Review of some Afrotropical Acroceridae, with descriptions of eight new species from South Africa (Diptera: Brachycera)

by

DAVID A. BARRACLOUGH

Natal Museum, Pietermaritzburg, 3201 South Africa

Eight new species in the subfamilies Panopinae and Acrocerinae are described and the philoptine genus Africaterphis is revised. New species are Astomella minuta, A. gessi, A. parvacoronata, Corononcodes homalostemma, Ogcodes (Ogcodes) fasciata, O. (O.) kosi, Sabroskya palpalis and Acrocera londti. Host records for Astomella capensis Schlinger and Ogcodes (Ogcodes) caffer Loew are given.

Schlinger (1960 a & b) revised the South African Acroceridae, providing keys to subfamilies, genera and species. Since then, no new acrocerids have been described from Africa south of the equator, although some have been described from Madagascar. The new species described in this paper are from the collections of the Natal Museum, Pietermaritzburg (NM) and the Albany Museum, Grahamstown (AM).

The terminology used in the descriptions is based on that of McAlpine (1981) and Schlinger (1981), but reference has also been made to Brunetti (1926), Sabrosky (1950) and Schlinger (1959, 1960 a & b, 1968).

All descriptions are based on the holotypes, but are supplemented with information taken from paratypes where possible. The latter information is given in parentheses.

Astomella Lamarck

Astomella has until now only rarely been recorded from the Afrotropical region, with the holotypes of A. acuta Schlinger, 1959 (Tanzania) and A. capensis Schlinger, 1960a (South Africa) and an unplaced male being the only known specimens. However with the description of three new species from South Africa, it appears that the genus is more abundant than expected, and the discovery of more southern African species would not be surprising, especially since the known fauna appears not to be a group of closely related species. A. acuta is very distinct from the other species, in having an unusually shaped postpronotum and rather prominent antennal tubercle. A. minuta is clearly distinct from A. capensis and the closely related A. gessi and A. parvacoronata, in having a dark brown postpronotum and abdominal tergites without fasciae.

Key to Afrotropical species of Astomella

I.	Postpronotum with acute projection on inner dorsal margin	cuta
	Postpronotum without projection on inner dorsal margin	. 2
	Anterior surface of fore coxa with at least some dark brown pile mi	
_	Anterior surface of fore coxa with white to gold pile only	. 3
3.	Ocellar tubercle barely raised above eye level (Fig. 10)	nsis
_	Ocellar tubercle distinctly raised above eye level (Figs 13 & 18)	. 4
	Scutellum mostly white to pale yellow	
	Scutellum dark brown to black parvacoro	

Astomella minuta sp. nov., Figs 1-9

MALE. Total length 6,0 mm (4,0-6,5 mm); length of wing from extreme base 4,0 mm (3,0-4,5 mm).

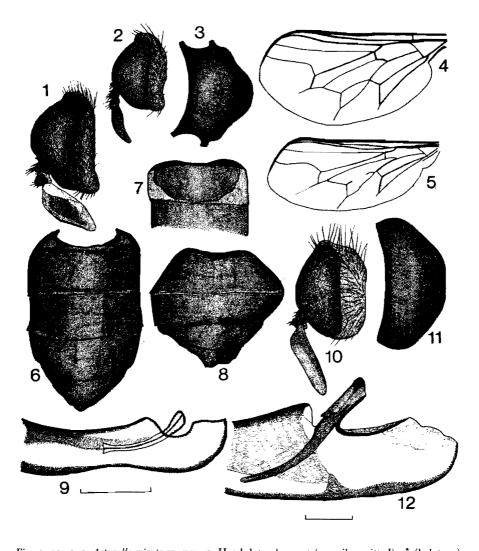
Head (Fig. 1): Eyes and occiput dark brown to black. Ocellar tubercle slightly raised. Eyes occupy three- to four-fifths of head capsule. Antennal tubercle indistinct. Scape and pedicel subequal in length, brown with short brown pile; flagellum 2,5 $(2,5-3,0) \times$ combined length of scape and pedicel, 1,5 $(1,5-3,0) \times$ as wide as pedicel testaceous (testaceous to dark brown) with sparse white pruinosity. Eyes almost contiguous below antennae (up to 1,5 × scape width apart). Proboscidial covering brown (brown to black); buccal cavity yellow. Pile on eye and occiput brown, distinctly longer above and sparser on occiput, about 1,0-1,5 × scape length.

Thorax: Wholly dark brown to black. Pile white to pale brown, longer than head pile, about $2,0-3,0 \times$ scape length; pile sparse on anepimeron, sparse to absent on antepronotum, absent on lower posterior part of anepisternum, entire katepisternum and meron (sometimes absent on lower parts only). Pro- and metathoracic spiracles white. Scutellum about $2,0 \times$ as wide as long (Fig. 3). Haltere entirely testaceous to brown (knob partly white).

Legs: Fore coxa pale testaceous, mid coxa testaceous, hind coxa brown; pile yellow to brown on anterior and posterior surfaces of fore coxa, white to brown on anterior and posterior surfaces of mid coxa and on anterior surface of hind coxa, pile about 1,5-2,0 × scape length. Trochanters yellow (yellow to pale testaceous); pile brown ventrally, about half eye pile length, but subequal in length to eye pile on hind trochanter. Femora yellow (yellow to brown); pile brown, mostly as long as on eye. Tibiae yellow, but hind tibia brownish on apical half; pile brown, length less than half that of femoral pile; spurs yellow, subequal in length to scape. Fore and mid tarsal segments yellowish basally, brownish apically; hind tarsus brown to blackish, swollen relative to fore and mid tarsi; pile brown, as long as on tibiae, longer and paler at apices of some segments. Claws dark brown to black; pulvilli yellow.

Wing (Fig. 4): Hyaline. Veins brown, paling towards posterior margin. Short yellow to brown setulae along C and R₁ to junction of C and Sc (sometimes not this far), setulae longer and more numerous towards wing-base. R₄ sharply angled near junction with cell r₅. Upper calypter and much of wing-base covered with whitish pruinosity; hind margin of calypter with white to brown pile about as long as on femora. Lower calypter semi-opaque and whitish, rim testaceous (white to testaceous); pile sparse and yellow to brown, about as long as on eye.

Abdomen (Figs 6, •7 & 9): Widest at TII and TIII (Fig. 6). Dark brown (SI-SIV exceptionally whitish), but yellowish along hind margins of terga and sterna



Figs 1-12: 1-9. Astomella minuta sp. nov. 1. Head, lateral aspect (eye pile omitted), \$\delta\$ (holotype).

