

Four new species of the genus *Amblypsilopus* Bigot (Diptera: Dolichopodidae) from Tropical Africa and Papua New Guinea

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A. medvedevi sp.n. from Papua New Guinea, *A. nartshukae* sp. n. from Angola, *A. gorodkovi* sp. n. from Tanzania, *A. steelei* from Kenya are described. New records, catalogue and a key to known species of Afrotropical *Amblypsilopus* are given.

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Introduction

The genus *Amblypsilopus* was re-established by Bickel (1994) for a great number of species, most of which were originally described in *Sciapus* Zeller and *Chrysosoma* Guérin-Meneville from all zoogeographical regions. The author synonymised *Sciopolina* Curran, *Labeneura* Parent and *Leptorhethum* Aldrich with *Amblypsilopus*. The genus has mainly a pan-tropical distribution, being possibly polyphyletic (Bickel, 1994). For example, most Afrotropical species of *Amblypsilopus* form two large assemblages, differing by the position of arista on first flagellomere (basodorsal to dorsal or dorsoapical to apical) and some other characters. Those groups may represent two or more independent taxa. Forty three Afrotropical species are known from all parts of Tropical and South Africa, as well as on some Atlantic Ocean (St. Helena) and Indian Ocean (Madagascar and Seychelles) islands. *A. pallidicornis* is widespread throughout the western Pacific and Indian Ocean. South African *A. munroi* was found recently in Sri Lanka (Bickel, 1994). Indication of oriental *A. simplex* on Seychelles (Lamb, 1922: females only) probably refers to undescribed species. Australian fauna of the genus is the richest, having 87 mostly endemic species (Bickel, 1994). While processing unidentified material from the collections of the Natural History Museum, London (NHML), the Hungarian Natural History Museum (HNHM), and the Zoological Institute, St. Petersburg (ZIN), twelve species of the genus *Amblypsilopus* were found. In this paper descriptions of a new species from Papua New Guinea, three new species from Tropical Africa and new records for known African species are given. *A.*

cilifrons, *A. ernestus*, *A. signatus* and *A. madagascarensis* are transferred here from *Chrysosoma*. The only significant difference between descriptions of *A. ernestus* and *A. munroi* females (Curran, 1924) is anterior four tibia coloration (from dark-yellow in *A. munroi* to black-brown in *A. ernestus*). This character is very variable in other species of *Amblypsilopus* (Irwin, 1974; Bickel, 1994; see also diagnosis of *A. cilifrons* and *A. parilis* in this paper). Thus we synonymized the two species. *Sciapus integer* (Becker, 1923) should be placed in *Ethiosciapus* Bickel (see remark by Parent, 1929, under the key to *Sciapus*), and it is excluded from *Amblypsilopus*. Holotypes and paratypes of the new species and neotype of *A. longifilus* are conserved in the Natural History Museum (London), holotype of *A. gorodkovi* is placed in the Hungarian Natural History Museum (Budapest).

List of Afrotropical species of *Amblypsilopus* Bigot

(for references see Dyte & Smith, 1980)

aenescens Vanshuylbroeck, 1952: 138 (*Sciapus*). Madagascar.
arduus Parent, 1936: 6 (*Sciapus*). Zaire.
auratus Curran, 1924: 217 (*Chrysosoma*). South Africa, Zimbabwe (!), Zambia, Angola, Zaire, Tanzania (!), Nigeria.
basilewskyi Vanshuylbroeck, 1960: 319 (*Sciapus*). Tanzania, Kenya (!), Uganda (!).
bevisi Curran, 1927: 11 (*Sciapus*). South Africa.
bipunctatus Parent, 1934: 120 (*Sciapus*). Kenya.
bonniae Irwin, 1974: 245 (*Sciopolina*). South Africa.
cilifrons Parent, 1937: 126 (*Chrysosoma*). Nigeria, Togo (!), Zaire, Kenya, n. comb.
coalescens Parent, 1934: 121 (*Sciapus*). Zaire.
cuthbertsoni Parent, 1937: 129 (*Sciapus*). Zimbabwe.
disjunctus Parent, 1936: 1 (*Chrysosoma*). Zaire, Nigeria.

- fasciatus* Curran, 1924: 216 (*Sciopolina*). South Africa.
= *palliatu*s Curran, 1927: 12 (*Sciapu*s).
- finitimus* Parent, 1939: 262 (*Chrysosoma*). Zaire.
- flabellifer* Becker, 1923: 45 (*Sciapu*s). Madagascar, ?Zaire.
- flavioallu*s Becker, 1923: 40 (*Leptorhethu*m). Cameroun, Equatorial Guinea.
- gorodkovi* sp. n. Tanzania.
- haemorrhoidalis* Becker, 1923: 46 (*Sciapu*s). Ethiopia, Uganda, South Africa.
- inflexus* Becker, 1923: 40 (*Sciapu*s). Uganda, Zaire, South Africa, Madagascar, St. Helena.
- lenga* Curran, 1929: 1 (*Sciapu*s). Liberia, Sierra Leone, Zimbabwe.
= *barbipalpis* Parent, 1937: 128 (*Labeneura*, as subgenus of *Sciapu*s).
- longifilus* Becker, 1923: 28 (*Chrysosoma*). Tanzania, Kenya, Zaire, St. Helena.
- macularivenu*s Irwin, 1974: 251 (*Sciopolina*). South Africa.
- madagascarensis* Vanschuytbroeck, 1953: 89 (*Chrysosoma*). Madagascar, **n. comb.**
- miseru*s Parent, 1935: 81 (*Chrysosoma*). Mozambique, Zimbabwe (!).
- munroi* Curran, 1924: 218 (*Chrysosoma*). South Africa, Namibia, Angola, Mosambique; Sri Lanka.
= *ernestu*s Curran, 1924: 218 (*Chrysosoma*), **n. comb.**, **n. syn.**
- nanu*s Parent, 1929: 243 (*Sciapu*s). Senegal, Zaire.
- nartshukae* sp. n. Angola.
- nubilis* Parent, 1935: 87 (*Sciapu*s). Madagascar.
- pallidicornis* Grimshaw, 1901: 12 (*Gnamptopsilopu*s). Seychelles, Hawaiian Islands, Society Islands, Marquesas Islands, Guam, Belau, Taiwan.
= *fulgidipenne* Enderlein, 1912: 377 (*Chrysosoma*).
- parilis* Parent, 1931: 44 (*Chrysosoma*). South Africa, Namibia (!), Zimbabwe (!), Tanzania, Zaire, Nigeria (!).
- peruigrus* Becker, 1923: 30 (*Chrysosoma*). Malawi, Zaire.
- rectangularis* Parent, 1937: 13 (*Sciapu*s). Zaire, ?Madagascar.
- retrovenu*s Irwin, 1974: 242 (*Sciopolina*). South Africa.
- rosaceu*s Wiedemann, 1824: 40 (*Dolichopu*s). South Africa, ?Madagascar.
= *peringueyi* Curran, 1926: 2 (*Sciapu*s).
- setifrons* Parent, 1937: 14 (*Sciapu*s). Zaire, St. Helena.
- signatu*s Becker, 1923: 35 (*Chrysosoma*). Malawi, Zaire, **n. comb.**
- simplex* de Meijere, 1910: 99 (*Agonosoma*). ?Seychelles; Java.
- steedei* sp. n. Kenya.
- stuckenbergi* Vanschuytbroeck, 1957: 3 (*Sciapu*s). Madagascar.
- stuckenbergorum* Irwin, 1974: 236 (*Sciopolina*). South Africa.
- subfascipennis* Curran, 1926: 386 (*Sciapu*s). Uganda, Zaire, St. Helena, ?Madagascar.
- sudanensis* Parent, 1939: 271 (*Sciapu*s). Sudan, Zaire.
- tenuicauda* Parent, 1936: 7 (*Sciapu*s). Zaire.
- tropicalis* Parent, 1933: 40 (*Sciapu*s). Zaire.

