

New data on Sciapodinae (Diptera: Dolichopodidae) with a revised catalogue and keys to Afrotropical species of the subfamily

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Abstract

Holotypes of 55 species and paratypes of additional 5 species have been examined mainly from the collections of the Royal Institute for Natural Sciences (Brussels) and Royal Museum for Central Africa (Tervuren). Descriptions of 18 new species, new records for known African species are given, 15 species are replaced, several species are excluded from the fauna of Madagascar, Congo (Kinshasa) or even Africa. Subgenus *Bickeliolus* GRICHANOV is raised to genus. The following pairs of species are synonymized: *Bickeliolus haemorrhoidalis* (BECKER) [= *B. coalescens* (PARENT)], *Chrysosoma consentium* CURRAN (= *C. fortunatum* PARENT), *C. katangense* CURRAN (= *C. speciosum* PARENT), *C. mesotrichum* BEZZI (= *C. garambaense* VANSCHUYTBROECK), *C. singulare* PARENT (= *C. gracile* VANSCHUYTBROECK), *Ethiosciapus bicalcaratus* (PARENT) [= *E. setifrons* (PARENT)], *E. finitimus* (PARENT) (= *E. skuffini* GRICHANOV), *Plagiozopelma pallidicorne* (CURRAN) [= *P. lindneri* (VANSCHUYTBROECK)]. A revised catalogue and keys to 12 genera and 205 Afrotropical species of Sciapodinae are also presented.

Key words: Diptera, Dolichopodidae, Sciapodinae, nomenclature, Tropical Africa.

Introduction

The last catalogue of Afrotropical dolichopodid fauna (DYTE and SMITH, 1980) included about 180 species belonging to 8 genera of Sciapodinae, of which 3 genera were later synonymized, status of 1 genus was changed, and all species of the genus *Sciapus* were transferred to other genera. As a result, only 65 previously known Afrotropical species are placed now in the sciapodine genera *sensu* DYTE and SMITH (1980). BICKEL (1994a) recently revised the world fauna of sciapodine genera. In his big work he proposed 21 valid genera, of which 8 occur in Afrotropical Region. GRICHANOV (1995/1997) reviewed all African sciapodine genera, described two new genera and 22 new species of the subfamily from the Region. In this paper one new genus is established and one more is recorded for Africa for the first time. Now twelve genera are known from Afrotropical zoogeographical Region, of which *Ethiosciapus*, *Bickeliolus* and

Gigantosciapus are endemic for Continental Africa and Madagascar, and *Bickelia* and *Mascaromyia* are confined to western Indian Ocean islands. *Dytomyia* was found on Madagascar and in Australia. The number of Afrotropical species belonging to sciapodine genera are as follows: *Chrysosoma* (67), *Amblypsilopus* (43), *Mascaromyia* (21), *Plagiozopelma* (17), *Condylostylus* (15), *Gigantosciapus* (13), *Ethiosciapus* (10), *Bickeliolus* (7), *Mesorhaga* (5), *Dytomyia* (3), *Bickelia* (3) and *Sciapus* (1).

In total, 205 Afrotropical species are known today. Many of those species were briefly or incompletely described. Some of them are known from females, others from males only. Authors in their descriptions often omitted important characters regarded now as having generic level value. That is why no less than 20 species are waiting to be synonymized or be declared *Nomina Dubia* in future revisions of type material. A few dozens of species are probably waiting to be described. The major fraction of Afrotropical species was described by O. PARENT (71 species including 7 placed in synonymy), I. Ya. GRICHANOV (41 and 1), C. H. CURRAN (37 and 7), Th. BECKER (21 and 2), P. VANSCHUYTBROECK (15 and 3) and C. G. LAMB (9).

The well-known fauna of Congo (Kinshasa) comprises 84 species; Tanzania numbers 25, South Africa 22, Uganda 20, Nigeria 19, Kenya and Cameroons 16 species each. Adjacent African islands are poorly studied. Only 29 species were recorded from Madagascar, 16 from Mauritius and 11 from Seychelles. The most interest distribution of species are as follows: *Chrysosoma snelli* CURRAN – Tanzania, Kenya, Madagascar, Seychelles, Reunion, Mauritius, Rodriguez, Aldabra, Maldives, Chagos Archipelago; *Mascaromyia librativertex* (LAMB) – Seychelles, Mauritius, Chagos Archipelago; *Bickelia subparallela* GRICHANOV – Chagos Archipelago, Seychelles; *Amblypsilopus munroi* (CURRAN) – South Africa, Namibia, Angola, Mozambique, Sri Lanka; *Amblypsilopus pallidicornis* (GRIMSHAW) – Madagascar, Seychelles, Hawaiian Islands, Society Islands, Marquesas Islands, Guam, Belau and Taiwan.