2. Head, lateral aspect (eye pile omitted), \$\Psi\$ (paratype). 3. Scutellum (pile omitted), \$\delta\$ (holotype). 4. Wing, \$\delta\$ (holotype). 5. Wing, \$\Psi\$ (paratype). 6. Abdomen (pile omitted), \$\delta\$ (holotype). 7. Tergal fascia, lateral broadening (pile omitted), \$\delta\$ (paratype). 8. Abdomen (pile omitted), \$\Psi\$ (paratype). 9. Aedeagal apex, lateral view, \$\delta\$ (paratype). 10-12:

Astomella capensis Schlinger. 10. Head, lateral aspect (eye pile omitted), \$\delta\$ (holotype).

11. Scutellum (pile omitted), \$\delta\$ (holotype). 12. Aedeagal apex, lateral view. (Scales = 0,1 mm, Figs 9 & 12).

II-III (white to yellowish; exceptionally, this colouring broadens laterally on TII-TIV, Fig. 7). Pile testaceous to brown, up to three times eye pile length; dense on TI, TII and TV, more prominent along midline of TIII and TIV (often sparse on TVI); sternal pile white to yellow, subequal in length to eye pile. Aedeagal apex as in Fig. 9.

Female as for male, except: Total length 5,0 mm; length of wing from ex-

treme base 4,0 mm.

Head (Fig. 2): Flagellum less than $2.0 \times$ combined length of scape and pedicel, less than $1.5 \times$ as wide as pedicel, more acutely pointed apically, blackish with short brown pile.

Wing (Fig. 5): Brownish. R4 less sharply angled near junction with cell r5; cell m3 incomplete.

Abdomen (Fig. 8): More globular dorsally, widest at junction between TII and TIII. Sternal pile shorter.

ETYMOLOGY Minutus (L.) = small, insignificant; refers to the small size of this

species relative to other Afrotropical congeners.

MATERIAL EXAMINED. Holotype, &: SOUTH AFRICA: 'Cape Province / Belmont Valley / Grahamstown / 5-9.xi.1971 / F. W. Gess'; 'Malaise trap'. Paratypes: 2 &, same data; 34 &, same data except: 28-31.x.1971 (2); 12-15.xi.1971 (1); 24-26.xi.1971 (3); 29-30.xi.1971 (1); 6-8.xii.1971 (5); 8-14.xii.1971 (1); 14-20.xii.1971 (3); 20-23.xii.1971 (6); 23-28.xii.1971 (1); 28-31.xii.1971 (2); 3-6.i.1972 (3); 6-14.i.1972 (1); 1 \, 9, same data except: 24-26.xi.1971. Holotype and 28 &, 1 \, 9 paratypes in Albany Museum, Grahamstown; 8 & paratypes in Natal Museum, Pietermaritzburg (type number NM 2604).

A. minuta is distinct from A. capensis, A. gessi and A. parvacoronata in having a dark brown postpronotum and abdominal tergites without fasciae.

Astomella capensis Schlinger, Figs 10-12.

Astomella capensis Schlinger, 1960 a: 464–466.

This species is distinguished from the closely related A. gessi and A. parvacoronata in having the ocellar tubercle barely visible in lateral view (Fig. 10) and the aedeagal apex as in Fig. 12. It also differs from A. gessi in the colour of the scutellum (Fig. 11).

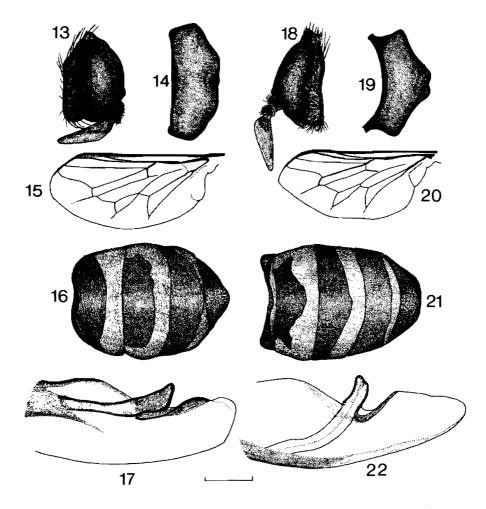
A male of this species (compared with male holotype) was collected from the nest of a migid spider, *Moggridgea crudeni* Hewitt at Alicedale in the Cape Province, by F. Cruden (label data). According to F. W. Gess (pers. comm.), the spider was identified by its author. There is only one published host record for *Astomella*: Brauer (1869) reared A. hispaniae Lamarck from Cteniza ariana Kock (Ctenizidae) in Corfu. Schlinger (pers. comm.) has reared A. gravis Erichson from a theraphosid spider in Israel. It appears that Astomella species are restricted to mygalomorph hosts.

Astomella gessi sp. nov., Figs 19-17.

MALE. Total length 12,0 mm; length of wing from extreme base 7,0 mm.

Head (Fig. 13): Eyes and occiput black. Ocellar tubercle well raised above eye level, with median groove and sparse white pile. Eyes occupy about three-fifths of head capsule. Antennal tubercle indistinct. Scape and pedicel subequal in length, black with very sparse brown pile; flagellum 3,0 × combined length of scape and pedicel, 2,0 ×

as wide as pedicel, testaceous in apical three-quarters, light brown basally (left antenna missing). Eyes contiguous below antennae. Proboscidial covering blackish; buccal cavity dark brown. Pile on eye and occiput brown and white respectively, $2,0 \times$ as long above, where it is $2,0 \times$ scape length.



Figs 13-22. 13-17: Astomella gessi sp. nov., & (holotype). 13. Head, lateral aspect (eye pile omitted). 14. Scutellum (pile omitted). 15. Wing. 16. Abdomen (pile omitted). 17. Aedeagal apex, lateral view. 18-22: Astomella parvacoronata sp. nov., & (holotype). 18. Head, lateral aspect (eye pile omitted). 19. Scutellum (pile omitted). 20. Wing. 21. Abdomen (pile omitted). 22. Aedeagal apex, lateral view. (Scales = 0,1 mm, Figs 17 & 22).

Thorax: Dark brown to black with white to yellow postpronotum, upper part of postalar callus testaceous, scutellum translucent white to yellow with brown margin (Fig. 14). Pile white, reaching almost 2,0 × head pile length, sparser and shorter on median part of scutum, absent on lower posterior half of anepisternum and lower half of katepisternum; meron with row of short white hairs along upper margin. Pro- and metathoracic spiracles brown. Scutellum more than 2,0 × as wide as long, broadly notched apically. Haltere testaceous to brown, part of knob white.