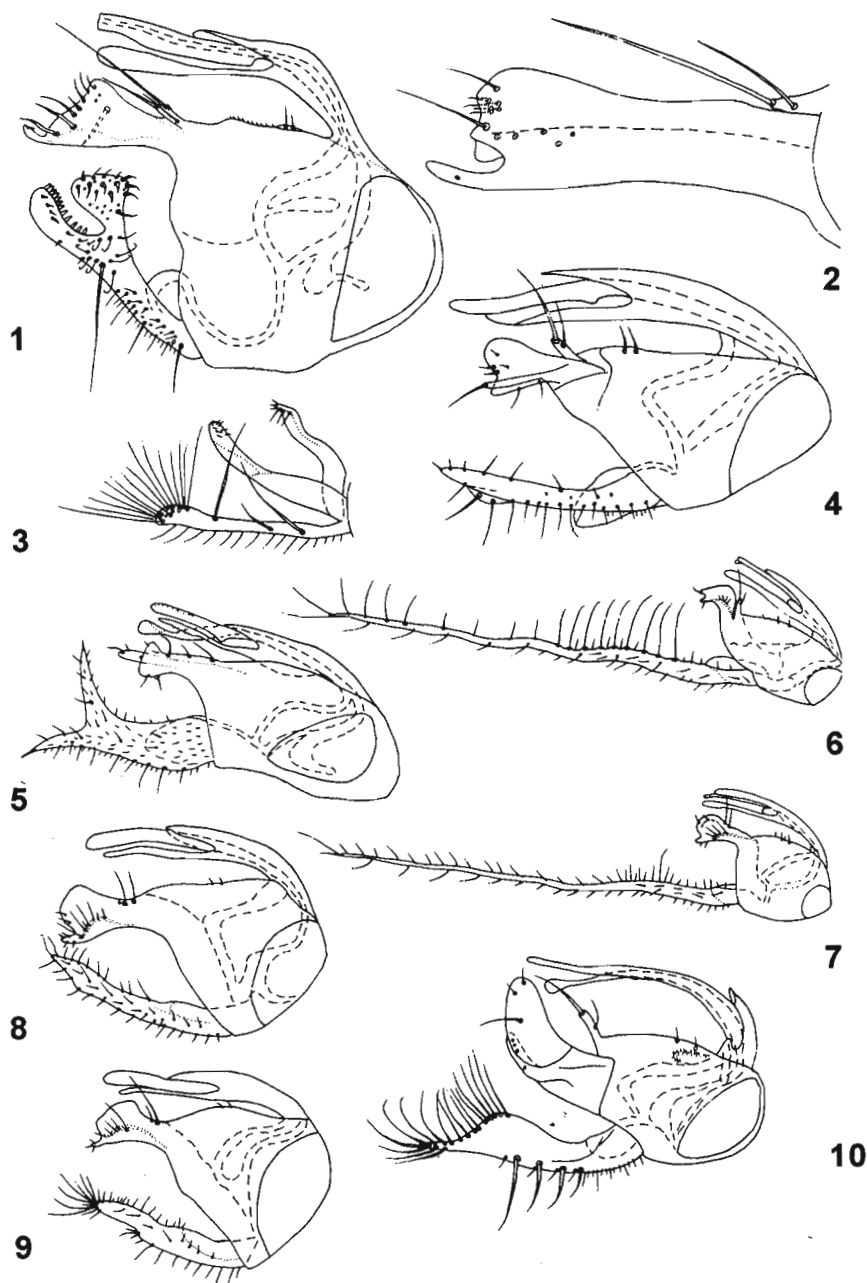
Key to the Afrotropical Species of *Amblypsilopus*

(females usually cannot be identified without males of the same series)

1. Males 2
- Females 34

2. $R2+3$ and $R4+5$ fused at wing apex 3
- No 7
3. Postocellar hairs numerous (at least more than a single pair); first flagellomere dark brown; cercus elongate with flattened area at tip 4
- Postocellar hairs, one pair; first flagellomere yellowish; cercus small with tapered tip 5
4. Wing heavily infusate; vein M_1 not recurved basad; apical sclerotized spot of wing tip not reaching posterior margin of wing *stuckenbergorum*
- Wing lightly infusate; M_1 strongly recurved basad; apical sclerotized spot of wing tip reaching posterior margin of wing *retrovenu*s
5. Wing with reduced apical sclerotized spot and a dense patch of thickened macrotrichia; wing with two rows of hooklike setae below M_1 ; cercus small with elongate base *fasciatus*
- Wing with well-developed apical sclerotized spot and no dense patch of thickened macrotrichia; wing without rows of hooklike setae; cercus small with short, rounded base 6
6. Arista cylindrical at tip; upcurved portion of wing vein M_1 beyond fork M_{1+2} with definite, thickened spot; $m-cu$ with two slightly thickened areas, these thickenings not forming distinct spots *bonniae*
- Arista horizontally spatulate at tip; upcurved portion of beyond fork M_{1+2} with slightly swollen, darkened area; $m-cu$ with two definite, swollen spots *macularivenu*s
7. M_2 absent; M_1 with strong V-shaped curvature . . . *lenga*
- Venation normal 8
8. Fore coxa yellow; halter usually yellow; lower calipter usually with light setae 9
- Fore coxa black at least in basal half; halter usually black-brown; lower calipter usually with black setae 21
9. All coxae wholly yellow 10
- At least middle coxa with blackish-brown spot . . . 13
10. Mesonotum and pleura blue-green; halter black; lower calipter with black setae *setifrons*
- Thorax mostly yellow; halter yellow; lower calipter with white setae 11
11. Fore tibia with long curved posterior seta . . . *pallidicornis*
- Fore tibia without such seta 12
12. Fore basitarsomeres as long as fore femora and tibia together; 4th and 5th tarsomeres of all tarsi flattened; cercus with two long dorsal setae *stuckenbergi*
- Fore basitarsomeres not much longer than fore tibia; 5th tarsomeres of all tarsi slightly flattened; cercus filiform, with short hairs, nearly thrice as long as hypopygium *rosaceu*s
13. Antenna yellow; fore tarsomeres somewhat modified . . 14
- Antenna black; fore tarsus usually simple 15
14. Fore basitarsomeres enlarged, with ventral pile; other tarsomeres simple *steedei*
- Fore basitarsomeres simple; 5th tarsomeres of the same tarsus black, enlarged, with flag of long yellow setae *basilewskyi*
15. Fore coxa with five or six yellow setae, organized in two belt-shaped groups; cercus long and narrow, with apical brush of hairs and basoventral prominence *coalescens*
- Fore coxa with usual hairs and/or bristles, at most with brush-form ciliation 16
16. $m-cu$ sinuate; middle tibia progressively blackish in apical half; cercus triangular, knife-shaped, with long dorsal chetae *cuthbertsoni*
- $m-cu$ straight or slightly convex; middle tibia yellow . . 17
17. Middle tibia and basitarsomeres with anterior and ventral ciliation of thickened setulae, which as long as tibia diameter *bipectinatus*