Treating material from the collections of the Royal In-

stitute for Natural Sciences [RINS] (Brussels), Royal Museum for Central Africa [RMCA] (Tervuren) and National Museum of Kenya [NMK] (Nairobi), I found a lot of interesting material in the subfamily Sciapodinae. Holotypes of 55 species and paratypes of additional 5 species were examined. In this paper descriptions of 18 new species, new records for known African species are given, 8 species are synonymized and 15 species are replaced, and some previous species records from Madagascar, Congo (Kinshasa) or even all Africa are shown to be incorrect. A revised catalogue and keys to all Afrotropical sciapodine species is also presented.

Holotypes and paratypes of the new species are deposited in the Royal Institute for Natural Sciences (Brussels). Hypopygii removed from the dry specimens are placed after alkalisation into glycerol and mounted on the same pin in a cavity of polymer film covered with a piece of adhesive tape. Most part of the material collected from Madagascar is kept in 70% alcohol inside glass tubes and cans. In addition, one specimen of each species is also placed after alkalisation into glycerol and mounted on pin in sealed plastic container. Listing material examined, I use here slash (/) to separate labels on one pin and square brackets [...] to insert my personal remarks. Species diagnosis includes usually key characters and some important features that were missed in original descriptions. Bibliography includes works published after the "Catalogue of the Diptera of the Afrotropical Region" (DYTE and SMITH, 1980).

CATALOGUE OF AFROTROPICAL SPECIES OF SCIAPODINAE

TRIBE MESORHAGINI BICKEL

Genus *Mesorhaga* Schiener

Mesorhaga SCHIENER, 1868:217. Type species *Mesorhaga tristis* SCHIENER, 1868, by monotypy.
= *Aptorthus* ALDRICH, 1893:48. Type species *Aptorthus albiciliatus* ALDRICH, 1893, subsequently designated by COQUILLETT, 1910:509.

africana CURRAN, 1927:264 – Congo (Kinshasa).
demeyeri GRICHANOV, **sp. n.** – Madagascar.
mahunkai GRICHANOV, 1997c:45 – Tanzania.
pauliani VANSCHUYTBROECK, 1952:137 – Madagascar.
tsurikovi GRICHANOV, **sp. n.** – Burundi.

TRIBE SCIAPODINI BICKEL

Genus *Sciapus* ZELLER

= *Leptopus* FALLEN, 1823:23. Included species *Leptopus longulus* FALLEN, 1823 and *Leptopus wiedemanni* FALLEN, 1823 [preoccupied by LATREILLE, 1809].

= *Psilopus* MEIGEN, 1824:35. Type species *Dolichopus platypterus* FABRICIUS, 1805, by subsequent designation of WESTWOOD, 1840:134 [preoccupied by POLI, 1795].

Sciapus ZELLER, 1842: 831 (new name for *Psilopus* MEIGEN)

= *Stenarus* GISTL, 1848:10 ([unnecessary] new name for *Psilopus* MEIGEN).

= *Psilopodius* RONDANI, 1861:11 ([unnecessary] new name for *Psilopus* MEIGEN).

= *Psilopodinus* BIGÖT, 1889:24. Type species *Dolichopus platypterus* FABRICIUS, 1805, by original designation.

= *Psilopiella* VAN DUZEE, 1914:438. Type species *Psilopiella rutila* VAN DUZEE, 1914, by original designation.

= *Agastoplax* ENDERLEIN, 1936:114. Type species *Psilopus flavicinctus* LOEW, 1857, by monotypy.

= *Dactylodiscia* ENDERLEIN, 1936:114. Type species *Psilopus calceolata* LOEW, 1859, by original designation.

= *Dactylorhipis* ENDERLEIN, 1936:114. Type species *Psilopus bellus* LOEW, 1873, by monotypy.

= *Placantichir* ENDERLEIN, 1936:114 [unavailable name, genus proposed after 1930 without designation of type species from the five included species].