Legs: Fore coxa yellow, mid coxa testaceous to brown, hind coxa mostly dark brown; white pile on anterior and posterior surfaces, but sparse on posterior surface of mid coxa and absent on posterior surface of hind coxa, pile about 2,0 × scape length. Trochanters yellow to pale testaceous; pile whitish ventrally, about two-thirds scape length on fore trochanter, 2,0 × this length on mid and hind trochanters. Femora yellow with brown streaks; pile white, subequal in length to that on lower part of eye. Tibiae yellow to testaceous, but hind tibia apically brownish; pile yellow on fore tibia, yellow and brown on mid and hind tibiae, about half femoral pile length; spurs yellow to testaceous, fore and mid spurs subequal in length to scape, hind spur 1,5 × as long. Fore tarsus yellowish, with yellow pile up to 2,0 × tibial pile length (left tarsus missing); mid tarsus testaceous, but segments apically brownish with yellow and brown pile up to 2,0 × tibial pile length; hind tarsus testaceous, segments apically blackish with brown pile (left tarsus and apical three segments of right tarsus missing). Claws black; pulvilli yellow to testaceous.

Wing (Fig. 15): Hyaline. Veins brown, paling towards posterior margins. Short yellow to brown pile on C in basal two-thirds of first costal sector. R_1 with short yellow to brown pile up to junction with C. Wing-base brownish. Lower calypter semi-opaque and whitish with white rim; pile sparse and white, about as long as on eye.

Abdomen (Figs 16 & 17): Widest towards hind margin of TIII. Terga brown, posterior fasciae white to yellow. Fascia on TI present only laterally; fasciae on TII and TIII about one third segment lengths, strongly broadened laterally to occupy entire margins; TIV fascia about one-fifth to one-quarter segment length, broadening laterally to occupy posterior two-thirds of margin. Pile on TI and TII white on brown sections, but yellow on fasciae; pile on TIII and TIV white along anterior margins, brown to yellow on posterior three-quarters of each segment; pile on TV and TVI mixed white and brown. TI pile short and sparse; TII pile dense, subequal in length to thoracic pile; pile on TIII and TIV shorter and sparser than on TII; pile on TV and TVI subequal in length to TII pile. SI brownish; SII mostly yellowish; SIII—SV brown with white to yellow fasciae on posterior one-thirds, narrowing laterally along hind margins; apical sternites brown. Sternal pile white to yellow, subequal in length to pile on lower part of eye. Aedeagal apex as in Fig. 17.

ETYMOLOGY. Named after Dr F. W. Gess, in recognition of his noteworthy acrocerid collecting in the Grahamstown area.

MATERIAL EXAMINED. Holotype, &: 'SOUTH AFRICA: Natal / Ashburton / 11.xi.1981 / W. H. Chapman / In swimming pool'; in Natal Museum, Pietermaritz-burg (type number NM 2605).

A. gessi, the only South African Astonella species known from outside the eastern Cape, is distinguished from A. capensis and A. parvacoronata in having the ocellar tubercle distinctly raised above eye level but not concave above, and the scutellum mostly white to pale yellow. Atomella parvacoronata sp. nov., Figs 18-22.

MALE. Total length 11,5 mm; length of wing from extreme base 6,5 mm.

Head (Fig. 18): Eyes and occiput black. Ocellar tubercle prominently raised above eye-level, height subequal to scape length, concave above. Eyes occupy about four-fifths of head capsule. Antennal tubercle just visible in lateral view. Pedicel about two-thirds scape length; scape blackish, pedicel blackish with lower half testaceous, both segments dorsally with abundant short brown pile. Flagellum just less than $3.0 \times 1.0 \times 1.$

Thorax: Dark brown to black with yellowish postpronotum. Pile yellow, 1,5 to 2,0 × head pile length, sparser and shorter on median part of scutum and on lower posterior part of anepisternum, absent on most of katepisternum and meron, sparse and short along upper meron margin. Pro- and metathoracic spiracles whitish. Scutellum about 2,0 × as wide as long, apically notched (Fig. 19). Haltere stem yellowish, knob brown.

Legs: Fore coxa yellowish anteriorly, brownish posteriorly; mid and hind coxae mostly brown; pile yellow on all surfaces, sparse to absent on posterior surface of hind coxa, about 1,5 × scape length. Trochanters yellow, pile yellow ventrally, subequal in length to pile on lower part of eye. Femora yellow, pile yellow, fore femoral pile subequal in length to pile on lower part of eye, mid and hind femoral pile 2,0 × as long and denser below. Tibiae yellow to testaceous; fore tibia with yellow pile, about two-thirds femoral pile length; mid and hind tibial pile mixed yellow and black, mostly half femoral pile length; spurs tipped with brown, fore spur half scape length, mid spur two-thirds scape length, hind spur subequal in length to scape. Fore and mid tarsi testaceous, fore tarsal pile yellowish, subequal in length to tibial pile, reaching 2,0 × this length near apices of last two segments; mid tarsal pile brown, of similar length; hind tarsus mostly blackish, but basitarsus testaceous dorsally and laterally, swollen relative to fore and mid tarsi, pile mostly brown and subequal in length to tibial pile, but yellow and 2,0 × this length near apex of fifth segment. Claws apically black, basally testaceous; pulvilli yellow.

Wing (Fig. 20): Hyaline. Veins brown, paling towards posterior margin. Short yellow to brown pile on C in first costal sector and on R₁ in basal third of first costal sector. Upper calypter whitish, wing-base testaceous. Lower calypter semi-opaque and whitish, rim yellow to testaceous. Pile on calypters about as long as on lower part of eye.

Abdomen (Figs 21 & 22): Widest at hind margin of TII. Terga brown; posterior fasciae white to yellow. Fascia white on TI, occupying full width of hind margin, but narrowing to be absent laterally; fasciae on TII and TIII yellow, broadening laterally, occupying entire lateral margin length on TII and about posterior half on TIII; TIV with narrow yellow fascia occupying about posterior one-sixth medially, narrowing to be absent on lateral margin. Pile yellow on TI, short and sparse; pile yellow on TII, dense and subequal in length to thoracic pile; pile on TIII and TIV similar to background colour, shorter than on TII, especially in brown areas; pile on TV and TVI brown and white, subequal in length to TII pile. SI-SIII mostly testaceous, SIV

brown with posterior half yellow, remaining sternites wholly brown. SI bare; pile yellow on remaining sternites, subequal in length to eye pile. Aedeagal apex as in Fig. 22.

ETYMOLOGY. Parvus (L.) = small; corona (L.) = crown; refers to the crown-like ocellar tubercle.

MATERIAL EXAMINED. Holotype, &: SOUTH AFRICA: 'Cape Province / Belmont Valley / Grahamstown / 1-13.iii.1972 / F. W. Gess'; 'malaise trap'; in Albany Museum, Grahamstown.

A. parvacoronata is distinguishable from A. capensis and A. gessi in having the ocellar tubercle prominently raised above eye level and distinctly concave above. A. parvacoronata and A. capensis share the same type locality. The former species was collected in early March, and A. capensis has only been collected in May and June.