- Middle tibia with simple setulae 18
18. Fore femora with ventral brush of long dense curved yellow-brown hairs; 5th tarsomeres of middle tarsus white; cercus bifurcated *gorodkovi*
- Fore femora without such brush 19
19. Wing with small dark apical spot; 4 dorsocentral setae *nanus*
- Wing hyaline; 2 or 3 strong dorsocentral bristles 20
20. Fore and middle tarsi with erected ciliation; hypopygium and 7th segment small, cercus short, bifurcated on apex *narchukae*
- Tarsi with simple ciliation; 7th abdominal segment long, hypopygium big, cercus long and curved, with brush of hairs on apex, reaching second abdominal segment *haemorrhoidalis*
21. At least fore femora with long brown-black ventral bristles 22
- Fore femora with white ciliation below, sometimes with a few dorsal or preapical black hairs, or bare 26
22. Hind femora yellow, blackish at most in basal fourth or narrowly black at apex 23
- Hind femora mostly black 24
23. All femora with long black ventral bristles; fore and hind femora blackish in basal fourth *fruitimus*
- Middle and (?) hind femora with short dense hairs; fore femora yellow, hind femora narrowly blackish at base *aenescens*
24. Fore femora with two black ventral bristles in basal fourth, other femora bare; fore and middle legs brown dorsally and yellow ventrally *tenuicauda*
- At least fore and hind femora with a row of long bristles 25
25. Legs entirely black; all femora with a row of brown or black bristles *disjunctus*
- Fore and middle femora partly yellow, fore tibia yellow; middle femora with short hairs *inflexus*
26. Cercus short, usually broad, not much longer than epandrium 27
- Cercus filiform, at least twice as long as epandrium 31
27. *m-cu* distinctly sinuate; fore tarsus (?) simple; 3.2 mm *madagascarensis*
- *m-cu* straight or nearly straight; fore tibia and basitarsomeres usually with ventral pad of short fine cilia 28
28. All femora bare; fore tarsus (?) simple; last three tarsomeres of hind tarsus flattened; 2.5 mm *pernigrus*
- Femora with long white ventral hairs; first and second tarsomeres of fore tarsus with ventral pad of short fine cilia, which at least half as long as width of tarsomeres; last two tarsomeres of hind tarsus flattened; body longer than 3.5 mm 29
29. Femora with white ventral cilia, not longer than femora diameter; fore tibia and basitarsomeres with fine erected ciliation on dorsal side *miserus*
- Femora with white ventral cilia, which longer than femora diameter; fore tibia and basitarsomeres without erected setulae 30
30. Fore basitarsomeres 3/4 to 7/5 as long as second tarsomeres and 2/5 to 2/3 as long as rest tarsomeres from second to fifth *auratus*
- Fore basitarsomeres 1.5—2 times as long as second tarsomeres and from 2/3 to 9/10 as long as rest tarsomeres from second to fifth *cilifrons*
31. Fore and middle femora, apical half of fore coxa reddish yellow; fore basitarsomeres with 5 strong dorsal bristles; fore tibia with two ventral setae; cercus long and narrow, with slightly enlarged base and apex, and with more strong hairs on apex *flabellifer*
- All femora mostly black; fore basitarsomeres without strong dorsal bristles 32
32. Middle tibia and basitarsomeres with erected setulae; all femora with two rows of short white ventral hairs in basal half *parilis*
- Middle tibia and basitarsomeres with simple setulae 33
33. All femora with white ventral hairs in basal half, which longer than femora diameter; middle femora with white hairs turning into long black hairs in apical half on posteroventral surface; apical third of fore basitarsomeres with ventral pad of short hooked hairs; middle tibia with two short dorsal setae; cercus with long ventral cilia; surstylus strongly curved *longifilus*
- Femora bare; fore tarsus with simple setulae; cercus with short hairs; surstylus long, almost straight *signatus* (3 mm), *munroi* (4 mm)
34. Vertex shallowly excavated, ocellar tubercle not prominent; clypeus and mouthparts strongly projecting; body mostly yellow *flavicollis*
- Vertex distinctly excavated 35
35. Fore coxa yellow 36
- All coxae black 47
36. Lower calipter with black cilia; coxae yellow, middle coxa black from outside; middle tibia with one dorsal seta; 2 mm *rectangularis*
- Lower calipter with pale cilia; body longer than 3 mm 37
37. Acrostichals long, more than half as long as dorsocentral setae 38
- Acrostichals short 41
38. Antenna yellow *basilewskyi*
- Antenna black 39
39. Fore femora with a row of strong pale setae, which longer than femora diameter; hind basitarsomeres black *sudanensis*
- Fore femora without strong setae; hind basitarsomeres partly yellow 40
40. Scape red; hind tibia bare; hind tarsus longer than tibia *nubilis*
- Antenna wholly black; hind tibia with one anterodorsal seta; hind tarsus shorter than tibia *nartshukae*
41. *m-cu* shorter than M_{1+2} distad of *m-cu* (if not, then ocellar hairs numerous, first flagellomere brown) 42
- *m-cu* longer than M_{1+2} distad of *m-cu* (if not, then only one pair of ocellar hairs, first flagellomere yellowish) 43
42. First flagellomere dark-brown; 4 mm *stuckenborgerum*
- First flagellomere yellow-orange; 9 mm *tropicalis*
43. Ratio of *m-cu* to M_{1+2} distad of *m-cu* greater than 1.5 44
- Ratio of *m-cu* to M_{1+2} distad of *m-cu* less than 1.4 45
44. Thorax mostly yellow; acrostichals present *rosaceus*
- Thorax metallic green; acrostichals absent *fasciatus*
45. Fascio-clypeal suture relatively shallow; first flagellomere with anterior bulge dorsal *bonniae*
- Fascio-clypeal suture relatively deep, pointed; first flagellomere with anterior bulge ventral 46
46. Lack of setae on middle tibia in posteroventral position *macularivenus*
- Middle tibia possesses a single posteroventral seta *bevisi*
47. *m-cu* strongly sinuate 48
- *m-cu* straight 49
48. All femora black; middle basitarsomeres with 6 or 7 short ventral setae; hind tibia with 6 or 7 long dorsal setae *subfascipennis*
- Fore femora yellow in apical two thirds, with 1 or 2 fine black ventral setae; fore tibia with 1 anterodorsal and 2 posterodorsal, middle tibia with 3 anterodorsal, 3 posterodorsal and 2 ventral, hind basitarsomeres with 1 dorsal seta *arduus*
49. Fore and middle tibiae black or brown *auratus*, *pernigrus*, *munroi*
- Fore and middle tibiae yellow or dirty-yellow 50
50. Hind tibia mostly yellow *flabellifer*, *parilis*
- Hind tibia black-brown *munroi*, *longifilus*, *parilis*, *miserus*



Figs 1—10. *Amblypsilopus* Bigot, male genitalia.

1, 4–10 — hypopygium, left lateral view: 1, *A. steelei* sp. n.; 4, *A. nartshukae* sp. n.; 5, *A. gorodkovi* sp. n.; 6, *A. longifilus* (Becker); 7, *A. parilis* (Parent); 8, *A. auratus* (Curran); 9, *A. cilifrons* (Parent); 10, *A. medvedevi* sp. n.; 2, 3, *A. basilewskyi* (Vanschuytbroeck), lateral view: 2, surstylus; 3, cercus.

Descriptions and new records

Amblypsilopus rosaceus (Wiedemann)

Material examined. 3 males, 7 females, **S. Africa** (S6), C.P. Silvermine, N.R. Cape penin, 2—3.1.1972./ South-
ern African Exp. B.M. 1972—1.

Diagnosis. Very interesting fly with mostly yellow thorax, abdomen, legs and antenna; all coxae yellow; halteres yellow; lower calipter with white cilia. Lateral frons with strong seta in both sexes, one postvertical seta relatively short, arista basodorsal. Six strong dorsocentrals; some short biserial acrostichal setae, restricted in anterior part of mesonotum; scutellum with two strong and two hair-like lateral setae. Wing venation undisturbed. Legs simple; fore tibia with two weak dorsal setae; fore basitarsomeres not much longer than tibia, and 4 times as long as second tarsomeres; fifth tarsomeres of all tarsi slightly flattened; middle and hind tibiae with strong setae; hind basitarsomeres with short basoventral seta. Cercus with short hairs, filiform, nearly thrice as long as hypopygium.

Distribution. South Africa, ?Madagascar. *w. thin basoventral process = surstylus*

Amblypsilopus steelei sp. n.

(Fig. 1)

Holotype. Male, **Kenya**: Kwali Forest, 20 mls W of Mombasa, 1.VI.1948 / Miss. M. Steele. B.M. 1948—347.

Description. Frons broad, shining metallic blue-green. A weak front vertical bristle bends forward, a strong postvertical one is positioned as a linear continuation of the postocular setal row. Ventral postcranium covered with dense irregular white hairs. Face green, densely white pollinose, slightly convex, clypeus separated from eyes, not coming down eyes; face slightly narrowed, 1.7 times as high as wide under antennae. Palpi and proboscis yellow, with light hairs, palpus also with two black bristles. Antenna yellow, 1.7 times as long as height of head. Scape slightly swollen; pedicel with a ring of short setulae, one ventral bristle, twice as long as first flagellomere, and one shorter dorsal seta. First flagellomere rounded, slightly longer than height, with short yellow hairs. Arista apicodorsal, bare. Length ratio of scape to pedicel to first flagellomere to arista — 7:6:10:125. Mesonotum and scutellum brilliantly shining blue-green. Pleura bronze-green, densely grey pollinose. 5 (?) strong dorsocentral setae; 3 (?) long acrostichals. Scutellum with two strong bristles and two lateral hairs. Legs including trochanters yellow. Middle and hind coxae brown-black, apical segments of tarsi brown (last tarsomeres of middle and hind tarsi broken). Fore coxa from the front with short white hairs and 4 or 5 long yellow apical setae. Middle and hind coxae from the outside with a few yellow hairs, hind coxa also with one external bristle. Femora practically bare. Fore tibia bare. Fore basitarsomeres slightly broadened, ventrally flattened, with pale pile; fifth tarsomeres flattened. Length ratio of fore coxa to femora to tibia to tarsus (segments from first to fifth) — 4.8:6.5:9.7:4.0:0.7:0.9:0.5:0.5. Middle tibia with 3 anterodorsal, 2 short posterodorsal and 3 or 4 apical bristles. Length ratio of middle coxa to femora to tibia to tarsus (segments from first to third) — 2.6:7.7:11.8:7.1:2.4:1.7. Hind tibia with 2 anterodorsal, 3 posterodorsal, 3 or 4 apical setae. Length ratio of hind coxa to femora to tibia to basitarsomeres — 2.2:9.0:14.8:5.6. Wings hyaline, veins brown. *R*₄₊₅ gently curved to *M*₁ at apex. *M*₁ gently curved and forming the right angle with *M*₁₊₂. Ratio of parts of costa between *R*₂₊₃ and *R*₄₊₅ to those between *R*₄₊₅ and *M*₁ — 22 : 4. *M*₂ present as short stub vein and faint fold on