= *Placantichir* BICKEL, 1994a:88. Type species *Dolichopus nervosus* Lehmann, 1822, designated by BICKEL, 1994a [for description to validate proposal of new genus, see generic characters cited for *Placantichir* ENDERLEIN, 1936:114].

Records of Palearctic species such as *S. longimanus* BECKER, *S. adumbratus* BECKER and *S. sylvaticus* BECKER from Congo (Kinshasa), Zimbabwe and Madagascar (VANSCHUYTBROECK, 1951, 1952, 1959) belong to undescribed species of *Amblypsilopus*.

endrodyi GRICHANOV, 1997c:47 – Ghana.

Genus *Dytomyia* BICKEL

Dytomyia BICKEL, 1994a:91. Type species *Sciopus sordidus* PARENT, 1928, by original designation.

deconinckae GRICHANOV, **sp. n.** – Madagascar.

elenae GRICHANOV, **sp. n.** – Madagascar.

paulyi GRICHANOV, **sp. n.** – Madagascar.

Genus *Bickelia* GRICHANOV

Bickelia GRICHANOV, 1996a:119. Type species *Bickelia subparallela* GRICHANOV, 1996, by original designation.

guerini PARENT, 1935:86 (*Sciopus*) – Mauritius.

parallela MACQUART, 1842:175 (*Psilopus*) – Mauritius.

subparallela GRICHANOV, 1996a:120 – Chagos Archipelago, Seychelles.

Genus *Mascaromyia* BICKEL

Mascaromyia BICKEL, 1994a:100. Type species *Psilopus pollicifer* LAMB, 1922:375, by original designation.

albitarsis PARENT, 1935:83 (*Sciopus*) – Mauritius.
amplicaudata LAMB, 1922:378 (*Psilopus*) – Seychelles.
babichae GRICHANOV, 1996:113 – Mauritius.
bickeli GRICHANOV, 1996:111 – Mauritius.
desjardsini MACQUART, 1842:175 (*Psilopus*) – Mauritius.
duplicata PARENT, 1932:230 (*Sciopus*) – Reunion.
dytei GRICHANOV, 1996:116 – Mauritius.
frolovi GRICHANOV, 1996:117 – Mauritius.
grandicaudata LAMB, 1922:378 (*Psilopus*) – Seychelles.
hutsoni GRICHANOV, 1996:115 – Mauritius.
indistincta LAMB, 1922:376 (*Psilopus*) – Seychelles.
kalinkini GRICHANOV, 1996:116 – Mauritius.
leptogaster THOMSON, 1869:510 (*Psilopus*) – Mauritius.
librativertex LAMB, 1922:374 (*Psilopus*) – Seychelles, Mauritius; Chagos Archipelago.
makhotkini GRICHANOV, 1996:112 – Mauritius.
magnicaudata LAMB, 1922:377 (*Psilopus*) – Seychelles.
mauritiensis PARENT, 1939:270 (*Sciopus*) – Mauritius.
pollicifer LAMB, 1922:375 (*Psilopus*) – Seychelles.
rufiventris MACQUART, 1842:174 (*Psilopus*) – Mauritius.
shabuninae GRICHANOV, 1996:114 – Mauritius.
vagabunda LAMB in BEZZI & LAMB, 1925:546 (*Psilopus*) – Rodriguez.

Genus *Condylostylus* BIGOT

Condylostylus BIGOT, 1859:215. Type species *Psilopus bituberculatus* MACQUART, 1842, by original designation.
 = *Dasypsilopus* BIGOT, 1859:215. Type species *Psilopus pilipes* MACQUART, 1842, by original designation.
 = *Eurostomerus* BIGOT, 1859:215. Type species “*Psilopus coerulus* MACQUART”, *nomen nudum* (= *Eurostomerus coerulus* BIGOT, validated by generic description).
 = *Oedipsilopus* BIGOT 1859:224. Type species *Psilopus posticatus* WIEDEMANN, 1830, by original designation.
 = *Tylochaetus* BIGOT, 1889:215. Type species *Psilopus bituberculatus* MACQUART, 1842, by original designation.
 = *Laxina* CURRAN, 1934:230. Type species *Dolichopus patibulatus* FABRICIUS, by original designation.

