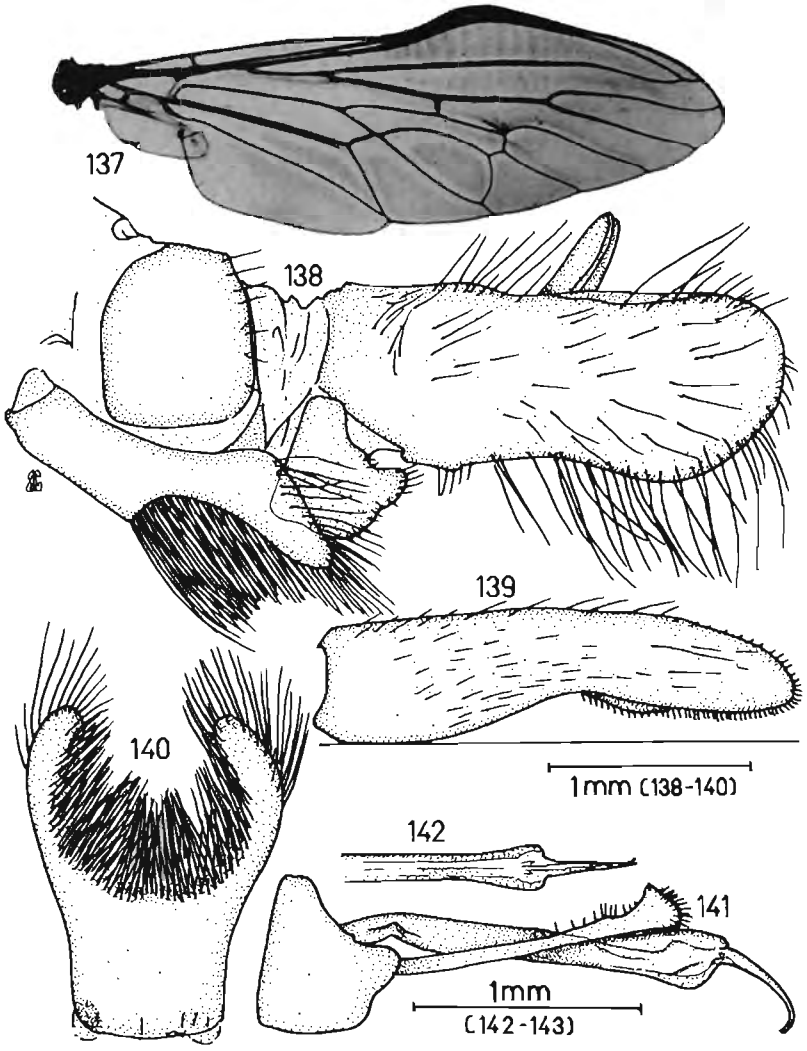
Dasophrys geniculatus (Macquart, 1838) Figs 137–150, 188

Lophonotus geniculatus Macquart, 1838: 129.
Asilus paron Walker, 1849: 450. **Syn. n.**
Dasophrys longibarbis Loew, 1857: 366, Loew, 1860: 166–167.
Dasophrys personatus Schiner, 1868: 186, Engel, 1927: 141–142; Hull, 1962: 528; Oldroyd, 1974: 152; Oldroyd, 1980: **Syn. n.**
Dasophrys paron; Ricardo 1920: 444; Engel, 1927: 142; Engel, 1929: 156; Hull, 1962: 528; Oldroyd, 1974: 152; Oldroyd, 1980: 337.
Neolophonotus geniculatus; Oldroyd, 1980: 340.

Redescription: Based on information taken from all specimens examined. The holotype is in a relatively poor state of preservation.

Head. Antenna dark red-brown to black; segments one and two with black setae; relative lengths of segments—3=5>1>2>4. Mystax: black setae in upper half white in lower. Frons silver pruinose. Occipital setae: black dorsally, black and white centrally, white ventrally. Proboscis dark red-brown with black and white setae ventrally. Palpi dark red-brown to black with black and white setae.

Thorax. Blackish with silver-gold pruinescence. Mesepimeral setae black. Hypopleural setae black. Mesonotal setae: acrosticals tiny black; dorsocentrals black



Figs 137–142. *Dasophrys geniculatus* (Macquart) male. 137. Wing (Schoenmakerskop: 8,0 mm). 138–143. Genitalia of holotype of *D. paron* (Walker) (syn. n.). 138. Lateral aspect. 139. Dorsal aspect of right clasper. 140. Ventral aspect of S8. 141. Lateral aspect of gonopod, stylus and aedeagus. 142. Ventral aspect of aedeagal tip.

and fairly well developed; humerals fine black and white; presuturals 3 black; supra-alars 3–4 black; postalars 2 black; scutellar marginal bristles 5–7 black; scutellar disc setae fine white; postmesonotal setae fine sparse white. Wings: Length range 7,9–10,2 mm; dilated; venation and microtrichial distribution as in Fig. 137. Legs: prothoracic coxa with white setae anteriorly, metathoracic coxa with lateral bristle. Leg bristles black; setae thin fairly short black and white.

Abdomen. Dark red-brown to black with gold pruinescence. Terga with yellow setae, short dorsally long laterally. Sterna with long yellow setae only. ♂ genitalia as in Figs 138–142. Ovipositor length : breadth ratio *ca.* 5,5.

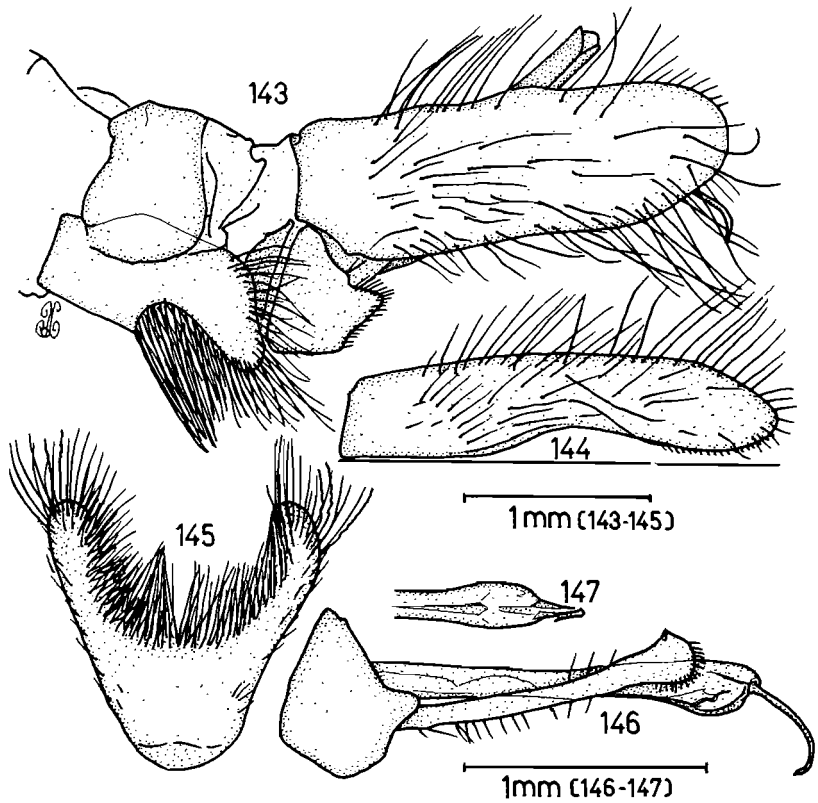
Variation: There is some size and setal coloration variation. A degree of variation is also seen in male genitalic structure as illustrated (Figs 148–150).