membrane. Crossvein *m-cu* slightly sinuate. Ratio of crossvein *m-cu* to apical part of *M*₁₊₂ (fork-handle) to apical part of *CuA* — 45:65:20. Anal vein and lobe present. Anal angle right. Squamae yellow, with brown edging and pale hairs. Halteres yellow, halter stem thin, twice as long as knob, with a row of short dark setulae. Abdomen shining blue-green, white pollinose, with short black hairs and long black marginal bristles. Base of segments mat-black; first and second segments with short white hairs; fourth and fifth segments swollen, with long dark ventral hairs; unmodified segments together nearly twice as long as mesonotum; seventh segment 1/3 times as long as sixth. Hypopygium brown. Cercus dark-yellow, wrench-shaped, with simple basodorsal hairs, hook-shaped setae and one long bristle in the middle, and numerous short thickened setae on both apical arms. Surstylus subtriangular, with strong bristles and distodorsal apophysis. Epandrial lobe prominent, with three setae.

Female. Unknown.

Length: body 6.2 mm; antenna 2.1 mm; wing-length 6.1 mm; wing-width 1.7 mm.

Distribution. Kenya.

Etymology. The species is named for collector, M. Steele.

Diagnosis. *A. steelei* has some similarities with *A. basilewskyi*, differing by broadened and flattened fore basitarsomeres and simple other tarsomeres, and another morphology of hypopygium. The new species is closely related to *Chrysosoma centrale* (Becker, 1923) from Cameroun, which perhaps should be transferred in *Amblypsilopus*. But *A. steelei* differs by larger size, yellow hairs and bristles on fore coxa and another ratio of fore podomeres.

Amblypsilopus basilewskyi (Vanshuylbroeck)

(Figs 2, 3)

Material examined. 2 males, 1 female, **Kenya**: 24—29.XII.1970, A. E. Stubbs. B.M. 1972—211 / Meru, 5—7000 feet. 6 females, **Kenya**: Nyeri, III—IV.1948, M. Steele. B.M. 1948—497. 2 males, 2 females, **Uganda**: Ruwenzori Range, XII.1934—1.1935. B.M. E. Afr. Exp. B.M. 1935—203/Kilembe, 4500 ft., F.W. Edwards. *Additional material.* Female, **Uganda**: Kibale Forest, 12.XII.1971—9.1.1972, R. L. Mason. Female, **Kenya**: 9—13.XII.1970, A. E. Stubbs. B.M. 1972—211/Nairobi, 5500 feet. Female, Naivasha 3, [19]37, H. J. A. Turner.

Description. Frons shining metallic blue-violet. A weak front vertical bristle bends forward, a strong postvertical one is positioned as a linear continuation of the postocular setal row. Ventral postcranium covered with dense irregular white hairs. Face violet-green, grey pollinose, slightly concave, clypeus separated from eyes, hardly coming down eyes; face narrowed, 1.6 times as high as wide under antennae. Palpi and proboscis orange, with light hairs, palpus also with 1 or 2 black setae. Antenna yellow, as long as height of head. Scape vase-like; pedicel with a ring of very short setulae, and with short but strong dorsal and ventral setae. First flagellomere rounded or oval, with short yellow hairs. Arista dorsal, preapical, bare. Length ratio of scape to pedicel to first flagellomere to arista — 9:6:10:165. Mesonotum and scutellum brilliantly shining blue-green, sometimes with copper reflection. Pleura bronze-green, with brown sutures, grey pollinose. Two strong posterior and four hairlike anterior dorsocentral setae; two or three pairs of long acrostichals, organized in irregular rows. Scutellum with two strong bristles. Legs including coxae and trochanters light-yellow. Middle and hind coxae with blackish-brown external spot. Sometimes (Uganda) only middle coxa with long and narrow external brown spot; apical four seg-

ments of posterior four tarsi brown. Fore coxa from the front with white hairs and four yellow apical setae. Middle and hind coxae from the outside with a few yellow hairs. All femora with very short hairs and setulae. Fore tibia with 3 or 4 dorsal, 2 or 3 apical setae; fourth tarsomeres with irregular anterodorsal, dorsal, posterodorsal and posterior dark hairs, which twice as long as article diameter; fifth tarsomeres of fore tarsus oval, broadened and flattened, with curved posterior flag of long yellow setae, twice as long as width of tarsomeres. Length ratio of fore coxa to femora to tibia to tarsus (segments from first to fifth) — 2.4:4.1:5.2: 5.2:2.3:1.3:0.7:0.7. Middle femora with two apicoventral hairs; tibia with 4 or 6 anterodorsal, 4 or 5 posterodorsal, 1 to 3 ventral and 4 or 5 apical bristles. Length ratio of middle coxa to femora to tibia to tarsus (segments from first to fifth) — 1.9:4.7:9.0:7.1:2.0:1.3:0.7:0.3. Hind tibia with 2 or 3 anterior, 3 or 4 anterodorsal, 9 to 11 posterodorsal, 7 to 9 ventral and 4 or 5 apical setae. Length ratio of hind coxa to femora to tibia to tarsus (segments from first to second) — 1.5:6.5:10.2:5.2:2.4. Wings hyaline, smoky in anterior part, veins brown. *R*₄₊₅ gently curved to *M*₁ in apical fifth. *M*₁ gently curved and forming the right angle with *M*₁₊₂. Ratio of parts of costa between *R*₂₊₃ and *R*₄₊₅ to those between *R*₄₊₅ and *M*₁ — 29:10. *M*₂ well developed. Crossvein *m-cu* slightly sinuate. Ratio of crossvein *m-cu* to apical part of *M*₁₊₂ (fork-handle) to apical part of *CuA* — 73:81:25. Anal vein and lobe present. Anal angle right. Lower calipser yellow, with yellow hairs. Halter yellow, knob orange; halter stem thin, 3.5 times as long as knob, with a row of dark setulae in apical half. Abdomen long and thin, shining blue-green, whitish pollinose, with short black hairs and long black marginal bristles. Base of segments mat-black; first tergite with membranous excavation and short white lateral hairs; sternum with white hairs. 1st-6th segments together more than thrice as long as mesonotum; 7th segment 2/3 as long as 6th one, with hairs and sometimes with marginal bristles. 7th and 8th segments either black-brown or yellow-brown. Hypopygium brown. Hypopygial foramen left basolateral. Cercus yellow, with yellow hairs and apical brush of long dark setae. Surstylus black. Hypandrial hood broad, reaching the middle of surstylus. Hypandrial arm thin and long, arising at midlength of hypandrium and extending beyond apex of surstylus. Aedeagus with developed dorsal angle. 1 or 2 ventral epandrial setae.

Female. Similar to male except lacking male secondary sexual characters, otherwise as follows: frons with a strong vertical seta; face twice as high as wide under antennae; clypeus slightly bulging; ventral postcranium with additional row of 6 or 7 strong yellow bristles; fore coxa with a row of 9 yellow spine-like anterior bristles. All tarsi from the end of basitarsomeres brown; ratio of first to second tarsomeres of fore, middle and hind tarsi — 4.1:1.5; 4.8:1.7; 3.9:1.9. 9th hemitergite with two thin spatulate setae; cercus long, with two long apical setae.