angustipennis LOEW, 1858:372 (1860:346) (*Psilopus*) – South Africa.
basovi GRICHANOV, **sp. n.** – Madagascar.
beckeri SPEISER, 1920:218 – Cameroons.
burgeoni PARENT, 1935:115 – Congo (Kinshasa), Tanzania, Kenya, Ruanda, Burundi.
chainei GRICHANOV, **sp. n.** – Madagascar.
congensis CURRAN, 1927:263 – Congo (Brazzaville), Cameroons, Congo (Kinshasa), Uganda, Tanzania, Kenya, South Africa.
 = *imitans* PARENT, 1935:117 *nec* CURRAN (misidentification).
galinae GRICHANOV, 1996c:218. – Uganda, Congo (Kinshasa).
imitator CURRAN, 1924:221 – Congo (Kinshasa), Kenya,

Tanzania, Burundi, Malawi, Zimbabwe, Mozambique, South Africa, Angola, Namibia.
 = *imitans* CURRAN, 1925:114 ([unnecessary] new name for *C. imitator* CURRAN).
kivuensis VANSCHUYTBROECK, 1964:136 – Congo (Kinshasa).
paricoxa PARENT, 1939:267 – Kenya, Zimbabwe, Tanzania.
pateraeformis BECKER, 1923:38 – Cameroons, Nigeria, Congo (Kinshasa), Uganda, Tanzania, Kenya, South Africa, (?) Madagascar.
 = *alter* BECKER, 1923:38.
selectus PARENT, 1931:43 – Malawi, Congo (Kinshasa).
selitskayae GRICHANOV, **sp. n.** – Congo (Kinshasa).
skuffini GRICHANOV, **sp. n.** – Madagascar.
stenurus LOEW, 1858:377 (1860:346) (*Psilopus*) – South Africa, Zimbabwe.
 = *sicatrix* CURRAN, 1926:389.

TRIBE CHRYSOSOMATINI GUERIN-MENEVILLE

Genus *Ethiosciapus* BICKEL

Ethiosciapus BICKEL, 1994a:141. Type species *Psilopus bilobatus* LAMB, 1922, by original designation.

bicalcaratus PARENT, 1933:37 (*Sciapus*) – Congo (Kinshasa), Uganda, Burundi, Madagascar, Comores, St. Helena.
 = *setifrons* PARENT, 1937:14 (*Sciapus*), **n. comb.**, **n. syn.**
bilobatus LAMB, 1922:372 (*Psilopus*) – Seychelles.
degener PARENT, 1934:119 (*Condylostylus*) – South Africa, **n. comb.**
dilectus PARENT, 1935:84 (*Sciapus*) – Tanzania, Uganda.
exarmatus PARENT, 1933:39 (*Sciapus*) – Congo (Kinshasa), ?Madagascar.
finitimus PARENT, 1939:262 (*Chrysosoma*) – Congo (Kinshasa), Uganda, **n. comb.**
 = *skuffini* GRICHANOV, 1996:226, **n. syn.**
flaviostris LOEW, 1858:371 (*Psilopus*) – South Africa, Mozambique, Madagascar, ?Ethiopia.
inflexus BECKER, 1923:46 (*Sciapus*) – Tanzania, Uganda, Kenya, Burundi, Congo (Kinshasa), – Madagascar, South Africa, St. Helena, **n. comb.**
integer BECKER, 1923:47 (*Sciapus*) – Malawi.
latipes PARENT, 1930:94 (*Chrysosoma*) – Madagascar.

Genus *Bickeliolus* GRICHANOV, **n. status**

Bickeliolus GRICHANOV, 1996:224 (as subgenus). Type species *Ethiosciapus maslovae* GRICHANOV, 1996, by original designation.

alluaudi PARENT, 1935:80 (*Chrysosoma*) – Madagascar, **n. comb.**
haemorrhoidalis BECKER, 1923:46 (*Sciapus*) – Ethiopia, Uganda, Burundi, Congo (Kinshasa), – South Africa, **n. comb.**

= *coalescens* PARENT, 1934:121 (*Sciapus*), **n. comb., n. syn.**

lamellatus PARENT, 1935:118 (*Sciapus*) – Congo (Kinshasa), Ruanda, Tanzania, Uganda, St. Helena, **n. comb.**

lasiophthalmus LAMB, 1922:371 (*Psilopus*) – Seychelles, **n. comb.**

lutescens VANSCHUYTBROECK, 1952:139 (*Sciapus*) – Madagascar, **n. comb.**

maslovae GRICHANOV, 1996:224 (*Ethiosciapus*) – Angola, **n. comb.**

trochanteralis CURRAN, 1924:219 (*Sciapus*) – South Africa, **n. comb.**

Genus *Chrysosoma* GUERIN-MENEVILLE

Subgenus *Chrysosoma* GUERIN-MENEVILLE

Chrysosoma GUERIN-MENEVILLE, 1831: pl. 20, fig. 6. Type species *Chrysosoma fasciata* GUERIN-MENEVILLE, 1831, by subsequent designation of ENDERLEIN, 1912:373.