Material examined: SOUTH AFRICA: 1 ♂—holotype of *paron*, 'S. Africa', 44.6, Dr A. Smith, (BM). *Cape Province.* 1 ♀ holotype, Cap de Bonne Esperance, Delalande, 1820, (NMP—No. 837); 1 ♂—holotype of *personatus*, 'Cap', (NMW); 3 ♂ 5 ♀, Schoenmakerskop, near Port Elizabeth, 9.i.1978, J. Londt, (NM); 1 ♂ 1 ♀, Grahamstown, iii.1971, J. Londt, (NM); 1 ♂, Grahamstown, x.1953, C. Cottrell, (KMT); 1 ♂, Addo District, Sundays River Valley, 1–8.i.1978, J. Londt, ex. Malaise, (NM); 1 ♂, Wetton, xi.1956, M. Walters, (NM); 2 ♂, Cape Peninsula, 25.x.1925, Brauns, (NM & ZSM); 1 ♀, Willowmore, 10.ii.1906, Brauns, (NM); 1 ♂, Algoa Bay, Capland (ie. Port Elizabeth), 10.xii.1897, Brauns, (ZSM); 2 ♂, Willowmore, Brauns, (NM); 3 ♂ 2 ♀, Van Stadens River mouth, dunes and hillside above lagoon, 1.i.1980, J. Londt (NM). *Natal.* 1 ♂, Mkuze, 20.ix.1972, I. Bampton, (NM); 1 ♀, Ndumu, 19.ix.1972, I. Bampton, (NM); 1 ♂, 10 m N. Jozini, dry forest, 28.xi.1971, M. Irwin, (NM); 5 ♂ 4 ♀, Mkuze Reserve, 300 m, 3–11.x.1977, J. Londt, (NM); 2 ♀, 'Zululand', 1957, L. Du Toit, (NM); 1 ♂ 3 ♀, Junction of Blaauw Krantz & Tugela Rivers, x.1896, G. Marshall, (BM). *Transvaal.* 1 ♂, Rustenberg, xii.1952, A. Capener, (NM); 1 ♂, Blyde River Canyon, 22–27.xi.1975, J. Londt, (NM); 1 ♂, Noordkaap River at Barberton–Nelspruit road, 7.xi.1970, riverbank bushveld, B. Stuckenberg, (NM); 1 ♂ Gladdespruit River, near asbestos mine, Nelspruit–Kaapsehoop road, 4150′, 3.xi.1970, B. Stuckenberg, (NM); 1 ♂, Gladdespruit River, headwaters at Kaapsehoop, grassland and gallery forest, 5000′, 3.xi.1970, B. Stuckenberg, (NM); 1 ♀, Zoutpan, Zoutpansberge, 15–30.xi.1932, G. van Son, (NM); 1 ♀, Lichtenburg, Brauns, (ZSM). MOZAMBIQUE. 1 ♂ 3 ♀, Inhaca Island, 20–25.ix.1959, G. van Son, (NM). KENYA. 2 ♀, Maungu Hills, 7.i.1973, Bampton, (NM). Distribution as in Fig. 188.

Note. It is with some hesitation that I include the specimens from Kenya. These females appear to be true *Dasophrys* and it is a pity that there is no male material available to establish definitely the specific identity. As *D. geniculatus* is a widely distributed species there is a good possibility that these specimens do in fact belong to this species. If this is true then it suggests that the genus *Dasophrys* may in fact occur in East Africa where it has not previously been recorded.

Seasonal incidence: See Table 1. Flies throughout summer.

Remarks: I have studied the unique holotype specimen of *D. personatus* (Figs 143–147) and consider this as being a fairly typical example of *D. geniculatus*



Figs 143–147. *Dasophrys geniculatus* (Macquart) male genitalia of holotype of *D. personatus* Schiner (**syn. n.**). 143. Lateral aspect. 144. Dorsal aspect of right clasper. 145. Ventral aspect of S8. 146. Lateral aspect of gonopod, stylus and aedeagus. 147. Ventral aspect of aedeagal tip.

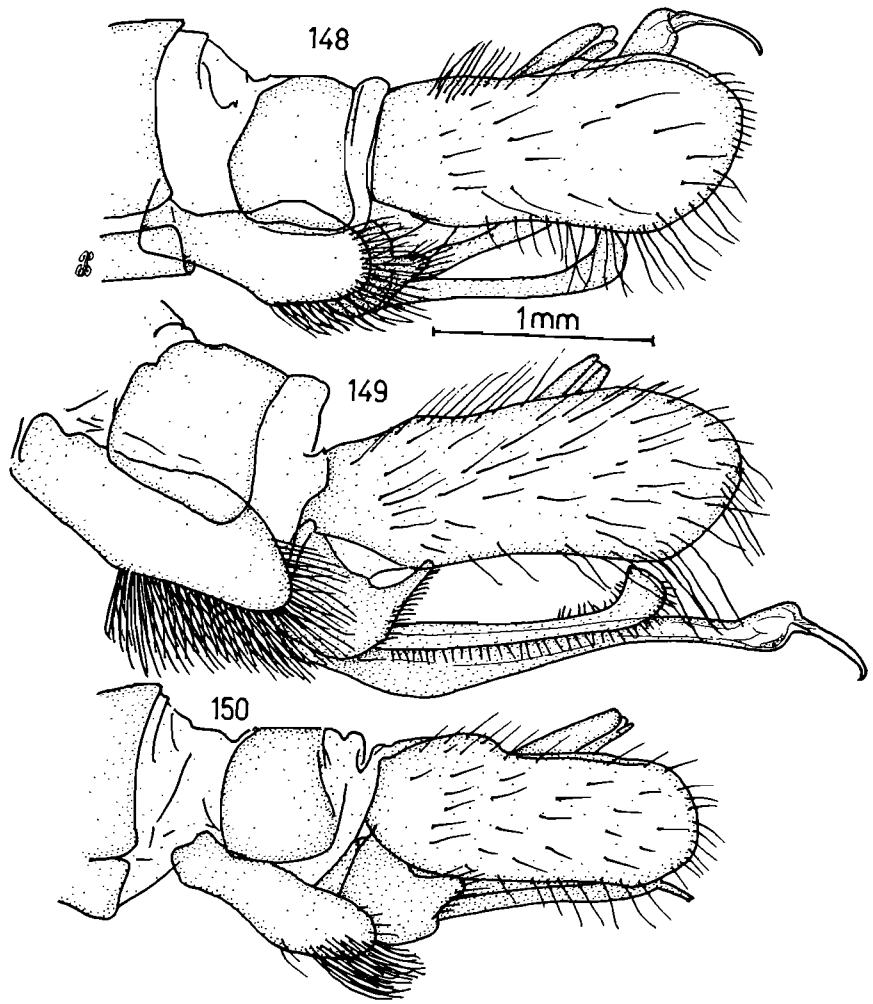
although the specimen is old and not in good condition. I have not seen Loew's type specimen of *D. longibarbis* and merely accept previous opinions that the species is a synonym of *D. paron*. I have collected this species in thick dune vegetation near Port Elizabeth. Although the wind was blowing very hard at the time the specimens were apparently unaffected and flew actively about.

Dasophrys punctipennis Engel, 1927 Figs 151–156, 189

Dasophrys (Neodasophrys) hirsutus var. *punctipennis* Engel, 1927: 143.
Dasophrys punctipennis; Oldroyd 1974: 154; Oldroyd, 1980: 337.

Redescription: Based on holotype and supplemented with information from other specimens examined.

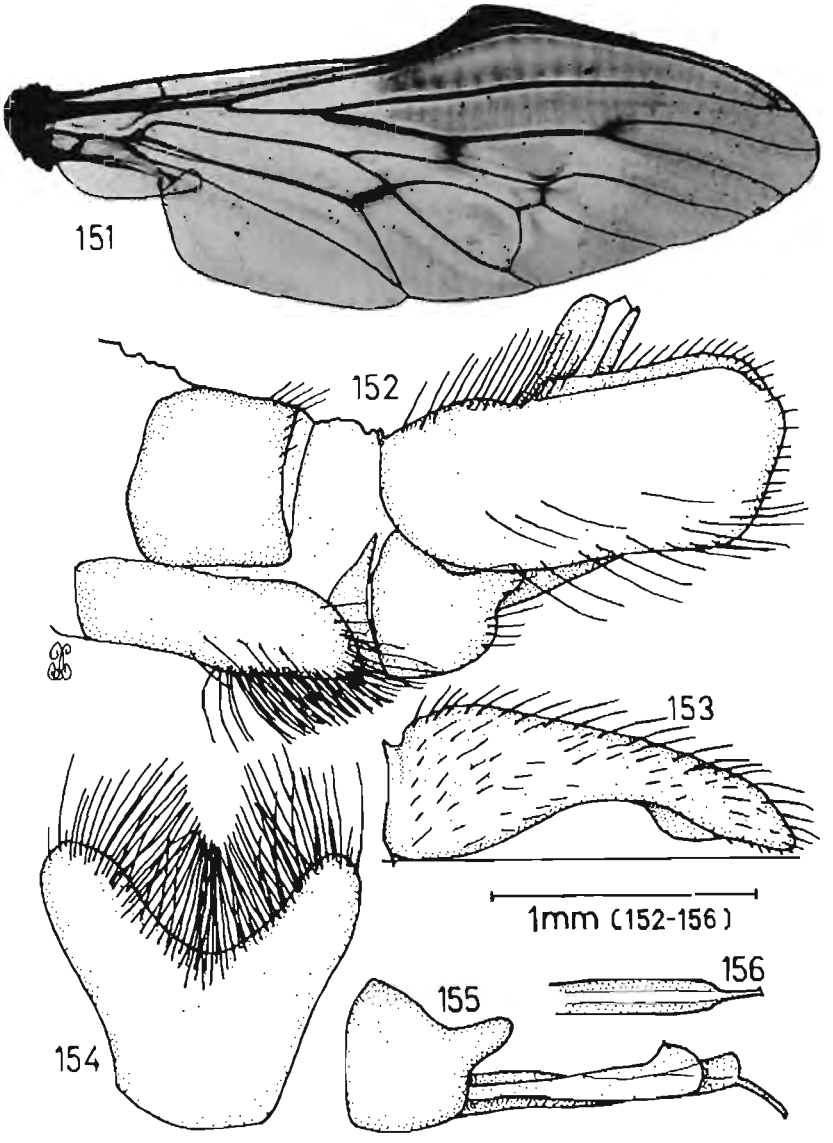
Head. Antenna dark red-brown to black; segments one and two with black setae; relative lengths of segments—3≥5>1>2>4. Mystax: black with few shiny pale brown setae on epistomal margin. Frons red-gold pruinose. Occipital setae: black dorsally, black and white centrally, white ventrally. Proboscis black with white setae ventrally. Palpi black with black and white setae.