Length: male body 9.7 mm; antenna 2.5 mm; female body 7.4 mm; wing-length 8.4 mm; wing-width 2.3 mm.

Distribution. Uganda (!), Tanzania, Kenya (!).

Diagnosis. Specimens examined are identical to brief and incomplete description (Vanschuytbroeck, 1960) of *A. basilawskyi*, collected in Kilimandjaro District of Tanzania, but may represent a separate species. Males have yellow flag on broadened fifth tarsomeres of fore tarsi. Males from Kenya have some differences with males from Uganda as noted. First flagellomere rounded, as long as high; middle and hind coxae with blackish-brown external spot; middle femora with anteroventral row of somewhat elongated dark hairs, which at most as long as femora diameter; seventh abdominal segment with long fine hairs, without strong

bristles; cercus with somewhat stronger setae. Otherwise hypopygium of both male series is almost identical. Females of both types, collected in Kenya and Uganda, present in the collection.

Amblysilopus nartshukae sp. n.

(Fig. 4)

Holotype. Male. **Angola:** 2 miles S. Luanda, G. R. Gradwell & D. Snow / Mangrove swamp / O.U.E.C. Exp. to Angola. B.M. 1950—337.

Paratypes. 1 male and 6 females, the same labels.

Description. Frons broad, shining metallic green. A strong front vertical bristle bends forward, postvertical one is positioned as a linear continuation of the postocular setal row. Ventral postcranium covered with dense irregular white hairs. Face blue-green, wholly white pollinose, clypeus separated from eyes; face slightly narrowed, 1.3 times as high as wide under antennae. Palpi and proboscis short, yellow, palpus with light hairs and 2 black bristles. Antenna black, shorter than height of head. Pedicel with long and strong dorsal and ventral bristles, thrice as long as pedicel. First flagellomere oval, shorter than its height, with short hairs. Arista apicodorsal, microscopically haired. Length ratio of scape to pedicel to first flagellomere to arista — 5.5:5.48. Mesonotum and scutellum brilliantly shining green with copper reflection. Pleura bronze-green, grey pollinose. 2 strong posterior and 1 strong anterior with 2 middle hairlike dorsocentral setae; 3 long acrostichals, restricted to anterior half of mesonotum. Scutellum with two strong bristles and two lateral hairs. Legs including fore and middle trochanters yellow. Middle and hind coxae bronze-black, the very base of fore coxa, hind trochanter and apical segments of tarsi dark-brown. Fore coxa from the front with short white hairs and three long yellow apical setae. Middle and hind coxae from the front with a few yellow hairs, hind coxa with light external bristle. All trochanters and femora with very short pale ventral hairs in basal half, hind femora with a few posteroventral hairs in apical third. Fore tibia with short basodorsal seta; middle tibia with short basal anterodorsal seta. Second to fifth tarsomeres of fore and middle tarsi with irregular erected setulae; fifth tarsomeres of the same tarsi slightly flattened, with well developed pulvilli; fourth and fifth tarsomeres of hind tarsus flattened and ventrally pad-like. Length ratio of fore coxa to femora to tibia to tarsus (segments from first to fifth) — 5.0:7.5:8.1: 5.3:2.0:1.6:1.3:0.8. Length ratio of middle coxa to femora to tibia to tarsus (segments from first to fifth) — 3.5:8.0: 11.5:7.0:3.3:2.2:1.5:0.8. Length ratio of hind coxa to femora to tibia to tarsus (segments from first to fifth) — 2.5:10.5:14.5:5.6:3.4:2.0:1.2:0.9. Wings hyaline, veins brown. *R*₄₊₅ gently curved to *M*₁ in apical fifth. *M*₁ gently curved and forming the right angle with *M*₁₊₂. Ratio of parts of costa between *R*₂₊₃ and *R*₄₊₅ to those between *R*₄₊₅ and *M*₁ — 22:6. *M*₂ present as short stub vein and faint fold on membrane. Crossvein *m-cu* straight. Ratio of crossvein *m-cu* to apical part of *M*₁₊₂ (fork-handle) to apical part of *CuA* — 31:39:17. Anal vein and lobe present. Anal angle sharp. Lower calipser yellow, with brown edging and white hairs. Halteres yellow, halter stem as long as knob, with a fringe of six short black setulae from above. Abdomen shining blue-green, with copper reflection; all segments with short black hairs and a few long black bristles; venter with white hairs. Apical border of segments somewhat darker; first tergite with narrow membranous excavation. 1st—6th segments together nearly twice as long as mesonotum. Hypopygium black-brown. Cercus yellow, digitiform, pointed on apex, with small

distodorsal apophysis. Surstylus curved, distally broadened, with two distodorsal prominences. Epandrial lobe prominent, with long apical and subapical bristles.

Female. Similar to male except lacking male secondary sexual characters, otherwise as follows: body usually shining metallic green, with lesser blue and copper reflection than in males; middle dorsocentral setae somewhat stronger than in males; all tibiae with one basal anterodorsal seta. Ratio of first to second tarsomeres of fore, middle and hind tarsi — 4.5:1.8; 6.0:2.6; 4.3:3.8.

Length: male body 4.3—4.6 mm; antenna 0.9 mm; female body 3.2—3.3 mm; wing-length 3.7 mm; wing-width 1.2 mm.

Distribution. Angola.

Etymology. The species is named for Russian dipterologist Dr. Emilia P. Nartshuk.

Diagnosis. *A. nartshukae* is related to *A. haemorrhoidalis*. Males of the new species strongly differ by small hypopygium and short cercus with distodorsal apophysis. Wings hyaline, fore and middle tarsi with erected ciliation, otherwise legs practically simple. Females are closely related to *A. nubilis*, differing in wholly black antenna, shorter posterior tarsus, and hind tibia setation. *Amblypsilopus bipectinatus* (Parent).

Material examined. Male, **Kenya**: Aberdare Range, X.1934, B.M.E.Afr.Exp. B.M.1935—203 / Mt. Kinangop, 8000 ft (F. W. Edwards) / Cedar forest.

Diagnosis. *A. bipectinatus* is associated with a group of species having black antenna and mostly brown-black posterior four coxae. It can be distinctly separated by anterior and ventral erected and thickened setulae on middle tibia and basitarsomeres. Additional diagnostic features are as follows. All coxae with yellow hairs and bristles; last segments of fore tarsus with some remarkable hairs; hind tibia with 6 to 8 anterior bristles and a few weak posterior and dorsal setae; hind basitarsomeres with a few weak anteroventral setae; cercus with long yellow dorsoapical hairs.

Amblypsilopus gorodkovi sp. n.

(Fig. 5)

Holotype. Male, **Tanzania**: Kwamsambia, Tanga region / I—18.II.1987, leg. Mahunka, Zicsi [HNHM].

Description. Frons metallic blue-green. Ventral postcranium covered with dense irregular white hairs. Face wide, metallic blue-green, pollinose; face slightly narrowed, 1.2 times as high as wide under antennae. Palpi and proboscis orange, palpus with light hairs and 1 black bristle. Antenna black, not longer than height of head. Pedicel with short but strong dorsal and ventral bristles. First flagellomere subtriangular, as long as height, with short hairs. Arista basodorsal, microscopically haired. Mesonotum metallic, dark blue-green (setae broken). Pleura bronze-green, grey pollinose. Scutellum with two strong bristles. Legs including trochanters light-yellow. Middle and hind coxae brown in basal half, fore femora brownish ventrally in basal half, apical segments of tarsi brown-black, fifth tarsomeres of middle tarsus white. Fore coxa from the front with white hairs. Middle and hind coxae from the outside with a few light hairs. Fore femora with ventral brush of dirty-yellow curved hairs in basal half, which as long as femora diameter, middle and hind femora with a few short light basoventral hairs. Fore tibia and tarsus simple. Length ratio of fore coxa to femora to tibia to tarsus (segments from first to fifth) — 5.1:7.3:7.4:9.0:2.6:2.0:1.3:0.9. Middle tibia without setae; middle tarsus with slightly flattened fourth tarsomeres and suboval fifth tarsomeres. Length ratio of middle coxa to femora to tibia to tarsus (segments from