= *Agonosoma* GUERIN-MENEVILLE, 1838:293 ([unnecessary] replacement name for *Chrysosoma* GUERIN-MENEVILLE), preoccupied by Laporte, 1832.

= *Margaritostylus* BIGOT, 1859:215. Type species *Psilopus globifer* WIEDEMANN, 1830, by original designation.

= *Megistostylus* BIGOT, 1859:215. Type species *Dolichopus crinicornis* WIEDEMANN (as *Psilopus crinicornis*), by original designation.

= *Mesoblepharius* BIGOT, 1859:215. Type species *Psilopus senegalensis* MACQUART, 1834, by original designation.

= *Oariostylus* BIGOT, 1889:215. Type species *Psilopus tuberculicornis* MACQUART, 1855, by original designation.

= *Eudasypus* BIGOT, 1889:24. Type species *Psilopus senegalensis* MACQUART, 1834, by original designation.

= *Oariopherus* BIGOT, 1889:24. Type species *Psilopus tuberculicornis* MACQUART, 1855, by original designation.

= *Spathipsilopus* BIGOT, 1888:24. Type species *Psilopus globifer* WIEDEMANN, 1830, by original designation.

= *Spathipsilopus* BIGOT, 1890:268. Type species *Psilopus globifer* WIEDEMANN, 1830, by subsequent designation of DYTE, 1975:213.

aequatoriale PARENT, 1933:2 – Congo (Kinshasa), Uganda.

aequilobatum PARENT, 1933:15 – Congo (Kinshasa), Congo (Brazzaville).

aestimabile PARENT, 1934:18 – Nigeria, Gambia, ?Madagascar.

albilimbatus BIGOT, 1890:287 (*Psilopus*) – Ivory Coast, Gabon, Ghana, Nigeria, Sierra Leone, Congo (Brazzaville), Congo (Kinshasa).

albocrinittatum CURRAN, 1925:109 – Congo (Kinshasa), Congo (Brazzaville).

alboguttatum PARENT, 1930:93 – Cameroons, Burundi, Guinea.

angolense PARENT, 1934:113 – Angola, Congo (Kinshasa).

arduus PARENT, 1936:6 (*Sciapus*) – Congo (Kinshasa), **n. comb.**

asperum PARENT, 1934:114 – South Africa.

bacchi DYTE, 1957:37 – Tanzania, Burundi.

benignum PARENT, 1934:115 – Nigeria.

breddoi PARENT, 1933:21 – Congo (Kinshasa).

carum WALKER, 1849:643 (*Psilopus*) – “Congo”.

centrale BECKER, 1923:25 – Cameroons.

cilifemoratum PARENT, 1934:115 – Malawi, Congo (Kinshasa).

consentium CURRAN, 1925:111 – Congo (Kinshasa), Congo (Brazzaville).

= *fortunatum* PARENT, 1933:1, **n. syn.**

continuum CURRAN, 1927:255 – Congo (Kinshasa), Congo (Brazzaville).

corruptor PARENT, 1933:24 – Congo (Kinshasa).

flexum LOEW, 1858:371 (*Psilopus*) – South Africa.

gemmeum WALKER, 1849:644 (*Psilopus*) – Nigeria, Sierra Leone, Gambia, Senegal.

gromieri PARENT, 1930:92 – Cameroons.

hargreavesi CURRAN, 1927:9 – Sierra Leone.

hirsutulum PARENT, 1933:27 – Congo (Kinshasa).

ituriense PARENT, 1933:29 – Congo (Kinshasa), Malawi.

katangense CURRAN, 1925:107 – Congo (Kinshasa), Sudan.