Figs 148–150. *Dasophrys geniculatus* (Macquart); variation in male genitalia. 148. Mkuze specimen. 149. Specimen from Junction of Bloukrantz and Tugela Rivers. 150. Specimen from Willowmore.

Thorax. Dark red-brown with red-gold pruinescence. Mesepimeral setae shiny dark red-brown. Hypopleural setae dark red-brown. Mesonotal setae: acrosticals fine black; dorsocentrals black; humerals fine black and white; presuturals 2–3 black; supra-alars 1 black; postalars 2–3 black; scutellar marginal bristles 6 black; scutellar disc setae white; postmesonotal setae white. Wings: 9,9 mm (range 8,8–11,2 mm); dilated; venation and microtrichial distribution as in Fig. 151. Legs: prothoracic coxa with white and pale yellow setae anteriorly; metathoracic coxa without lateral bristles. Leg bristles black; setae long red-brown.

Abdomen. Black with silver pruinose hind margins and posterolateral corners of terga. Terga with short black setae dorsally and long yellow and orange setae and



Figs 151–156. *Dasophrys punctipennis* Engel holotype male ('Capland'). 151. Wing (9,9 mm). 152–156. Genitalia. 152. Lateral aspect. 153. Dorsal aspect of right clasper. 154. Ventral aspect of S8. 155. Lateral aspect of gonopod, stylus and aedeagus. 156. Ventral aspect of aedeagal tip.

bristles laterally. Sterna with long yellow setae only. ♂ genitalia as in Figs 152–156. Ovipositor length : breadth ratio *ca.* 3,7.

Variation: East London males are a little smaller than the type and not in very good condition. There seems to be little variation.

Material examined: SOUTH AFRICA: *Cape Province.* 1 ♂ holotype, 'Capland', Dr Brauns, (ZSM); 1 ♀, Grahamstown, 27.iii.1973, Dassie Krantz, J. Londt, (NM); 3 ♂ 1 ♀, East London, 1915, R. Ellenberger, (MNP & NM). *Natal.* 1 ♀ , Umgeni, 1929, P. Lesne, (MNP). Distribution as in Fig. 189.

Note. The Natal female may not be conspecific but as it possesses black setae on the scutellar margin I have placed it here. It may be a variant of *D. androclea.*

Seasonal incidence: See Table 1. The only month known is March so this species may be like *androclea* in being a late summer flier.

Remarks: Originally described as a variety of *D. hirsutus* (subsequently synonymised with *D. androclea*) *D. punctipennis* is immediately separated from *androclea* in possessing strongly dilated wings in the male. Oldroyd was correct in considering *punctipennis* as a distinct species; he lists Pietermaritzburg as a locality for *punctipennis* but this is incorrect as his specimen from Town Bush is a female of the new species *D. umbripennis.* At present the known distribution of the species is confined to the eastern Cape Province (with doubts about the Natal coast). The type locality is uncertain as the type is labelled merely 'Capland' and while I do not believe that Dr Brauns ever visited East London I here propose that the type locality be restricted to East London as specimens are available from this locality.

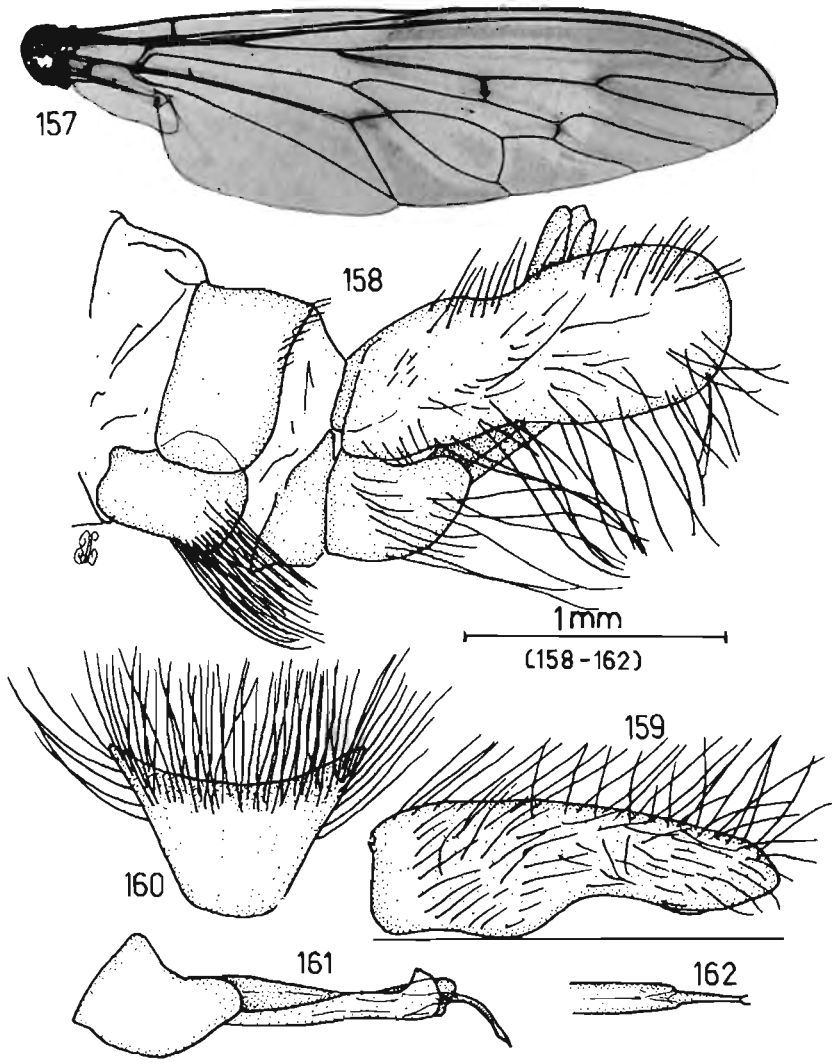
Dasophrys reburrus sp. n. Figs 157–162, 189

Derivation: *Reburrus*—L. one with bristling hair. Refers to the long bristles of legs and terminalia.

Description: Based primarily on the holotype.

Head. Antenna dark red-brown to black; segments one and two with black setae; relative lengths of segments—3>5>1>2>4. Mystax: black with a small patch of white setae on epistomal margin. Frons gold pruinose. Occipital setae: black dorsally (with dark brown shiny setae behind), shiny dark-brown centrally, white ventrally. Proboscis blackish with black and white setae. Palpi blackish with black setae.

Thorax. Dark red-brown with silver-gold pruinescence. Mesepimeral setae shiny orange-brown. Hypopleural setae shiny orange-brown. Mesonotal setae: acrosticals short black; dorsocentrals black; humerals fine orange-brown; presuturals 2 dark red-brown; supra-alars 1 dark red-brown; postalars 2 dark red-brown; scutellar marginal bristles 5 dark red-brown; scutellar disc setae shiny yellow-brown; postmesonotal setae yellow-brown. Wings: 9,5 mm; undilated; venation and microtrichial distribution as in Fig. 157. Legs: prothoracic coxa with white setae anteriorly; metathoracic coxa without lateral bristles. Leg bristles orange-brown; setae long orange-brown short white and dark red-brown.



Figs 157–162. *Dasophrys reburrus* sp. n. holotype male (Mariepskop). 157. Wing (9,5 mm). 158–162. Genitalia. 158. Lateral aspect. 159. Dorsal aspect of right clasper. 160. Ventral aspect of S8. 161. Lateral aspect of gonopod stylus and aedeagus. 162. Ventral aspect of aedeagal tip.

Abdomen. Dark red-brown with gold pruinescence. Terga with long shiny orange and white setae. Sterna as terga. ♂ genitalia as in Figs 158–162. ♀ unknown.

Variation: Unknown.

Material examined: SOUTH AFRICA: *Transvaal.* 1 ♂ holotype, Mariepskop, x.1956, B. Stuckenberg, (NM); 1 ♂ paratype, 2430 Cd (ie. quarter degree notation for a locality near Buffelsvlei), 15–20.vii.1977, University of Pretoria, (NM). Distribution as in Fig. 189. Natal Museum Type No 2374.

Seasonal incidence: See Table 1. Possibly a spring or midsummer flier.