first to fifth) — 2.7:7.2:12.2:11.0:3.0:2.0:1.2:1.0. Hind tibia with a few weak posterodorsal setae. Length ratio of hind coxa to femora to tibia to tarsus (segments from first to fifth) — 2.0:11.0:16.0:7.2:3.7:2.2:1.4:0.8. Wings hyaline, with parallel anterior and posterior borders, veins brown. *R*₄₊₅ gently curved to *M*₁ in apical fifth. *M*₁₊₂ and *M*₁ form the right angle. *M*₁ with elbow-shaped bend, than almost straight. Ratio of parts of costa between *R*₂₊₃ and *R*₄₊₅ to those between *R*₄₊₅ and *M*₁ — 24:5. *M*₂ present as stub vein and faint fold on membrane. *M*₁₊₂ distinctly convex anteriorly near junction with *m-cu*. Crossvein *m-cu* straight or slightly convex. Ratio of crossvein *m-cu* to apical part of *M*₁₊₂ (fork-handle) to apical part of *CuA* — 33:35:10. Anal vein and lobe present. Anal angle sharp. Lower calipter yellow, with brown edging and yellow hairs. Halteres yellow, halter stem thin, twice as long as knob. Abdomen shining blue-green, with short light hairs. Apical border of segments somewhat darker; 1st-6th segments together nearly thrice as long as mesonotum. Hypopygium and 7th segment dark-brown. Cercus brown, with light hairs, bifurcated. Surstylus with elongated external apophysis. Hypandrial arm with serrations. Epandrial lobe reduced.

Female. Unknown.

Length: body with hypopygium 4.4 mm; antenna 0.5 mm; wing-length 3.7 mm; wing-width 1.1 mm.

Distribution. Tanzania.

Etymology. The species is named for Russian dipterologist Dr. K. B. Gorodkov.

Diagnosis. *A. gorodkovi* is related with a group of species having black antenna and mostly brown-black posterior four coxae. It clearly differs from other species by ventral brush of long dense curved hairs on fore femora, white fifth tarsomeres of middle tarsus and bifurcated cercus. Surstylus with elongated external apophysis. Hypandrial arm with serrations. Epandrial lobe reduced.

Amblypsilopus longifilus (Becker)

(Fig. 6)

Chrysosoma longifilum Becker, 1923: 28 (HNHM, types lost) *Amblypsilopus longifilus* (Becker). — Bickel, 1994: 352

Neotype, here designated. Male, **E. Africa**: Arusha, 4.I.1961, B. Hocking/Hocking Colln, B.M. 1980—386.

Description. Frons shining metallic violet-green, with three curved black vertical setae. Two rather long postvertical bristles are positioned in the middle of each lateral half of posterior frons. One pair of postocellar hairs, upper postocular setae nearly as long as postvertical bristles. Ventral postcranium covered with dense irregular white hairs. Face violet-green, weakly white pollinose, epistome slightly bulging, clypeus separated from eyes, not coming down eyes; face narrowed, as high as wide under antennae. Palpi and proboscis short, black with light hairs, palpus also with two long black bristles. Antenna black, 1 and 3/4 as long as height of head. Pedicel with a ring of short setulae and at least one strong dorsal bristle, which as long as next article. First flagellomere asymmetrically triangular, as long as high at base, with short ventral hairs. Arista apical, bare. Length ratio of scape to pedicel to first flagellomere to arista — 4:5:9:123. Mesonotum and scutellum blackish with metallic green-violet reflection. Pleura dark bronze-green, whitish pollinose. Two strong posterior and a few hairlike anterior dorsocentral setae; three pairs of long acrostichals. Scutellum with two strong bristles. Legs mostly black; fore and middle knees, tibiae and basitarsomeres in basal half yellow. All coxae with white hairs, longest on lateral side of fore coxa. All femora with two rows of white ventral hairs in basal half, which longer than femora diameter.

Middle femora on posteroventral surface with white hairs turning into long black hairs in apical half. Fifth tarsomeres of all tarsi slightly flattened. Fore tibia bare. Apical third of fore basitarsomeres with ventral pad of short hooked hairs. Length ratio of fore coxa to femora to tibia to tarsus (segments from first to fifth) — 4.0:8.0:8.1:5.8:2.2:1.2:0.8:0.7. Middle tibia with two short and weak dorsal setae. Length ratio of middle coxa to femora to tibia to tarsus (segments from first to fifth) — 3.1:8.6:11.7:8.5:3.0:1.9:1.1:0.8. Length ratio of hind coxa to femora to tibia to tarsus (segments from first to fifth) — 2.0:11.5:15.2:7.8:3.1:1.8:0.9:0.9. Wings hyaline, veins brown. *R*₁ long, extending behind the middle of wing. *M*₁ forming sharp internal angle with *M*₁+2, slightly recurved basad, with right angle bend, then straight. *R*₄+5 gently curved to *M*₁ in apical fifth. Ratio of parts of costa between *R*₂+3 and *R*₄+5 to those between *R*₄+5 and *M*₁ — 24:7. *M*₂ present as short stub vein and faint fold on membrane. Crossvein *m-cu* straight, forming obtuse angle with *M*₁+2. Ratio of crossvein *m-cu* to apical part of *M*₁+2 (fork-handle) to apical part of *CuA* — 44:41:25. Anal vein present as faint fold. Alula and anal lobe well developed. Anal angle extremely sharp. Lower calipter brown, with black setae. Halteres black, halter stem twice as long as knob, with a group of hairs from above. Abdomen shining, dark blue-green, with short black hairs and long black bristles. Borders of segments narrowly black; first tergite with narrow pale membranous excavation and short white hairs; venter with long black hairs. 1st—6th segments together nearly twice as long as mesonotum. Hypopygium black-brown. Cercus brown, whiplike with long black cilia, longest on basoventral surface; those cilia at most 1/7 as long as cercus. Surstylus strongly curved. Epandrial lobe prominent, with two apical setae.

Length: body 4.5 mm; postabdomen 1.8 mm; antenna 2.0 mm; wing-length 4.4 mm; wing-width 1.4 mm.

Distribution. Tanzania, Kenya, Uganda, Zaire, St. Helena.

Diagnosis. *A. longifilis* is associated with *parilis* group, differing by the following combination of characters. Lateral frons with two postvertical setae; face metallic blue green, thinly grey pollinose; palpus black, proboscis brown; all femora with two rows of white ventral hairs in basal half, which longer than femora diameter; middle femora on posteroventral surface with white hairs turning into long black hairs in apical half; fore and middle basitarsomeres yellow-brown; first tarsomeres of fore tarsus 2.6 times as long as second article; apical third of fore basitarsomeres with ventral pad of short fine hairs; middle tibia with two short dorsal setae; cercus long, filiform, with long cilia; epandrial lobe prominent.

Remark. Becker (1923) described *A. longifilis* from 2 males and a female collected at Katona-Arusha and Muenja (HNHM, lost). Neotype from the same locality (Arusha) differs from the description by Becker in palp, proboscis and basitarsomeres coloration. All those characters are very variable in other species of *Amblypsilopus* (Irwin, 1974; Bickel, 1994).

Amblypsilopus parilis (Parent)

(Fig. 7)

Material examined. 2 males, N.Nigeria: Nguru, 14.III. 1971, J.C. Deeming. Female, Nigeria: Samaru, 23—25.VI. 1970, P. H. Ward. B.M. 1970—604. Male, S.W.Africa (W49): Rietfontein, 23 mls SW Grootfontein, 3.VI.1972 / Southern African Exp. B.M. 1972—1. Male, By Sanyati R., Tsetse Fly Ops., S.Rhodesia, 8.I.1956, nr. Kanba Camp, coll. R. Goovier, 58—9 [NHML].