Corononcodes Speiser

C. coronatus (Figs 23 & 24) is the type species, originally described from Kimberley. The holotype has been transferred from the Transvaal Museum collection to that of the Natal Musuem, where it will remain; it is a female, and not a male as stated by Speiser in his description.

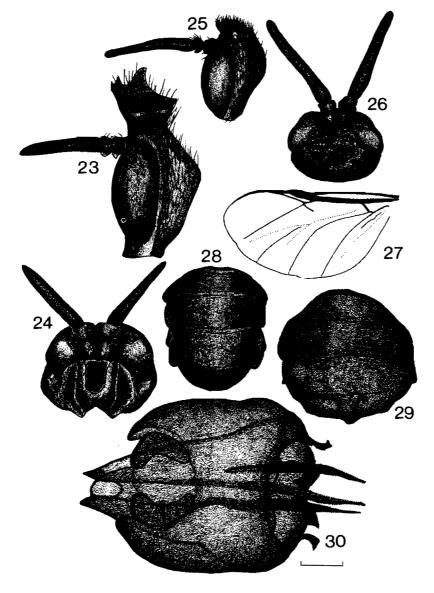
Key to Afrotropical species of Corononcodes

Corononcodes homalostemma sp. nov., Figs 25-30

MALE. Total length 5,0 mm (4,0-5,0 mm), excluding antennae; length of wing from extreme base 4,0 mm (3,0-4,0 mm).

Head (Figs 25-26): Eyes and occiput blackish. Ocellar tubercle height onethird (one-quarter to one-third) head height; ocelli testaceous (sometimes not visible), median ocellus less than half size of lateral ocellus; ocellar tubercle mostly at one level, but rugose middle section raised one-third (unraised to one-third) total height above lateral margins, with three to four low ridges radiating from each side of it through slightly excavated areas to lateral margins (ridges sometimes absent); tubercle dorsally oblate, occiput visible in dorsal view. Eyes occupy about half to five-eighths of head capsule. Pedicel about half to two-thirds scape length, flagellum about 4,0 × combined length of scape and pedicel; scape dark brown to blackish, pedicel and flagellum reddish-brown (scape reddish-brown, pedicel and flagellum dark brown to blackish); scape and pedicel with yellow to brown pile. Epistomal area reduced; margin of buccal cavity coincident with lower margin of eyes. Proboscidial covering dark brown; buccal cavity testaceous to brown. Pile on occiput and ocellar tubercle similar in colour and length to that on scape and pedicel. Pile on eye yellow (yellow to brown), restricted to a row perpendicular to upper eye margin and opposite antennal-base, length of row subequal to width of scape apex $(1,0 \text{ to } 1,5 \times \text{width of apex})$.

Thorax: Dark brown (postalar callus sometimes testaceous). Pile yellow (yellow to brown), absent below anepisternum, anterior and katatergite, and absent on upper and lower margins of proepisternum, anterior (lower) margin of anepisternum, lateral corners of scutellum and on entire mediotergite, pile sparse to absent on anater-



Figs 23-30. 23-24: Corononcodes coronatus Speiser, \(\partial \) (holotype). 23. Head, lateral aspect. 24. Head, dorsal aspect. 25-30: Corononcodes homalostemma sp. nov. 25. Head, lateral aspect, \(\partial \) (holotype). 26. Head, dorsal aspect, \(\partial \) (holotype). 27. Wing, \(\partial \) (holotype). 28. Abdomen (pile omitted), \(\partial \) (holotype). 29. Abdomen (pile omitted), \(\partial \) (paratype). 30. Genitalia, dorsal view (setae omitted), \(\partial \) (paratype). (Scale = 0,1 mm, Fig. 30).

gite, pile up to 2,0 × as long as on head. Pro- and metathoracic spiracles yellow (white to yellow). Haltere yellow (yellow to testaceous), but knob brown.

Legs: Coxae brown, pile white to yellow and subequal in length to head pile, pile sparse on posterior surface of fore coxa and sparse to absent on posterior surfaces of mid and hind coxae. Trochanters testaceous to brown, pile ventral and similar to coxal pile. Femora yellow to testaceous (brownish on apical half to two-thirds), pile white to yellow, half as long to as long as head pile, sparse to absent on posterior surfaces. Tibiae yellow to testaceous (to brown), pile similar to femoral pile, but present along posterior surfaces; spurs poorly developed, less than half scape length. Tarsi yellow to testaceous, fifth segment brownish, pile similar to femoral and tibial pile, but longer on fifth segment. Claws brown to black; pulvilli white to yellow.

Wing (Fig. 27): Veins brownish, but pale on posterior two-thirds (sometimes not pale). Upper calypter partially transparent with white to yellow pruinosity, rim yellow (white to testaceous). Lower calypter mostly hyaline, rim white to testaceous with sparse white pile along posterior margin, pile half as long as pile on upper part of head.

Abdomen (Figs 28 & 30): Widest at TII; TIII narrowed towards hind margin. Wholly dark brown (SI sometimes mostly testaceous). Pile white to yellow, subequal in length to thoracic pile, but sparser on sterna. Sterna keeled. Genitalia as in Fig. 30, exserted at abdominal apex.

Female. Total length 5,0 mm; length of wing from extreme base 5,0 mm.

Head: Flagellum 3,0 × combined length of scape and pedicel. Row of eye pile usually absent. Ocellar tubercle with rugose middle section raised one-third to one-half total height above lateral margins.

Abdomen (Fig. 29): Distinctly more globular, widest at TII and TIII. Testaceous to brown.

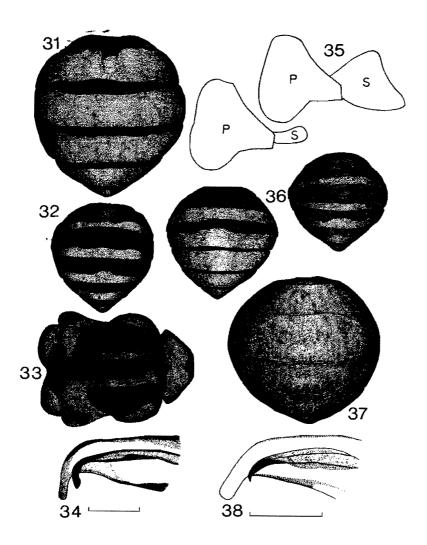
ETYMOLOGY. Homalos (Gr.) = level; stemma (Gr.) = crown; refers to the more or less level ocellar tubercle.