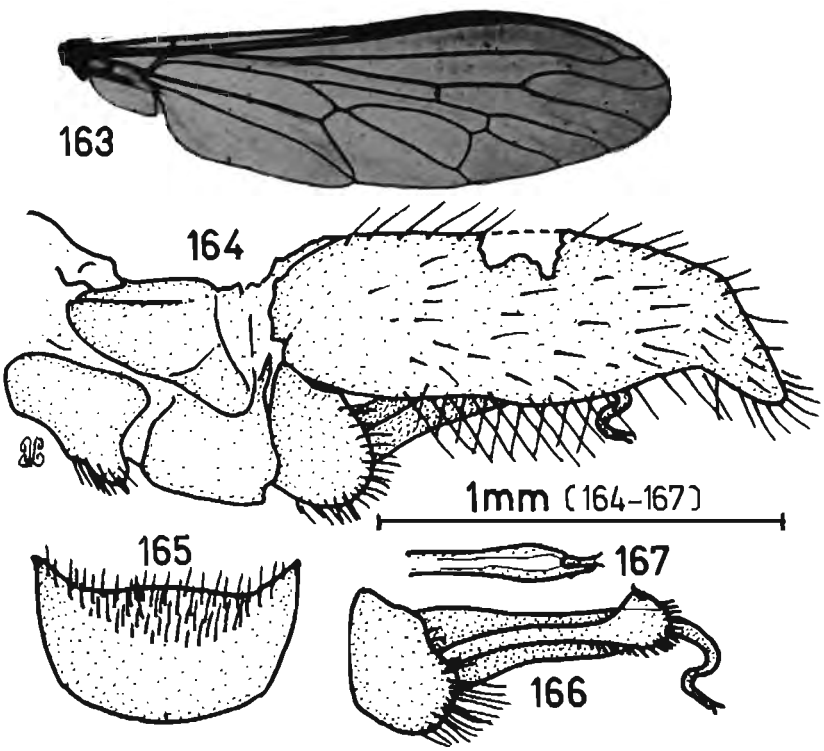
Dasophrys saliotragus sp. n. Figs 163–167, 192

Derivation: *Salio*—L. to leap or spring; *tragus*—L. buck. Named after the locality of one of the paratypes—Springbok.

Description: Based on two males and one female.

Head. Antennae black; segments one and two with black and white setae; relative lengths of segments—3>1>5>2>4. Mystax: black with a few white setae interspersed. Frons silver pruinose. Occipital setae: long black dorsally, black and white centrally, white ventrally. Proboscis black with white setae ventrally. Palpi black with black and white setae.

Thorax. Blackish with silver pruinescence. Mesepimeral setae black and white. Hypopleural setae black and white. Mesonotal setae: acrosticals black; dorsocentrals black; humerals fine white; presuturals 2 black; supra-alars 1 black; postalars 1 black; scutellar marginal bristles 2 black; scutellar disc setae white; postmesonotal setae sparse black and white. Wings: 5,3 mm (holotype); slightly dilated but considered as undilated; venation and microtrichial distribution as in Fig. 163 (paratype ♂ illustrated). Legs: prothoracic coxa with white setae anteriorly; metathoracic coxa lacking lateral bristles. Leg bristles dark red-brown; setae mostly white.



Figs 163–167. *Dasophrys saliotragus* sp. n. paratype male (Springbok). 163. Wing (4,6 mm). 164–167. Genitalia. 164. Lateral aspect. 165. Ventral aspect of S8. 166. Lateral aspect of gonopod, stylus and aedeagus. 167. Ventral aspect of aedeagal tip.

Abdomen. Blackish with silver pruinescence. Terga with black bristles and black and white setae; sterna with long black and white setae. ♂ genitalia as in Figs 164–167 (paratype ♂ illustrated), holotype claspers more tapering distally than in paratype. Ovipositor length : breadth ratio *ca*. 2,2.

Variation: The holotype and female paratype from Kamieskroon are much darker in colour than the paratype from Springbok which is somewhat teneral. Wing-length ranges from 4,6–5,9 mm.

Material examined: SOUTH AFRICA: *Cape Province*. 1 ♂ 1 ♀ holo- and paratype, 10 km E. Kamieskroon, 630 M, 17.x.1977, R. Miller, (NM); 1 ♂ paratype, Springbok, Namaqualand, xi.1890, R. Lightfoot, (SAM). Distribution as in Fig. 192. Natal Museum type No. 2434.

Seasonal incidence: See Table 1. Probably an early summer flier.

Dasophrys silvestris sp. n. Figs 168–173, 188

Derivation: *Silvestris*—L. of woods/forest. Refers to the forest habitat in which this species was taken.

Description: Based on the holotype and other specimens taken from the same locality.

Head. Antenna black; segments one and two with black setae (a few white ones may be found as well); relative lengths of segments—3>1>5>2>4. Mystax: black setae in dorsal half, white in ventral half. Frons silver pruinose. Proboscis dark red-brown with black and white setae. Palpi dark brown-black with black and white setae.

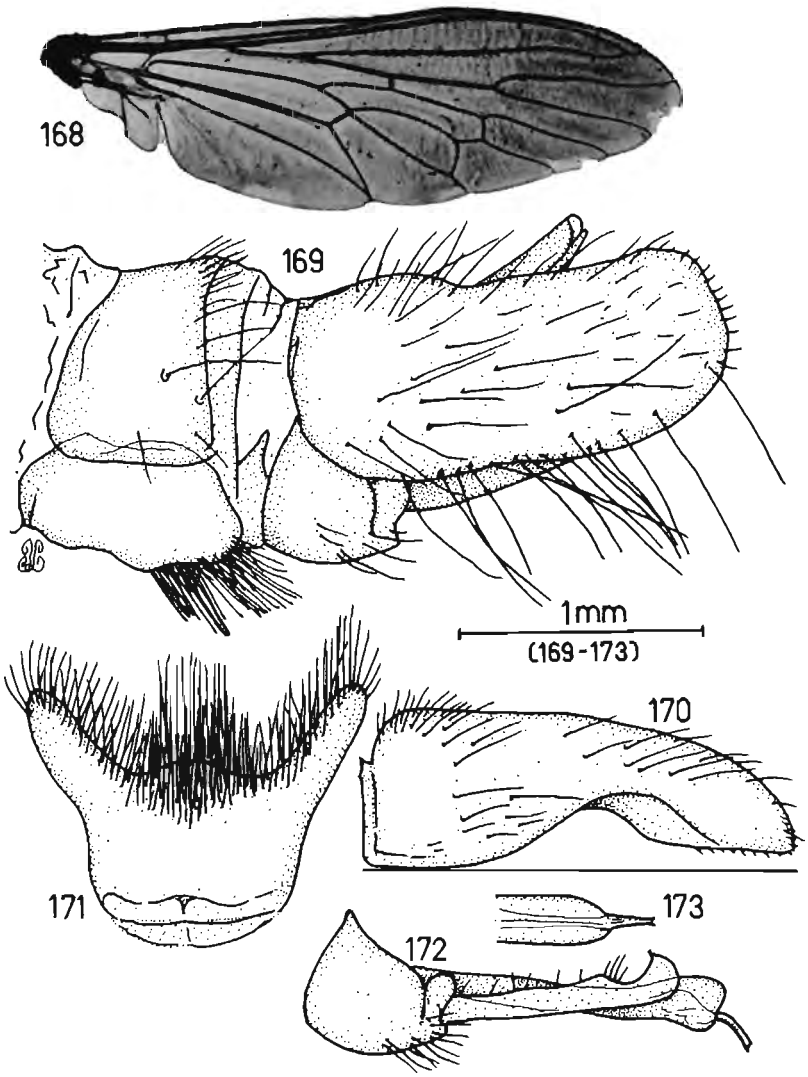
Thorax. Blackish with a reddish sheen and gold-silver pruinose. Mesepimeral setae pale yellow. Hypopleural setae pale yellow. Mesonotal setae: acrosticals longish black; dorsocentrals longish black; humerals fine white setae (may be a few black); presuturals 2 black; supra-alars 2 black; postalars 2 black; scutellar marginal bristles 2–6 black; scutellar disc setae fine white; postmesonotal setae sparse white. Wings: 6,9 mm (range 6,9–8,3 mm); undilated; venation and microtrichial distribution as in Fig. 168. Legs: prothoracic coxa with white setae anteriorly; metathoracic coxa lacking lateral bristles. Leg bristles black (a few pale yellow); setae short pale yellow and long thin black.

Abdomen. Dark red-brown to black with silver pruinescence. Terga with short black setae dorsally and long shiny pale yellow bristles and setae laterally. Sterna with long pale yellow and black setae. ♂ genitalia as in Figs 169–173. Ovipositor length : breadth ratio *ca*. 2,2.

Variation: Minimal. Some specimens have most mesonotal bristles pale yellow.

Material examined: SOUTH AFRICA: *Natal*. 2 ♂ holotype and paratype 4 ♀ paratypes, Ngome Forest between Vryheid and Nongoma, 11–12.iv.1969, B. Stuckenberg, (NM). Distribution as in Fig. 188. Natal Museum Type No. 2375.

Seasonal incidence: See Table 1. Possibly a late summer flier.