Description. Similar to *A. longifilis* except as noted. Frons

with two or three curved black vertical setae. One or two postvertical bristles, upper postocular setae short. Face except upper part densely white pollinose. Antenna black, 1 and 1/3 as long as height of head. First flagellomere asymmetrically triangular, 1 and 1/3 as long as high at base, with short ventral hairs. Arista apical, microscopically haired. Length ratio of scape to pedicel to first flagellomere to arista — 5:5:9:65. Mesonotum and scutellum metallic blue-green. Two or three long acrostichals. Legs mostly black; fore and middle knees, tibiae and basitarsomeres yellow. Specimens from Nigeria with mostly yellow hind tibia. All femora with two rows of white ventral hairs in basal half, which shorter than femora diameter. Middle and hind femora on posteroventral surface with three or four preapical black hairs. Fore tarsomeres with simple setulae. Length ratio of fore coxa to femora to tibia to tarsus (segments from first to fifth) — 3.5:5.6:6.7:4.5:1.7:1.1:0.7:0.5. Middle tibia and tarsus with short erected setulae. Length ratio of middle coxa to femora to tibia to tarsus (segments from first to fifth) — 2.7:7.4:9.9:6.2:3.2:2.0:1.4:0.7. Length ratio of hind coxa to femora to tibia to tarsus (segments from first to fifth) — 2.0:9.2:12.2:6.0:2.8:1.6:0.9:0.6. Wing vein *R*₁ long, extending up to the middle of wing. Ratio of parts of costa between *R*₂+3 and *R*₄+5 to those between *R*₄+5 and *M*₁ — 21:7. Ratio of crossvein *m-cu* to apical part of *M*₁+2 (fork-handle) to apical part of *CuA* — 30:33:15. Hypopygium black. Cercus blackish, whiplike, with light and dark dense hairs, which at most 1/10 as long as cercus. Surstylus strongly curved. Epandrial lobe reduced, with its setae raising on the ventral side of surstylus base.

Female. Similar to male except lacking male secondary sexual characters, otherwise as follows: frons with strong vertical bristle; first flagellomere as long as height at base; *R*₁ slightly shorter than in males, ending before the middle of wing; halter dirty yellow; middle tibia with one anterodorsal setae. Ratio of first to second tarsomeres of fore, middle and hind tarsi — 2.1:1.1; 3.5:1.3; 2.6:1.9. Abdomen shining green, without black bands; ninth hemitergite long, with two long spinate setae; cercus long, with two long apical hairs.

Length: body 3.5 mm; postabdomen 1.3 mm; antenna 1.2 mm; female body 2.7 mm; wing-length 3.5 mm; wing-width 1.2 mm.

Distribution. South Africa, Namibia (!), Zimbabwe (!), Tanzania, Zaire, Nigeria (!).

Diagnosis. *A. parilis* differs by the following combination of characters. Face white pollinose; palpus and proboscis black; all femora with two rows of short white ventral hairs in basal half; first tarsomeres of fore tarsus 2.65 times as long as second article and nearly as long as rest; fore tarsus with simple setulae; middle tibia and tarsus with short erected setulae. Cercus blackish, whiplike, with light and dark dense hairs, which at most 1/10 as long as cercus. Epandrial lobe reduced, with its setae raising on the ventral side of surstylus base.

Amblypsilopus auratus (Curran)

(Fig. 8)

Material examined. 5 males and a female, Njombe, 6000—6500 ft, Tanganyika, 10—18.I.1952, Dr. W.Peters. Male, Nigeria: Ilorin, 17.V.1912, J.W.Scott-McFie. Male, By Sanyati R., Tsetse Fly Ops., S.Rhodesia, 8.I.1956, nr. Kanba Camp, coll. R. Goovier, 58—9 [NHML]. Male, S.Africa: Cape Province, 18.XI.1954, C. H. Andrewes / Brit. Mus. 1955—68/ [?] 14.II.1954.

Description. Similar to *A. longifilis* except as noted. Frons with a group of curved black vertical setae. One postvertical

bristle. Antenna twice as long as height of head. Arista slightly thickened at base, microscopically haired in apical half. Length ratio of scape to pedicel to first flagellomere to arista — 5:5:7:110. Legs black. All femora with two rows of white ventral hairs in basal 2/3, which longer than femora diameter. Fore and middle femora on posterior surface with a few black hairs in apical third. Fore tibia and tarsus with posteroventral and posterodorsal rows of somewhat elongated setulae; fore tibia with two fine posteroventral setae. Apical third or half of fore basitarsomeres and second tarsomeres with ventral pad of short fine hairs. Middle tibia with two weak ventral setae. (All ratios for males collected from Tanzania). Length ratio of fore coxa to femora to tibia to tarsus (segments from first to fifth) — 4.3:7.0:7.5:3.8:2.7:1.4:0.8:0.7. Length ratio of middle coxa to femora to tibia to tarsus (segments from first to fifth) — 3.0:7.5:9.8:7.0:2.2:1.6:0.9:0.7. Length ratio of hind coxa to femora to tibia to tarsus (segments from first to fifth) — 2.3:9.0:13.3:5.5:2.6:1.5:1.0:0.7. Wing vein *R*₁ long, ending just before the middle of wing. *M*₁ forming right angle with *M*₁+2, strongly curved to apex, than straight. Ratio of parts of costa between *R*₂+3 and *R*₄+5 to those between *R*₄+5 and *M*₁ — 30:8. Ratio of crossvein *m-cu* to apical part of *M*₁+2 (fork-handle) to apical part of *CuA* — 39:36:21. Hypopygium black. Cercus brown, short, strap-like (dorsal view), with short black hairs. Surstylus strongly curved, flattened and oval in apical half (ventral view), with 8—13 distolateral setulae and thin dorsoapical hook. Epandrial lobe reduced with 2 or 3 setae raising on the ventral side of surstylus base.

Female. Similar to male except lacking male secondary sexual characters, otherwise as follows: frons with strong vertical seta; face 1.4 times as high as wide under antenna; middle tibia with one anterodorsal bristle. Ratio of first to second tarsomeres of fore, middle and hind tarsi — 3.9:2.1; 5.2:2.7; 5.2:2.8. Halteres yellow. Abdomen shining green, without black bands; ninth hemitergite long, with two long spinate setae; cercus long, with two long apical hairs.

Length: body 3.6—4.2 mm; postabdomen 0.6 mm; antenna 1.6 mm; female body 3.1 mm; wing-length 3.8—4.0 mm; wing-width 1.5 mm.

Distribution. South Africa, Zimbabwe (!), Zambia, Angola, Zaire, Nigeria, Tanzania (!).

Diagnosis. *A. auratus* differs by the following combination of characters. Legs black; all femora with two rows of white ventral hairs in basal 2/3, which longer than femora diameter; fore tibia with two fine posteroventral setae; middle tibia with weaker two ventral and 0—1 basodorsal setae; first tarsomeres of fore tarsus 3/4 to 7/5 as long as second article and 2/5 to 2/3 as long as rest tarsomeres; apical third or half of fore basitarsomeres with ventral pad of short fine hairs; fourth and fifth tarsomeres of hind tarsus flattened; *m-cu* straight. Cercus brown, short, strap-like (dorsal view), with short black hairs. Surstylus strongly curved, flattened and oval in apical half (ventral view), with 8—13 distolateral setulae and thin dorsoapical hook.

Amblypsilopus cilifrons (Parent)

(Fig. 9)

Material examined. 4 males, N. Nigeria: Zaria, Samaru, 2.VII.1967, 19.III.1971 & 16.VII.1972, J.C. Deeming. Male, Nigeria: Samaru, 6—23. VIII.1970, P. H. Ward. B.M. 1970—604 / Mercury vapour light trap. Male, Nigeria: N.W. State, Mokwa. I.A.R. Mile 1, 8—17. VIII.1970, P.H. Ward. B.M. 1970—604 / M/V light white sheet. 2 males, Togo: Bassari, sur les boeufs, 16.VII.1971, R. Mable [ZIN].