MATERIAL EXAMINED. Holotype, δ : SOUTH AFRICA: 'Cape Province / Belmont Valley / Grahamstown / 4-17.v.1972 / F. W. Gess'; 'Malaise trap'. Paratypes: 4 δ , 4 \circ , same data; 5 \circ , same data except: 12-26.iv.1972(4); 17-24.v.1972(1). Holotype and 7 \circ , 3 \circ paratypes in Albany Museum, Grahamstown; 2 \circ , 1 \circ paratypes in Natal Museum, Pietermaritzburg (type number NM 2606).

C. homalostemma is easily distinguished from C. coronatus in having the epistomal area reduced and the haltere knob brown.

Africaterphis Schlinger

Since series of both sexes of A. acroceroides (Sabrosky) and A. gertschi (Schlinger) are now available, some comments on sexual dimorphism can be made and separate keys to the different sexes presented.



Figs 31-38. 31-34: Africaterphis acroceroides (Sabrosky). 31. Abdomen, δ. 32. Abdomen, ♀. 33. Thorax, dorsal aspect, δ. 34. Aedeagal apex, lateral view. 35-38: Africaterphis gertschi (Schlinger). 35. Variation in scutal spot behind postpronotum (P = postpronotum, S = spot). 36. Abdomen, variation in size of fasciae on TII-TVI (pile omitted), δ. 37. Abdomen (pile omitted), ♀. 38. Aedeagal apex, lateral view. (Scales = 0,1 mm, Figs 34 & 38).

Key to the species of Africaterphis

MALES:

FEMALES:

Africaterphis acroceroides (Sabrosky), Figs 31-34 Terphis acroceroides Sabrosky, 1950: 50

Males are larger than females (females 4,0-5,0 mm; males 6,0-7,0 mm) and have yellow fasciae occupying the posterior four-fifths of the black TII to TVI (Fig. 31). Females have yellow fasciae occupying no more than the posterior one-third of the dark brown TII to TVI (Fig. 32). Aedeagal apex as in Fig. 34.

Africaterphis gertschi (Schlinger), Figs 35-38
Terphis gertschi Schlinger, 1960a: 497-499

This species was previously known from only two or three imperfect males. Seven additional males and eight females are now to hand. Unlike in A. acroceroides, the females are larger than the males (females 5,5-6,5 mm; males 4,5-5,0 mm).

MALE. The yellow to brown spot behind the tip of the postpronotal lobe on the scutum, varies from small and ovalish to large and subtriangular (Fig. 35). Yellow fasciae on the abdominal tergites occupy from about one-third of TII and two-thirds of TV, to about half of TII and nine-tenths of TV (Fig. 36). Aedeagal apex as in Fig. 38.

Female. As for male, except: Antennal flagellum with long setae absent along ventral margin. Postpronotum dark brown to black, posterior corners yellow to testaceous. Scutum sometimes with dull brown area behind postpronotum. Scutellum blackish, with only a slight brownish tinge on part of posterior margin. Wing veins testaceous to brown. Abdomen widest at TIII and TIV (Fig. 37), usually wholly dark brown to black, posterior margins of sternites sometimes testaceous. TI at most only slightly raised, tergites not folded over ventrally, TII–TIV with anterior margins not deeply grooved.

MATERIAL EXAMINED. 7 &, 8 \mathfrak{P} : SOUTH AFRICA: Cape Province, Hilton, Grahamstown, F. W. Gess, Malaise trap: 8-12.x.1975 (1 \mathfrak{P}); 22-26.x.1975 (1 \mathfrak{P}); 28-30.x.1970 (1 \mathfrak{P}); 5-9.xi.1970 (1 \mathfrak{P}); 5-9.xi.1970 (1 \mathfrak{P}); 12-30.xi.1970 (3 \mathfrak{P} 4 \mathfrak{P}); 1-18.xii.1970 (1 \mathfrak{P}); 5-7.xii.1979; (1 \mathfrak{P}) 1-16.i.1971; (1 \mathfrak{P}).

Ogcodes (Ogcodes) Latreille

Two new species of Ogcodes have been collected in the Kosi Bay area of Natal. Three males of O. kosi sp. nov. were collected flying together with a number of Rhinia apicalis Wiedemann (Calliphoridae), in the shade of a large Acacia growing a few hundred metres from the estuary-bay junction. One male of O. fasciata sp. nov. was collected further inland, beneath the tree canopy in a swamp forest, about two kilometres from the entrance to the Kosi Bay Nature Reserve.

Identifications using Schlinger's (1960a) key may be doubtful, particularly because of the difficulty in making a decision at couplet 5 (Scutellum wholly orange-brown OR Scutellum black or brown, with distinct pale margins). For example, O. davatus Becker may have only minute whitish patches on the antero-lateral corners of the scutellum, and if scutellar colouring were taken as unicolorous as a result, lack of detail in later couplets could lead to a misidentification. Consequently, I have taken a consensus of the more important characters used by Brunetti (1926), Sabrosky (1950) and Schlinger (1960a, b & c) to separate Afrotropical O. (Ogcodes) species, and have constructed a more detailed key.

Key to Afrotropical species of O. (Ogcodes)

1. Scutum dark brown or black, without vittae 2
— Scutum yellow to brown with three vittae 5
2. Scutellum yellow; abdomen with spotted areas
— Scutellum dark (median black area if yellowish); abdomen without spotted areas 3
3. Scutum dark brown
— Scutum black
4. Scutellum dark brown to black; M ₁ absent; femora mostly brown
varius pallidimarginalis
5. Scutellum wholly orange-brown, brown or black without pale basal corners or margins 6
— Scutellum dark brown to black, with pale basal corners or margins
6. Vittae contiguous (scutellum bright orange-brown); wings brown on basal half; femora
apically black; abdomen mostly orange-brown, fasciate, with spots on TII-TVneavei
Vittae separate; wings, femora and abdomen not so coloured or patterned
7. Femora black; genitalia black; (scutellum orange-brown; wings brownish; abdomen mostly
orange-brown)
- Femora yellow to orange; genitalia not black
femora yellow to testaceous and apically brownish; abdomen brown, fasciae white to
yellow)
- Fasciae on TII-TV, if present, occupying at most the posterior one-fifth
9. Scutellum brown to black; wings hyaline; femora yellow; abdomen mostly dark brown, nar-
row white to yellow fasciae on posterior one-sixth to one-fifth of TII-TVkosi
- Scutellum bright orange-brown; wings brownish-yellow; femora orange-yellow; abdomen
mostly orange-yellow, with spots on TII-TV congoenis
10. Anal vein ends free on wing margin; hind tibia of male incrassate; scutellum with pale
basal corners
— Anal vein ends in Cu2 far above wing margin; hind tibia of male unmodified; scutellum
with pale margins guttatus

Ogcodes (Ogcodes) fasciata sp. nov., Figs 39-42

MALE. Total length 8,0 mm; length of wing (measured from tegula) 6,0 mm.