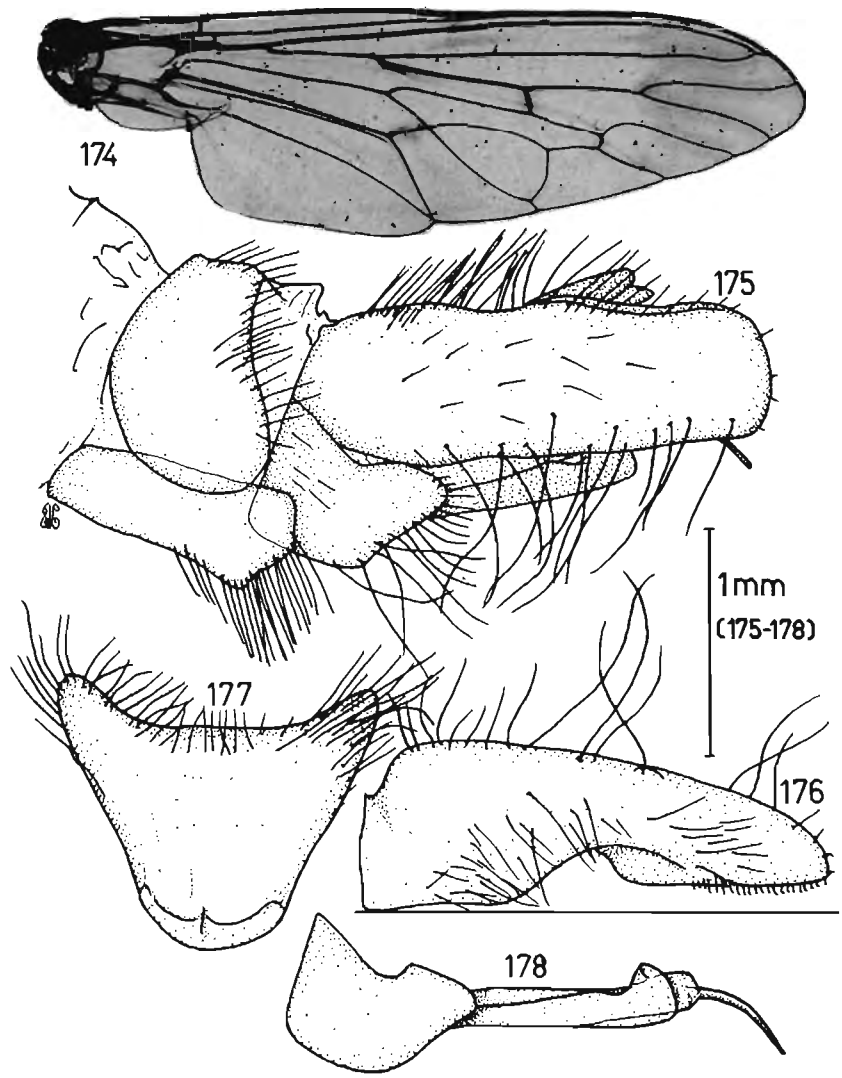
Figs 168–173. *Dasophrys silvestris* sp. n. (Ngome) male. 168. Wing of paratype (7.2 mm). 169–173. Genitalia of holotype. 169. Lateral aspect. 170. Dorsal aspect of right clasper. 171. Ventral aspect of S8. 172. Lateral aspect of gonopod, stylus and aedeagus. 173. Ventral aspect of aedeagal tip.

Dasophrys swazi sp. n. Figs 174–178, 191

Derivation: Based on the country of origin of the holotype—Swaziland.

Description: Based on holotype and paratype only.

Head. Antenna dark red-brown to black; segments one and two with white setae (a few black ones also present); relative lengths of segments—3>5>1>2>4. Mystax: black with some white setae around epistomal margin. Occipital setae: black and white dorsally and centrally, white ventrally. Proboscis black with white and black setae. Palpi black with black and white setae.



Figs 174–178. *Dasophrys swazi* sp. n. holotype male (Mbabane). 174. Wing (10,9 mm). 175–178. Genitalia. 175. Lateral aspect. 176. Dorsal aspect of right clasper. 177. Ventral aspect of S8. 178. Lateral aspect of gonopod, stylus and aedeagus.

Thorax. Dark red-brown to black with silver pruinescence. Mesepimeral setae yellow-brown and white. Hypopleural setae black and white. Mesonotal setae: acrosticals fine black; dorsocentrals black; humerals fine black and white; presuturals 3 (2 black and 1 brown); supra-alars 3 black; postalars 3 black; scutellar marginal bristles 8 black; scutellar disc setae white; postmesonotal setae sparse white. Wings: 10,9 mm (range 10,2–10,9 mm); undilated; venation and microtrichial distribution as in Fig. 174. Legs: prothoracic coxa with white setae anteriorly; metathoracic coxa lacking lateral bristles. Leg bristles few black and red-brown; setae long black, white and red-brown.

Abdomen. Dark red-brown with silver pruinescence. Terga with short black setae dorsally, long white setae and orange-brown bristles laterally. Sterna with long yellow-brown and white setae only. ♂ genitalia as in Figs 175–178. Ovipositor length : breadth ratio *ca*. 4,4.

Variation: Minimal.

Material examined: SWAZILAND. 1 ♂ holotype 1 ♀ paratype, Mbabane, 4500' 15.vi.1961, T. Oatley, (NM). Distribution as in Fig. 191. Natal Museum Type No. 2376.

Seasonal incidence: See Table 1. Possibly a winter flier.

Dasophrys umbripennis sp. n. Figs 179–184, 191

Derivation: *Umbra*—L. shade/shadow; *pennis*—L. wing. Refers to the darkly shaded wings of this species.

Description: Based on the holotype but supplemented with information from other specimens examined.

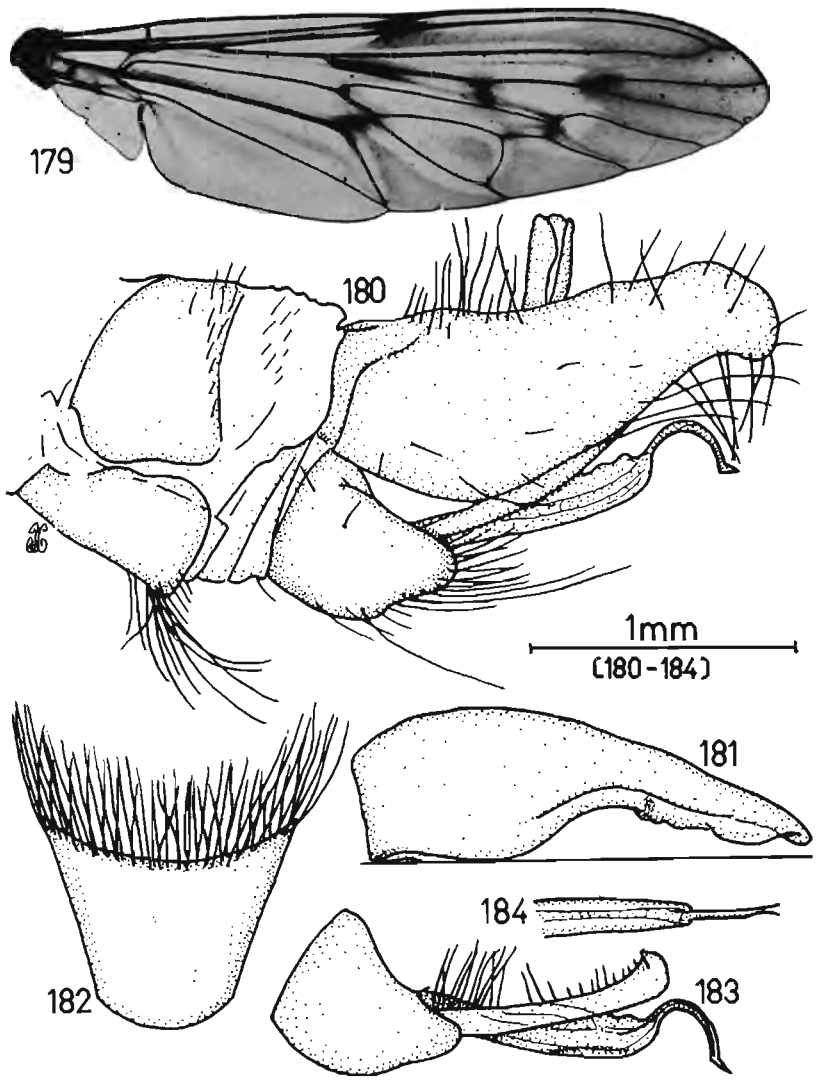
Head. Antenna black; segments one and two with black setae; relative lengths of segments—3>1=5>2>4. Mystax: black with white setae on epistomal margin. Frons silver pruinose. Occipital setae; black dorsally, black and white centrally, white ventrally. Proboscis black with white setae ventrally. Palpi black with black setae.

Thorax. Black with fine gold pruinescence. Mesepimeral setae orange-brown. Hypopleural setae orange-brown. Mesonotal setae: acrosticals longish black; dorsocentrals longish black; humerals black and white; presuturals 2 long black; supra-alars 1 long black; postalars 2 long black; scutellar marginal bristles 5 black; scutellar disc setae long white; postmesonotal setae long white. Wings: 9,1 mm (range 6,2–10,4 mm); undilated; venation and microtrichial distribution as in Fig. 179. Legs: prothoracic coxa with orange-white setae anteriorly; metathoracic coxa without lateral bristles. Leg bristles black and orange-brown; setae orange-brown, black and white.