Description. Similar to *A. longifilis* except as noted. Frons with a group of curved black vertical setae. One postvertical

bristle. Length ratio of scape to pedicel to first flagellomere to arista — 5:5:5:85. Legs mostly black; fore and middle tibiae and basitarsomeres yellow to dark-brown. All coxae with white hairs, longest on lateral side of fore coxa; middle coxa sometimes with a few dark apical hairs. All femora with two rows of white ventral hairs in basal 2/3, which longer than femora diameter. Fore and middle femora on posteroventral surface with a row of black hairs in apical third. Tibiae bare. Fifth tarsomeres of anterior four tarsi slightly flattened. Fore basitarsomeres and following article with ventral pad of short fine hairs. Fourth and fifth tarsomeres of hind tarsus flattened. (All ratios for males with black-brown legs). Length ratio of fore coxa to femora to tibia to tarsus (segments from first to fifth) — 3.4:6.0:5.9:3.5:1.7:1.0:0.5:0.5. Length ratio of middle coxa to femora to tibia to tarsus (segments from first to fifth) — 2.2:6.8:8.2:6.0:1.6:1.2:0.6:0.6. Length ratio of hind coxa to femora to tibia to tarsus (segments from first to fifth) — 1.9:8.2:11.4:5.1:2.0:1.2:0.7:0.6. Wing vein *R*₁ long, ending just before the middle of wing. Costa with short crocheted setulae. *M*₁ forming right angle with *M*₁+2, with obtuse angle bend, than straight. Ratio of parts of costa between *R*₂+3 and *R*₄+5 to those between *R*₄+5 and *M*₁ — 25:6. *M*₂ present as faint fold on membrane. Ratio of crossvein *m-cu* to apical part of *M*₁+2 (fork-handle) to apical part of *CuA* — 28:32:16. Hypopygium black. Cercus short, black, strap-like (dorsal view), densely haired, with a brush of longer black hairs on apex. Surstylus strongly curved, flattened and oval (ventral view), with 5—6 distolateral setulae, one of which longest, and with thin dorsoapical hook. Epandrial lobe reduced with 1 or 2 setae raising on the ventral side of surstylus base.

Length: body 3.4—3.8 mm; postabdomen 0.6 mm; antenna 1.2—1.4 mm; wing-length 3.0—3.3 mm; wing-width 1.0—1.2 mm.

Distribution. Nigeria, Togo (!), Zaire, Kenya.

Diagnosis. *A. cilifrons* is associated with *auratus* group, differing by the following combination of characters. Legs mostly black; fore and middle tibiae and basitarsomeres yellow to dark-brown. All femora with two rows of white ventral hairs in basal 2/3, which longer than femora diameter; fore tibia without erected setulae; first tarsomeres of fore tarsus 1.5—2 times as long as second article and 2/3 to 9/10 as long as rest tarsomeres; fore basitarsomeres and following article with ventral pad of short fine hairs; fourth and fifth tarsomeres of hind tarsus flattened; *m-cu* straight. Cercus black, short, strap-like (dorsal view), densely haired, with a brush of longer black hairs on apex. Surstylus strongly curved, flattened and oval (ventral view), with 5—6 distolateral setulae, one of which longest, and with thin dorsoapical hook.

Amblypsilopus miserus (Parent)

Material examined. Male, Nyanyana R. area, Tsetse Fly Ops., S. Rhodesia, 14.I.1956, 10 m E of Kanba Gorge, coll. R. Goovier, 145 [NHML].

Diagnosis. *A. miserus* is associated with *auratus* group, differing by the following combination of characters. Frons with two or three curved black vertical setae. One postvertical bristle. Upper postocular setae long. First flagellomere asymmetrically triangular, as long as high at base. Mesonotum with two strong posterior and a few hairlike anterior dorsocentral setae; three pairs of long acrostichals. Legs mostly black; fore and middle tibiae and basitarsomeres yellow. All femora with whitish ventral hairs, not longer than femora diameter. Fore tibia and basitarsomeres with fine erected ciliation on dorsal side. Fore basitarsomeres except base and second tarsomeres with ventral pad of short hooked hairs; first tarsomeres of fore tarsus 1.25

times as long as second article and half as long as rest tarsomeres. *R*₁ long, ending just before the middle of wing. Costa with short setulae; crossvein *m-cu* straight. Cercus short.

Distribution. Mozambique, Zimbabwe (!).

Amblypsilopus medvedevi sp. n.

(Fig. 10)

Holotype. Male, E. Dutch New Guinea: Jutefa Bay, Pim, sealevel —100 ft, II. 1936, L.E. Cheesman. B.M. 1936—271.

Description. Similar to *A. rimbija* and *A. wongabelensis* (see Bickel, 1994) except as noted. Head. Palp and proboscis brownish. Thorax. Three pairs of long acrostichals. Legs. Coxae, femora to knees and most distal tarsomeres brown; trochanters, femora knees, tibiae and basal tarsomeres yellow. Fore and middle coxae with pale anterior hairs; hind coxa with pale anterior seta. Femora with some long pale basoventral setae. Fore tibia with three long pale posterior setae in distal half decreasing in size distally; fore basitarsomeres with a few posterior hairs, and with dense ventral white pile; fifth tarsomeres of fore tarsus flattened; middle trochanter with strong dorsal bristle; third and fourth tarsomeres of hind tarsus flattened with ventral pad-like surface, fifth tarsomeres of the same tarsus very small and short. Length ratio of fore coxa to femora to tibia to tarsus (segments from first to fifth) — 2.6:4.1:4.4:2.4:0.9:0.6:0.4:0.4. Length ratio of middle coxa to femora to tibia (tarsus broken) — 2.3:5.0:5.3. Length ratio of hind coxa to femora to tibia to tarsus (segments from first to fifth) — 1.6:5.8:8.2: 2.5:1.1:0.9:0.9:0.4. Wing. Ratio of parts of costa between *R*₂+3 and *R*₄+5 to those between *R*₄+5 and *M*₁ — 18 : 5. Ratio of crossvein *m-cu* to apical part of *M*₁+2 (fork-handle) to apical part of *CuA* — 15:28:23.

Abdomen. Dark metallic green with copper reflection. Hypopygium black, cercus brownish, with pale hairs. Epandrium with setose cuticular projection arising at base of hypandrium and extending internally. Hypandrial hood slightly serrate. Epandrial lobe prominent, with a long and a short bristles. Surstylus big, massive, gently curved. Cercus distally slightly broadened, with outer row of long simple setae and long thin distodorsal apophysis bearing simple setae.

Female. Unknown.

Length: body 2.7 mm; wing-length 2.3 mm; wing-width 0.8 mm.

Distribution. Papua New Guinea.

Etymology. The species is named for Russian entomologist Dr. Gleb S. Medvedev.

Diagnosis. *A. medvedevi* is associated with species of *rimbija* group (Bickel, 1994) previously known from Australia, and can be separated by means of the following key.

- 1. Cercus distally expanded with outer row of strong setae and distodorsal apophysis, bearing long or bladelike setae, without narrow ventral prominences 2

- Cercus narrow, with or without narrow ventral prominences, without outer row of long setae *rimbija*, *wellsae*
- 2. Cercus greatly broadened, with outer row of bladelike setae and short obtuse distodorsal apophysis bearing bladelike setae *wongabelensis*
- Cercus slightly broadened, with outer row of simple setae and long thin distodorsal apophysis bearing simple setae *medvedevi*

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References

Becker, Th. 1923. Dipterologische Studien: Dolichopodidae. D. Aethiopische Region. *Entomol. Mitteilungen*, 12(1): 1—50.

Bickel, D. J. 1994. The Australian Sciapodinae (Diptera: Dolichopodidae), with a review of the Oriental and Australasian faunas, and a world conspectus of the subfamily. *Rec. Austral. Mus.*, Suppl. 21: 1—394.

Curran, C. H. 1924. The Dolichopodidae of South Africa. *Ann. Transv. Mus.*, 10: 212—232.

Dyde, C. E. & K. G. V. Smith. 1980. Family Dolichopodidae. In: R. W. Crosskey (ed.). *Catalogue of the Diptera of the Afrotropical Region*. Brit. Mus. (Nat. Hist.), London: 443—463.

Irwin, M. E. 1974. An account of southern African genus *Sciopolina* with descriptions of new species (Diptera: Dolichopodidae: Sciapodinae). *Ann. Natal Mus.*, 22: 221—264.

Lamb, C. G. 1922. The Percy Sladen Trust expedition to the Indian Ocean in 1905, under the leadership of Mr. J. Stanley Gardiner, M. A. Vol. 7. No VIII. Diptera: Asilidae, Scenopinidae, Dolichopodidae, Pipunculidae, and Syrphidae. *Transactions of the Linnean Society of London* (2, Zoology), 18: 361—416.

Parent, O. 1937. Dipteres Dolichopodides. *Especies et Localites nouvelles*. *Bull. Ann. Soc. Entomol. Belg.*, 77: 125—148.

Vanschuytbroeck, P. 1960. Mission zoologique de l'I.R.S.A.C. en Afrique orientale. L. Diptera Dolichopodidae. *Ann. Mus. roy. Congo belge*, ser. in—8 (Zool.), 88: 318—321.

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