Head (Fig. 39): Ocellar tubercle shiny brown to black, raised above eye level; pair of testaceous ocelli antero-laterally. Frontal triangle blackish. Scape brown, barely visible below frontal triangle. Pedicel testaceous with yellowish pruinosity. Flagellum brownish on basal half, testaceous on apical half, styliform with basal quarter to third swollen, apex with one to two hairs. Buccal cavity testaceous; proboscis absent. Occiput grey to black, projecting behind eye margin, pile yellow and more profuse at extreme upper and lower ends.

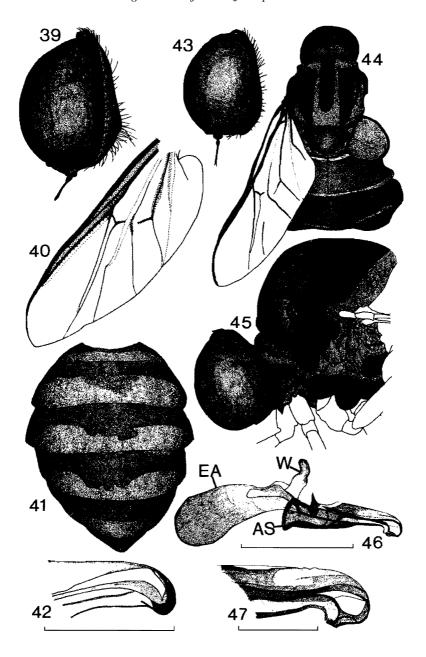
Thorax: Scutum testaceous with yellow pile; median vitta black, extending from anterior margin of scutum to three-quarters scutellum length from scutoscutellar suture: lateral vittae black and lanceolate, occupying posterior two-thirds of scutum. Prothoracic collar area dark brown; postpronotum yellowish; ventral margin of postalar wall brown. Scutellum wholly yellow to testaceous with brownish pile, longer than scutal pile. Pile absent along posterior margin of postpronotum, on apex of median vitta and on extreme lateral corners of scutellum. Antepronotum testaceous to brown and produced, pile yellow and short and sparse. Yellowish area between lower margin of postpronotum and upper margin of propleuron. Propleuron yellow to brown with yellow pile; lower margin of propleuron white to cream, this colouring extending anteriorly into light brown prosternal area and more broadly posteriorly through lower margin of anepisternum, upper margins of katepisternum and meron, and over most of anepimeron and katepimeron; remainder of anepisternum testaceous with yellow to brown pile; an epimeron with vellow pile; remainder of katepisternum and meron glossy dark brown. Katatergite testaceous to brown, pile yellow. Haltere stem white to cream, knob brownish-pruinose. Mediotergite brownish above haltere and on lower two-thirds of posterior margin, remainder testaceous with yellow pile, but pile absent posteriorly.

Wing (Fig. 40): Brownish. Veins dark brown to blackish; C brown on basal half, blackish on apical half. M_1 present, joined to base of R_{4+5} by r-m, and slightly extended towards M_4 . m-cu oblique to C, joined to Cu_2 at bend. Anal vein joins Cu_2 at wing margin. Lower calypter testaceous with blackish rim, pile on rim and surface white to yellow.

Legs: Coxae testaceous to brown, pile white on anterior and posterior surfaces, but sparse posteriorly on mid and hind coxae. Trochanters similarly coloured, pilose ventrally. Femora testaceous, but brownish apically, irregular white streak on anterior surfaces, pile short and yellow. Tibiae testaceous, pile more abundant than on femora. Tarsi brownish, but basitarsi testaceous, pile yellow to brown, longer apically. Pulvilli brownish; claws black.

Abdomen (Figs 41-42): Dorsally ovate. TI-TVI with white to yellow fasciae along posterior margins, remainder of tergites brown (Fig. 41). TI with fascia occupying almost entire length medially, but narrowing towards lateral margins. TII with fascia occupying posterior two-thirds, but absent along extreme lateral margins. TIII

Figs 39-47. 39-42: Ogcodes (Ogcodes) fasciata sp. nov., & (holotype). 39. Head, lateral aspect. 40. Wing. 41. Abdomen (pile omitted). 42. Aedeagal apex, lateral view. 43-47: Ogcodes (Ogcodes) kosi sp. nov. 43. Head, lateral aspect, & (holotype). 44. Entire dorsal aspect (pile omitted), & (holotype). 45. Thorax, lateral aspect (pile omitted), & (holotype). 46. Genitalia, lateral view, & (paratype). (AS = aedeagal sheath, EA = ejaculatory apodeme, W = wing). 47. Aedeagal apex, lateral view, & (paratype). (Scales = 0,1 mm, Figs 42 & 47; 0,4 mm, Fig. 46).



with fascia on posterior half to two-thirds, but this absent along extreme lateral margins; medially, brownish area occupies anterior two-thirds. TIV and TV with fascia on posterior half. TVI with fascia on posterior one-third. Pile distinctly longer along midline of TII-TVI and on lateral margins of TVI, sparse on lateral parts of fasciae, pile colour similar to that of background. SI whitish, SII-SVI whitish to testaceous on posterior half to two-thirds, remainder brownish; pile on SII-SVI, short and sparse and yellow. Aedeagus with gonopore indistinct (Fig. 42); ejaculatory apodeme short.

ETYMOLOGY. Fascia (L.) = band, strip; refers to the striking tergal fasciae.

MATERIAL EXAMINED. Holotype, 6: 'SOUTH AFRICA: Natal / Kosi Bay Nat[ure] Reserve / 2632DD, 30.xi-2.xii.1982 / Londt, Barraclough & / Stuckenberg, Forest / & open woodland area'; in Natal Museum, Pietermaritzburg (type number NM 2607).

Ogcodes fasciata belongs to that group of O. (Ogcodes) which has three scutal vittae. It is distinguished from O. clavatus Becker and O. guttatus Costa, in having the scutellum without pale basal corners or margins; from O. neavei Brunetti, in having separate scutal vittae; from O. trilineatus Brunetti, in having the femora yellow to orange; and from O. kosi sp. nov. and O. congoensis Brunetti, in having broad fasciae on the posterior half to two-thirds of the second to fifth abdominal terga.

Ogcodes (Ogcodes) kosi sp. nov., Figs 43-47

Male. Total length 4,5 mm (4,5 mm); length of wing (measured from tegula) 3,5 mm (3,5 mm).

Head (Figs 43-44): Ocellar tubercle shiny black, raised above eye level; pair of yellow (yellow to brown) ocelli antero-laterally. Frontal triangle dark brown above, paling to testaceous around antennal insertions. Scapes yellow to brown, contiguous below frontal triangle. Pedicel dark brown with yellowish pruinosity (pruinosity sometimes absent). Flagellum dark brown and styliform, basal quarter to third swollen, apex with one to two hairs. Proboscis absent. Occiput black, projecting behind eye margin, pile yellow to brown, longer and more profuse above.