Abdomen. Dark red-brown with silver-gold pruinose hind margins of terga. Terga with orange-brown bristles and orange-brown and white setae. Sterna with orange-brown and white setae. ♂ genitalia as in Figs 180–184. Ovipositor length : breadth ratio 5,0.

Variation: Minimal.

Material examined: SOUTH AFRICA: *Natal*. 1 ♂ holotype, Pietermaritzburg, Montrose, 23.vii.1977, J. Londt, (NM); 1 ♂ paratype, same data, 3.vi.1979, (NM); 1 ♂ paratype, Hilton, Pietermaritzburg, ex. Malaise trap, 20–21.v.1977, J. Londt, (NM); 2 ♂ paratypes, Pietermaritzburg, Town Bush, 14.xii.1978 & 26.x.1976, J. Londt, (NM); 14 ♂ 6 ♀ paratypes, Pietermaritzburg, Town Bush, iv.v.vi.x.1976, v.vi.vii.1977, R. Miller, ex Malaise trap (NM); 1 ♀ paratype, Pietermaritzburg, Town Bush, 4.v.1972, M. Irwin, (NM); 1 ♀ paratype, same data, 18.viii.1967, B. Stuckenberg, (NM); 2 ♂ paratypes, Karkloof, near Mt Alida, Temp. forest assoc., 17.vi.1974, M. Irwin, (NM); 1 ♀ paratype, Karkloof, 24.iv.1980, J. Londt (NM); 1 ♂ 1 ♀ paratypes, Cathedral Peak Area,



Figs 179–184. *Dasophrys umbripennis* sp. n. male. 179. Wing of paratype (Pietermaritzburg: 10,3 mm). 180–184. Genitalia of paratype (Hilton). 180. Lateral aspect. 181. Dorsal aspect of right clasper. 182. Ventral aspect of S8. 183. Lateral aspect of gonopod, stylus and aedeagus. 184. Ventral aspect of aedeagal tip.

16–18.xii.1977, J. Londt, (NM). Distribution as in Fig. 191. Natal Museum Type No. 2377.

Seasonal incidence: See Table 1. Apparently flies from early winter through into midsummer.

Prey records: A female collected at Town Bush was captured while feeding on a small Dipteran (family Muscidae).

Remarks: This interesting species is apparently a winter flier in and near forests in Natal. It sometimes occurs in Pietermaritzburg gardens, where it is found in

situations similar to those occupied by *androclea* during the late summer and autumn.

DISCUSSION

Taxonomic characters

The genus *Dasophrys* is a very uniform one, all the species being similar in morphology. This means that species are usually characterised by only a few features or by combinations of a few characters. Some of the more important taxonomically useful characteristics are discussed below.

Male genitalia: These structures provide some of the more reliable morphological features used in the characterisation of species. The form of the claspers although usually rather simple and often lacking obvious specific features may be very useful in defining certain of the taxa. In such species as *carinatus*, *crenulatus*, *fortis*, *montanus*, *nanus*, *saliotragus* and *umbripennis* it is possible to identify the species on the shape of the claspers alone. Of more importance are the styli and the aedeagus. The form of the aedeagus tip can be important in defining a number of the species. Although there is a considerable range in shape there appear to be two main categories of aedeagus based on the nature of the distal end. One group, consisting of most of the South-West Cape species (*minutus*, *nigroseta*, *bullatus*, *saliotragus*, *compressus* and *nanus*) and two Natal species (*fortis* and *crenulatus*) possess broad, gently tapering, undulating aedeagal tips while the other group, made up of all the other species, have a fairly straight, stout aedeagal base which has at its distal end a thin, shortish terminal filament which is usually bifid at its tip. This terminal filament may arise from the upper, central or lower part of the thicker aedeagal base. When this filament arises dorsally (as in *boslacus* and *umbripennis*) it is usually strongly arched and has the bifid tip turned sharply upwards. When arising ventrally the apical part of the aedeagal base sometimes has a distally projecting bump or lobe of rather characteristic shape (*tarsalis*, *irwini*, *natalensis* and *oldroydi*). In most species however, the terminal filament arises more or less centrally, is fairly straight or gently downward curved, and does not offer much of specific value. The shape of the styli may be useful. Although a basic shape is fairly rigidly maintained the relative length, breadth and shape of the tip may be useful taxonomically. The following species, in particular, have rather characteristic styli: *brevistylus*, *carinatus*, *crenulatus*, *fortis*, *irwini*, *minutus*, *natalensis*, *nigroflavipes*, *nigroseta*, *oldroydi*. The length of the styli is directly related to the length of the claspers (Fig. 185). The shape of the hind margin of the eighth abdominal sternum provides a useful means of characterising certain species. In most instances this is fairly unremarkable but in others it is strongly U-shaped (*geniculatus*, *hypselopterus*, *brevistylus*, *montanus*, *carinatus*, *nigroflavipes*, *boslacus*) and abundantly equipped with setae.

Female genitalia: These unfortunately offer no valuable specific characteristics. The ovipositor may vary in proportions and a histogram showing the distribution of ovipositor length : breadth (measured at mid-length) ratio for the 23 species for which females are known is given in Fig. 186. The limited data suggest a normal

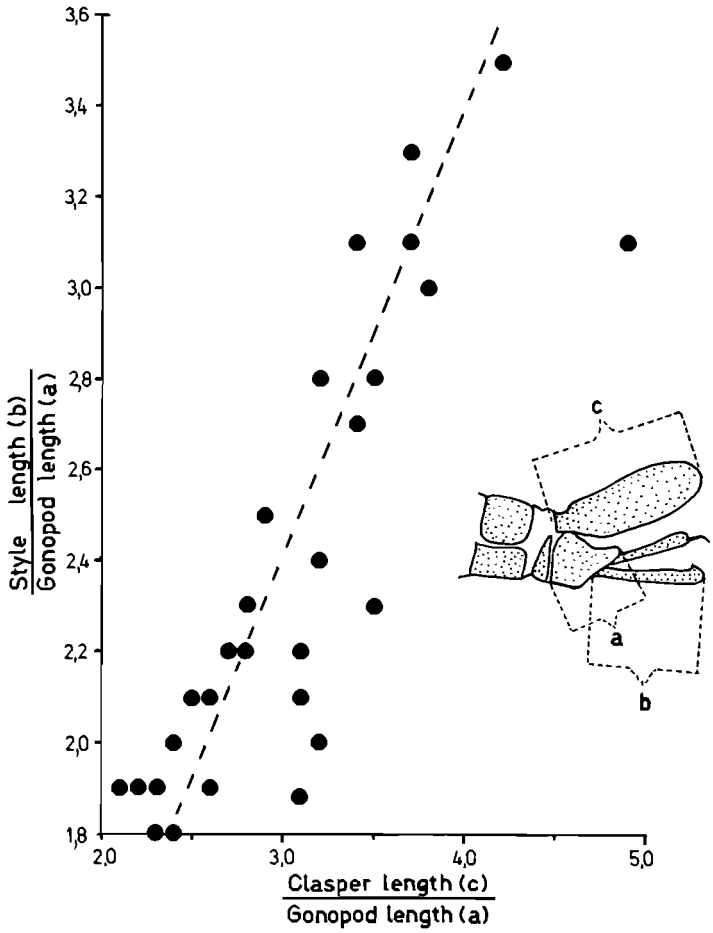


Fig. 185. The relationship between style and clasper length in *Dasophrys* species.

distribution but it is of interest that a group of five species (*nigroflavipes*, *silvestris*, *fortis*, *boslacus* and *nigroseta*) have this ratio smaller than 3,0 while all the other species have values greater than 3,5. Two species, *geniculatus* and *hypselopterus* have the ovipositor longer than five times the breadth. An attempt was made to correlate the length of the female ovipositor to the length of the male claspers; unfortunately no relationship could be found.

Wing dilation: This can be a useful means of characterising species although all intermediates between the completely undilated and the strongly dilated condition are found. This is in my opinion the main factor in favour of the disavowment of Ricardo's genus *Neodasophrys* which was based almost entirely on the undilated appearance of the wings of the various species assigned to it.

Wing shading: This can also be used in defining taxa. Eight species have clearly defined darkly shaded spots on their wings (*reburrus*, *umbripennis*, *oldroydi*, *swazi*, *androclea*, *punctipennis*, *crenulatus*, *loewi*). All these species except *puncti-*

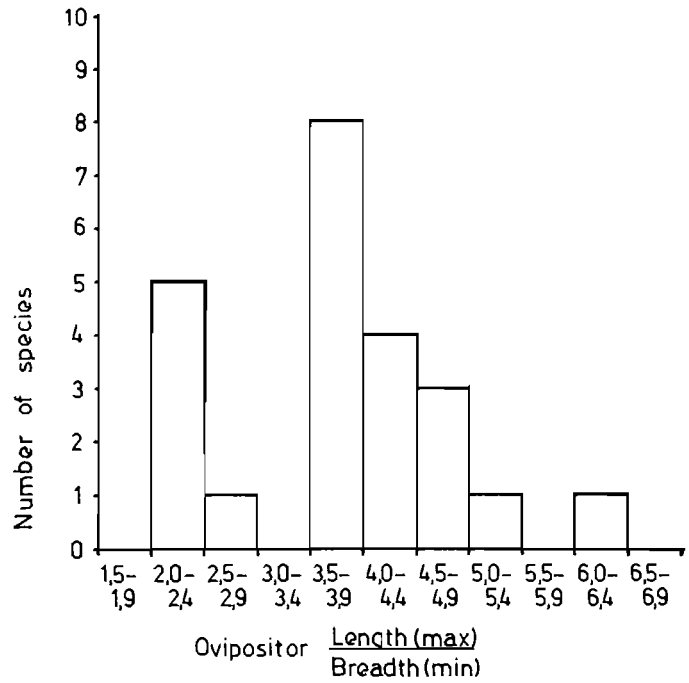


Fig. 186. A histogram showing the range in length : breadth ratios of *Dasophrys* ovipositors.

pennis (and possibly *crenulatus* and *loewi*) have undilated wings in the male. The first four listed (and possibly *androclea*) are also characterised by possessing a rather distally situated anterior crossvein which lies virtually opposite M_3 (which is the vein closing the fourth posterior cell).

Other useful characters used to group species or to help define species include: the presence or absence of lateral bristles on the metacoxae, the colour of the anteriorly directed prothoracic coxal setae and the colour and arrangement of the mystacal bristles.

Species groups

Only tentative suggestions can be made regarding the grouping of species. At present I recognise three rather loosely defined groups but a number of species do not fit into any of these.

The nigricans species group

This group contains seven species (*nigricans*, *compressus*, *nigroseta*, *minutus*, *saliotragus*, *nanus* and *bullatus*). These are mostly from the south-western parts of the Cape Province; they are all small species and usually possess long black mesonotal setae. These species do not have shaded wings and show little evidence of wing dilation in the male sex although *nigricans* and *compressus* do have slightly dilated wings. The fourth posterior cell is usually quite clearly stalked at its base (the exception being *nigricans*) a characteristic shared only by a few other

species outside of this group (*crenulatus*, *natalensis*, *geniculatus* and possibly *fortis*). With the exception of *nanus*, all lack lateral bristles on the metathoracic coxae. Antennal segment one is longer than segment five except in *bullatus* and possibly *minutus* (where the segments are of similar length). All members of the group have a simple hind margin to the eighth sternum and, except for *nigricans*, all the species have a similarly shaped aedeagus.

The geniculatus species group

This fairly well constituted group comprises *geniculatus*, *hypselopterus*, *montanus*, *nigroflavipes*, *brevistylus*, *carinatus* and possibly *boslacus*. The wings are unshaded and, except for *boslacus*, the males have clearly dilated wings. The metathoracic coxa is equipped with at least one laterally situated bristle except in *hypselopterus*. All members of the group have a clearly U-shaped hind margin to the eighth abdominal sternum (a feature unique to the group) and a simple aedeagus with centrally arising terminal filament.

The androclea species group

The five species which comprises this group (*androclea*, *oldroydi*, *reburrus*, *swazi*, *umbripennis*) all possess shaded, undilated wings in which the apical crossvein lies almost opposite M_3. All four species lack metathoracic coxal bristles and have a simple hind margin to the eighth sternum. The aedeagus is simple and has a centrally arising terminal filament (except in *umbripennis* where it is dorsally situated). These species have long, usually orange-brown, setae covering most leg segments.

The balance of species, eleven in all, are difficult to group. The uniquely shaped aedeagus of *crenulatus* and *fortis* may suggest that these two species should be grouped together but in other respects they are not particularly alike. *D. punctipennis* could be placed together with members of the *androclea* group as they have a lot in common; the strongly dilated male wing and position of the anterior crossvein of *punctipennis* however clearly separates it from the others.

Distribution

Dasophrys must at present be considered a purely southern African genus (Fig. 187). Two female specimens, identified as *Dasophrys*, were collected in Kenya. If they are true *Dasophrys* then they are probably *D. paron* which has a fairly great range. For the present, however, and until males are available, I must ignore these females. The map showing the distribution of the genus also shows that collecting has been somewhat biased. The best collection of *Dasophrys* is undoubtedly that of the Natal Museum in Pietermaritzburg. The map shows clearly the collecting activities of the museum staff. Similarly the collecting of entomologists at the Transvaal Museum (Pretoria) and South African Museum (Cape Town) is also evident from the map. Many of the localities marked represent places that I personally visited over the last three years. With this in mind I suggest that there may be a number of species still to be discovered and that the distribution of some of the described ones will be considerably extended when more extensive collecting has been done.

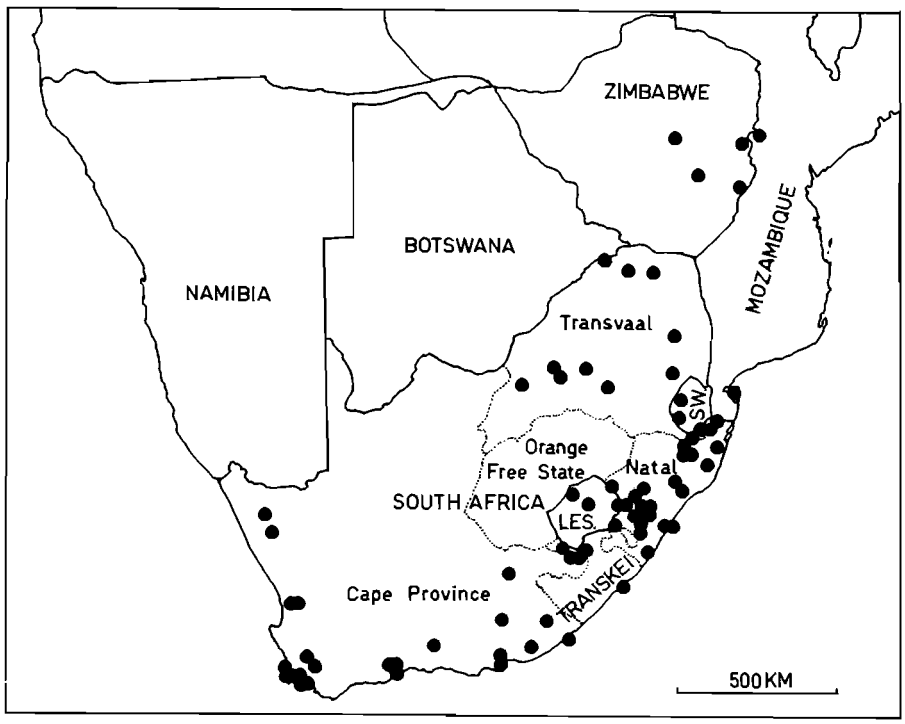


Fig. 187. The distribution of the genus *Dasophrys* as presently known.

The distribution of most species appears to be directly related to specific vegetational situations. The long ovipositor possessed by most species is suggestive of arboreal larval development and indeed many species are found in close association with forests and other situations in which much woody vegetation is present. A few species, however, appear to flourish in grassland (*tarsalis*, *fortis*, *nigroflavipes*, *crenulatus*, *montanus* and possibly *dorattina*) and may indeed oviposit in grass tussocks.

Seasonal incidence

Table 1 gives a summary of the months during which specimens of *Dasophrys* have been collected. In most instances there is too little information from which to draw any meaningful conclusions. While most species probably have their adult activity period during summer there are some notable exceptions. Members of the *nigricans* species group (most of which occur in the Mediterranean climate of the south-western Cape Province) are apparently most commonly collected in September and October (spring), a situation not uncommon for this region. Other species, such as *tarsalis*, *fortis* and *natalensis* are probably autumn flyers. At present *umbripennis* appears to be the only confirmed winter species but its close relatives, *oldroydi*, *reburrus* and *swazi* may also fall into this category. The summary given in Table 1 is likely to be incomplete and misleading as it contains information taken from a number of different years, some of which may have

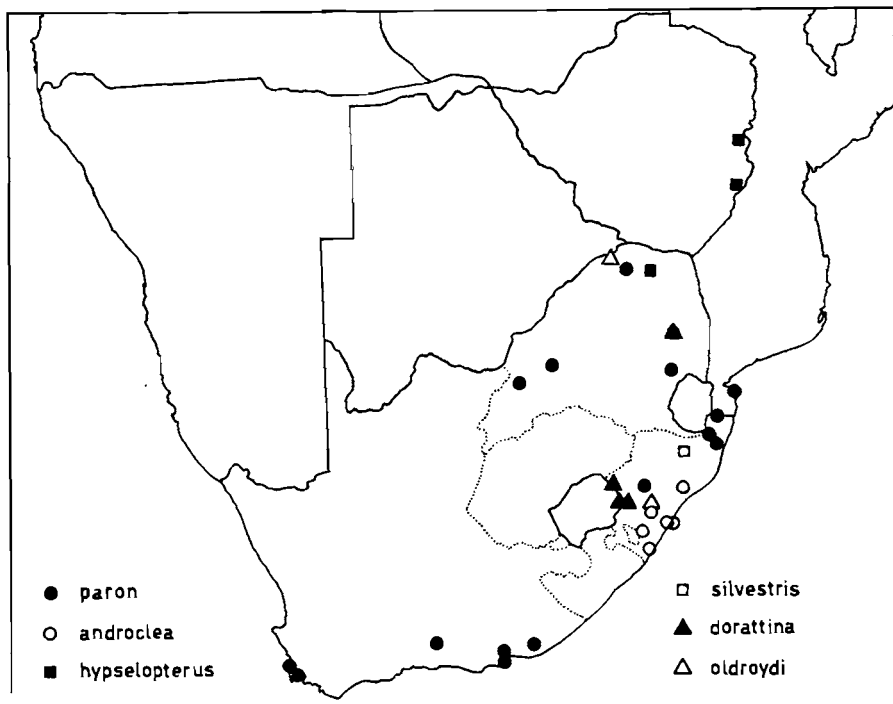


Fig. 188. The distribution of species of *Dasophrys* (as indicated).