Thorax (Figs 44-45): Scutum testaceous with yellow pile; median vitta black (dark brown to black), extending from anterior margin of scutum to two-thirds (half to two-thirds) scutellum length from scutoscutellar suture; lateral vittae black (dark brown to black) and lanceolate, occupying posterior two-thirds of scutum. Lateral scutum between anterior spiracle and postalar callus irregularly dark brown, merging with lateral vitta above. Prothoracic collar area dark brown to black; postpronotum testaceous to brown anteriorly, yellowish posteriorly; postalar callus white to cream; postalar wall dark brown, upper margin white to yellow, more broadly so posteriorly. Scutellum wholly dark brown to blackish, with yellow pile longer than scutal pile. Pile absent on yellowish part of postpronotum and on extreme lateral corners of scutellum. Antepronotum dark brown and produced, pile short to absent. Small yellowish area between lower margin of postpronotum and upper margin of propleuron. Propleuron dark brown with yellow pile; lower and posterior margins of propleuron white to yellow, this colouring extending anteriorly into light brown prosternal area and more broadly posteriorly through lower margin of anepisternum, upper margins of katepisternum and meron, and over most of anepimeron and katepimeron; remainder of anepisternum dark brown with yellow pile; anepimeron with sparse yellow pile; remainder

of katepisternum glossy dark brown, lower posterior margin with whitish pruinosity; remainder of meron dark brown and wholly covered with whitish pruinosity, as is most of pleuron posterior to this. Katatergite testaceous posteriorly, pile yellow. Haltere cream to light brown. Mediotergite glossy brown behind, yellow to testaceous along upper margin, yellowish (whitish pruinose to yellowish) laterally, pile white.

Wing (Fig. 44): Hyaline. Veins testaceous to dark brown. M_1 present, joined to R_{4+5} by r-m, and slightly extended towards M_4 . m-cu parallel to C (parallel to slightly oblique), joined to Cu_2 at bend. Anal vein reaches wing margin independently (sometimes joins Cu_2 at margin or just before). Lower calypter brown with dark brown rim, rim and surface with white to yellowish pile.

Legs: Coxae testaceous to dark brown, fore coxa with white pile posteriorly and anteriorly (sometimes absent anteriorly), pile absent anteriorly on mid and hind coxae. Trochanters similarly coloured, pilose ventrally. Femora varicoloured white to brown, irregular white streak on anterior surfaces, pile short and yellow. Tibiae testaceous, pile more abundant than on femora. Tarsi testaceous, but apical tarsomeres brownish, pile yellow and longer apically. Pulvilli testaceous to brown; claws black.

Abdomen (Figs 44, 46-47): Terga mostly dark brown. TI-TVI with fasciae along extreme hind margins or occupying up to one-fifth segment length medially, white to yellowish on TI-TV, yellow to testaceous on TVI. TII with pair of oval, whitish spots postero-laterally (sometimes absent). SI whitish to dark brown; SII-SV light to dark brown anteriorly, whitish posteriorly; SVI dark brown laterally, whitish to light brown medially and anteriorly. Pile white to yellow, absent on sterna. Aedeagus smoothly rounded apically, ventral margin more strongly angled behind gonopore (Fig. 47); ejaculatory apodeme long and well developed (Fig. 46).

ETYMOLOGY. Named after the type locality, Kosi Bay.

MATERIAL EXAMINED. Holotype, &: 'SOUTH AFRICA: Natal / Kosi Bay-Estuary / 2632DD, 16-19.iii.1982 / D. A. Barraclough / Indigenous bush area'; paratypes: 2 &, same data. Holotype and paratypes in Natal Museum, Pietermaritzburg (type number NM 2589).

Ogcodes kosi is most closely related to O. fasciata and O. congoensis. It is distinguished from O. fasciata in having the tergal fasciae occupying no more than the posterior one-fifth of the second to fifth terga, and from O. congoensis in having hyaline wings and the abdomen mostly dark brown.

Ogcodes (Ogcodes) caffer Loew
Oncodes [sic] caffer Loew, 1858: 68

A single (female?) of this species in the Natal Museum collection, identified by Oldroyd, was reared from an immature male drassid (det. P. Croeser, 1983). Generic and specific identification was impossible, due to the poor condition of the spider host (pinned dry beneath the fly) and a lack of reliable keys for Afrotropical Drassidae.

MATERIAL EXAMINED. 9 ?, SOUTH AFRICA: Hartebeespoort Dam, Brits District, 8.ii.1970, J. H. Potgieter.

Sabroskya Schlinger

Key to the species of Sabroskya

MALES

I. Palps absent (Fig. 49); TIV-TV with connecting white posterior fasciae ogcodoides
 Palps present (Fig. 48); TIV-TV without connecting white posterior fasciae palpalis

Because of the marked sexual dimorphism, particularly with respect to abdominal shape and colouring, a separate key to Sabroskya females should be drawn up once the female of S. palpalis becomes known.

Sabroskya palpalis sp. nov., Figs 48, 50, 52 & 54

MALE. Total length 6,5 mm; length of wing (measured from tegula) 4,5 mm.

Head (Fig. 48): Eyes brown with brown pile about as long as a tarsal claw. Ocellar tubercle shining black, with three testaceous ocelli. Frontal triangle dark brown, much reduced. Antenna testaceous and pruinose; scape hidden beneath lower junction of eyes; flagellum with swollen base, styliform extension more than half of total length, without lateral bristle. Proboscis not tapered, longer than fore basitarsus, short apical hairs present. Maxillary palp present, about two-thirds proboscis length. Occiput black, projecting behind eye margin, pile yellow and distinctly more profuse above.

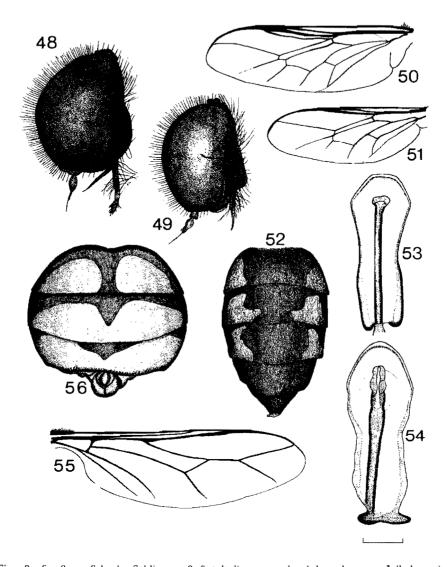
Thorax: Dark brown to black. Katepisternum, katepimeron, and parts of anepimeron and metanepisternum particularly glossy at some angles. Pile yellow to brown, but whitish on postalar callus, on lateral parts of mediotergite and on lateral scutum between wing-base and scutoscutellar suture. Pile longest on scutellum and absent on katepisternum, on medial third of prothoracic collar, on pleuron posterior to katatergite above and katepimeron below, and on medial part of mediotergite. Haltere cream to yellow.

Wing (Fig. 50): Hyaline. Basal C and sclerites brown, remainder of C and other veins mainly pale testaceous, venation indistinct. R_{2+3} present. R_4 slightly arched. Lower calypter with hyaline surface, rim brown anteriorly and testaceous posteriorly, pile on rim and surface short and white to yellow.

Legs: Coxae mostly black with white to yellow pile; pile absent on posterior of hind coxa. Trochanters dark brown, with white to yellow ventral pile. Femora brown on basal half to two-thirds, testaceous apically, with sparse white to yellow pile. Tibiae testaceous, pile yellow and abundant. Tarsi testaceous, with short and yellow pile. Pulvilli testaceous; claws black.

Abdomen (Fig. 52): Dark brown, but TII-TIV each with a pair of irregular white lateral markings, which are smaller and further removed from the lateral margins on successive terga. TV and TVI wholly dark brown. Pile white on TII-TVI, especially long and dense along midline and on posterior margins. SI-SIV dark brown medially and whitish laterally; apical sterna wholly dark brown; sternal pile white. Aedeagus as in Fig. 54.

ETYMOLOGY. Named for the presence of palps, which are absent in S. ogcodoides Schlinger.



Figs 48-56. 48-54: Sabroskya Schlinger. 48. S. palpalis sp. nov., head, lateral aspect, \$\delta\$ (holotype). 49. S. ogcodoides Schlinger, head, lateral aspect, \$\delta\$. 50. S. palpalis, wing, \$\delta\$ (holotype). 51. S. ogcodoides, wing, \$\delta\$. 52. S. palpalis, abdomen (pile omitted), \$\delta\$ (holotype). 53. S. ogcodoides, aedeagus, ventral view. 54. S. palpalis, aedeagus, ventral view (holotype). 55-56: Acrocera londti sp. nov., \$\begin{aligned}
\text{ (holotype)}. 55. Wing. 56. Abdomen (pile omitted, TI and TV not visible). (Scales = 0,1 mm, Figs 53 & 54).

MATERIAL EXAMINED. Holotype, 5: 'SOUTH AFRICA: Natal / Empangeni, 2831CA / In room, daytime; 10.ix.[19]79 / P. Reavell'; in Natal Museum, Pietermaritzburg (type number NM 2590).

S. palpalis is easily distinguished from S. ogcodoides in having palps. S. ogcodoides has no palps (Fig. 49), R_{2+3} present or absent and R_4 straight (Fig. 51), and the form of the aedeagus quite distinct (Fig. 53).

Acrocera Meigen

Schlinger (1960a) provided a key to South African Acrocera species which I have modified to include A. vansoni Schlinger (described in 1960b), A. londti sp. nov., and A. orbiculus (Fabricius). The last species was originally considered to be only Palaearctic, but has been recorded from Ethiopia (Brunetti 1926) and North America (Schlinger 1969).

Key to Afrotropical species of Acrocera

	R_{2+3} absent	
_	R_{2+3} present	
	R4 present only as basal stub or absent	
	R4 complete	
3.	R4 present only as basal stub, m-cu present	
	R4 absent, m-cu absent	
	m-cu present	
	m-cu absentlondti	
5.	Apical half of fifth tarsal segment blackorbiculus	
	Tarsus wholly yellowish-whiteturneri	
6.	Scutum vittate or spotted	
	Scutum unicolorous	
7.	R ₂₊₃ complete; TII mostly orange	
—	R ₂₊₃ incomplete apically; TII mostly black lindneri	

Acrocera londti sp. nov., Figs 55-56

Female. Total length 6,5 mm; length of wing (from extreme base) 5,5 mm.

Head: Eyes black, occiput grey to black, ocelli testaceous to brownish, antennae dark brown, buccal cavity blackish. Occiput with pale yellow pile, pile distinctly more profuse above.

Thorax: Glossy black, but testaceous on upper part of an epimeron and on anterior spiracle and surrounding area. Pile about as long as a tarsal claw, yellow to testaceous on scutum, whitish on pleuron. Haltere cream to yellowish.

Wing (Fig. 55): Hyaline. C, R_1 and A_1 testaceous; Sc and remaining veins dark brown to blackish. R_{2+3} absent, R_4 complete and straight, m-cu absent. Calypters covered with very short and dense white pile; rim of lower calypter yellowish with pile longer and more sparse.

Legs: Coxae dark brown with white pile more profuse on anterior surfaces and about twice thoracic pile length. Trochanters, femora, tibiae and tarsi yellowish, with yellow pile subequal in length to thoracic pile. Pulvilli yellowish; tarsal claws blackish.

Abdomen (Fig. 56): TI dark brown, pile absent. TII dark brown along anterior margin, laterally and along the entire midline; remainder yellow to orange. TIII with dark brown fascia along anterior margin, occupying about anterior three-quarters of

segment laterally, but narrowing towards midline, where dark colouring expands into a posteriorly directed triangular area; remainder of segment orange. TIV with irregular dark brown markings laterally, with each of these occupying anterior third of segment; medially an apiculate triangular area occupies the middle third of anterior margin; remainder of segment orange. TV yellow to orange, with irregular dark brown spot medially. Ovipositor testaceous to brown; cercus testaceous and acuminate, but dark brown along dorsal margin. Pile on TII–TV and on genitalia white to yellow, pile twice as long on genitalia as on tergites. Sterna mostly brown to dark brown, but irregularly testaceous medially; pile white to yellow, subequal in length to tergal pile.

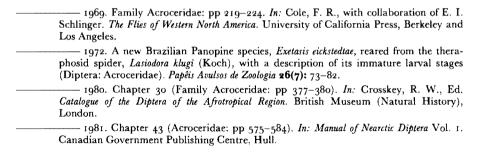
ETYMOLOGY. Named after the collector, Dr J. Londt.

MATERIAL EXAMINED. Holotype, 9: 'SOUTH AFRICA: Natal / Elandskop Dist[rict]. ca 40 / km W Pietermaritzburg / 2930CA, 10.ix.1979 / J. Londt, Rocky ridge / Grassland + Proteas'; in Natal Museum, Pietermaritzburg (type number NM 2660).

Acrocera londti is a member of species group III of Sabrosky (1944): venation incomplete, both branches of R_{4+5} present, but R_{2+3} absent. The other two Afrotropical members of this group are A. orbiculus (Fabricius) and A. turneri Schlinger. A. londti, unlike these, has m-cu absent.

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