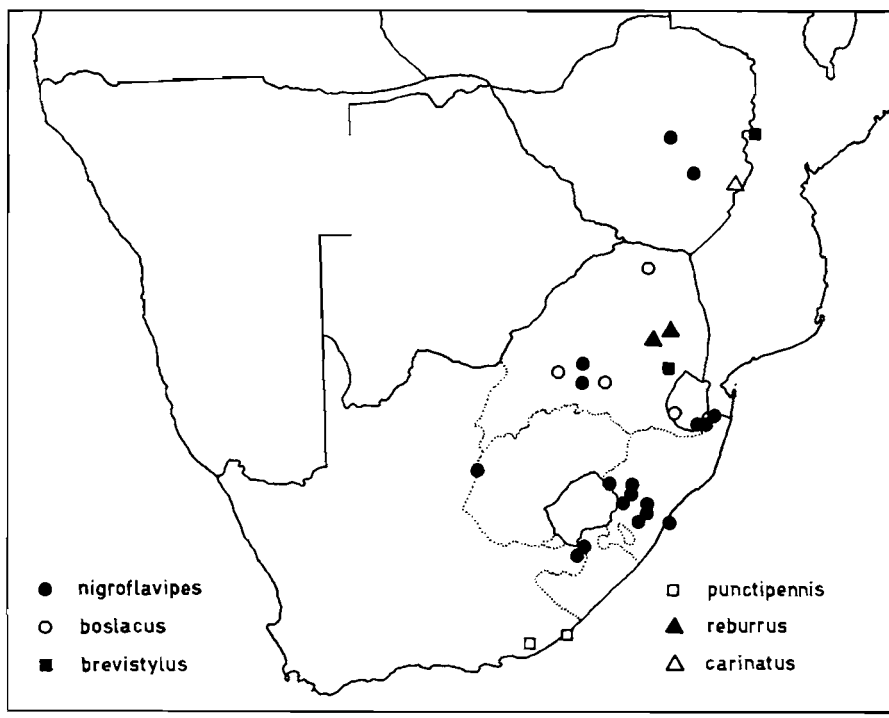
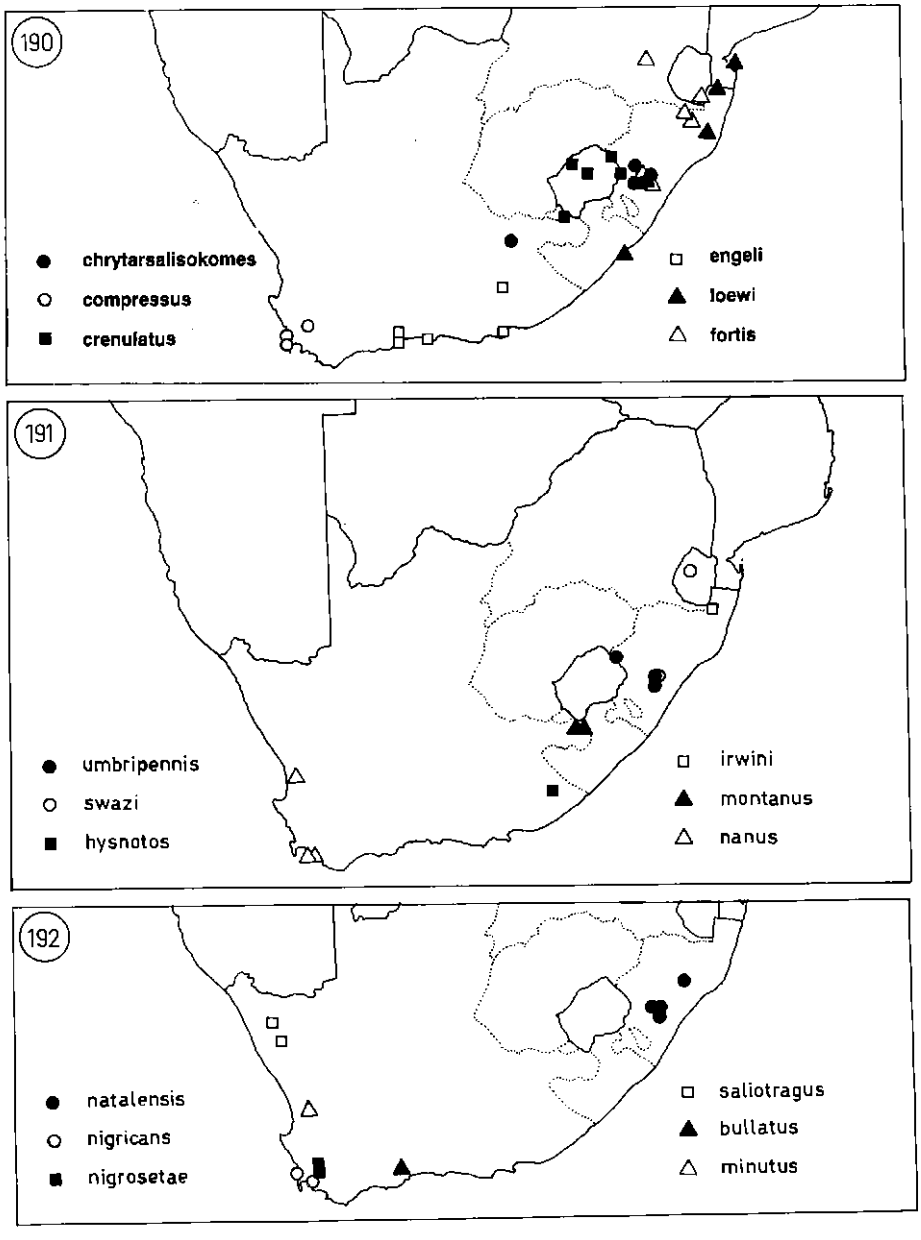


Fig. 189. The distribution of species of *Dasophrys* (as indicated).



Figs 190–192. The distribution of species of *Dasophrys* (as indicated).

ERRATA

Page 696, Fig. 188: replace *paron* with *geniculatus*.
Page 697, Fig. 190: replace *chrytarsalisokomes* with *tarsalis*.

TABLE 1
Months during which species of *Dasophrys* have been collected.

Species	Months											
	J	F	M	A	M	J	J	A	S	O	N	D
androclea	●	●	●	●	●	●	●			●	●	●
boslacus	●	●									●	●
brevistylus											●	
bullatus										●		
carinatus												●
compressus		●	●						●			
crenulatus	●									●	●	●
dorattina		●	●	●							●	
engeli				●							●	●
fortis	●	●	●	●								
geniculatis	●	●	●						●	●	●	●
hypselopterus	●									●	●	
hysnotos											●	
irwini											●	
loewi								●	●	●	●	
minutus										●		
montanus	●											
nanus									●			
natalensis		●	●	●								●
nigricans							●		●			
nigroflavipes	●	●	●	●				●			●	●
nigroseta										●		
oldroydi			●	●					●			
punctipennis			●									
reburrus							●			●		
saliotragus										●	●	
silvestris				●								
swazi						●						
tarsalis			●	●	●							
umbripennis				●	●	●	●	●		●		●

been very different from the usual as regards rainfall and other such important climatic considerations. My own experience with *androclea* in Pietermaritzburg is of interest. This species is clearly most abundant in March and April. Early season specimens first appear in January or February and the last specimens may be found as late as July. Specimens collected in October, November and December probably represent very early or very late emergences and these are rare. In some instances succession occurs; for example when *androclea* becomes less common (ie. from about May) specimens of *umbripennis* begin to be encountered in the same situations occupied by *androclea*. Some localities apparently yielded more than one species at the same time of the year. (eg. *natalensis* and *fortis* have been collected at Balgowan and Town Bush, Pietermaritzburg, on the same occasions). These species are however unlikely to compete as they are normally found to occupy very different habitats (eg. *natalensis* is found in forest situations while *fortis* occupies open grassland situations even if only a few metres from forest edges).

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Date received: 4 June 1980.

SPECIES INDEX

Names in italics are synonyms. The valid name appears in brackets after the synonymised name.