= *speciosum* PARENT, 1933:32, **n. syn.**

kuznetzovi GRICHANOV, 1997:37 – Zambia.

laeve BIGOT, 1891:373 (*Psilopodius*) – ?Guinea, Ivory Coast.

lavinia CURRAN, 1927:260 – Congo (Kinshasa), Tanzania, Burundi.

leucopogon WIEDEMANN, 1824:40 (*Dolichopus*) – ?Mauritius, ?Aldabra; Chagos Archipelago, Burma, Sri Lanka, Taiwan, India, Indochina, Java, Sumatra, Thailand, Queensland, New Caledonia, Tahiti.

= *apicalis* WIEDEMANN, 1830:227 (*Psilopus*).

= *conicornis* MACQUART, 1846:120 (*Psilopus*).

= *loewi* ENDERLEIN, 1912:378.

liberia CURRAN, 1929:4 – Liberia, Congo (Kinshasa).

marginatum BECKER, 1923:29 – Sierra Leone.

mesotrichum BEZZI, 1908:380 (*Psilopus*) – Congo (Kinshasa), Sierra Leone, Uganda.

= *senegalense* BECKER, 1923:20,33 *nec* MACQUART (misidentification).

= *senegalense* CURRAN, 1925:107 *nec* MACQUART (misidentification).

= *garambaense* VANSCHUYTBROECK, 1959:37, **n. syn.**

micantifrons SPEISER, 1910:108 (*Agonosoma*) – Tanzania.

minusculum BECKER, 1923:29 – Cameroons, Equatorial Guinea, Congo (Kinshasa), ?Sierra Leone.

= *ostentatum* BECKER, 1923:30.

norma CURRAN, 1927:257 – Congo (Kinshasa).

pauperculum PARENT, 1933:30 – Congo (Kinshasa).

petersi DYTE, 1957:37 – Tanzania.
pomeroyi CURRAN, 1927:7 – Nigeria, Cameroons.
praecipuum PARENT, 1936:319 – Congo (Kinshasa).
praelatum BECKER, 1923:31 – Equatorial Guinea, Tanzania, Congo (Kinshasa), Malawi.
pseudorepertum GRICHANOV, **sp. n.** – Congo (Kinshasa).
repertum BECKER, 1923:31 – Equatorial Guinea, Nigeria.
schoutedeni CURRAN, 1927:258 – Congo (Brazzaville), Congo (Kinshasa), Tanzania, Angola, Zambia.
 = *fortunatum* GRICHANOV, 1997 *nec* PARENT (misidentification).
senegalense MACQUART, 1834:450 (*Psilopus*) – Congo (Brazzaville), Congo (Kinshasa), Gabon, Senegal, Sierra Leone, Nigeria.
 = *smaragdinum* WALKER, 1849:642 (*Psilopus*).
 = *saphirum* BIGOT, 1858:362 (*Psilopus*).
 = *mixtum* CURRAN, 1927:3.
singulare PARENT, 1933:3 – Congo (Kinshasa).
 = *gracile* VANSCHUYTBROECK, 1959:29, **n.syn.**
snelli CURRAN, 1927:5 – Tanzania, Kenya, Madagascar, Seychelles, Reunion, Rodriguez; Maldives, Chagos Archipelago.
 = *leucopogon*, authors, *nec* WIEDEMANN.
stolyarovi GRICHANOV, **sp. n.** – Burundi.
stubbisi GRICHANOV, 1997:35 – Kenya, Uganda.
tarsiciliatum PARENT, 1930:91 – Cameroons, Sierra Leone, Congo (Kinshasa), Gabon.
tanasijshtshuki GRICHANOV, 1997:33 – Kenya, Congo (Kinshasa).
tenuipenne CURRAN, 1927:254 – Senegal, Nigeria, Congo (Brazzaville), Congo (Kinshasa), Uganda.
tractatum BECKER, 1923:35 – Togo, Nigeria, Ghana.
 = *biciliatum* PARENT, 1931:45.
tricrinium PARENT, 1933:33 – Congo (Kinshasa), Burundi, Mozambique, Malawi, Sierra Leone, Nigeria, Tanzania, South Africa.
 = *flexum* CURRAN, 1926:384 *nec* LOEW (misidentification).
trigemmans WALKER, 1849:650 (*Psilopus*) – no locality.
triumphator PARENT, 1933:33 – Congo (Kinshasa).
ungulatum PARENT, 1941:207 – Principe.
varivittatum CURRAN, 1925:112 – Congo (Kinshasa).
vividum BECKER, 1923:36 – Equatorial Guinea, Congo (Kinshasa), Cameroons.
 = *crinipes* PARENT, 1933:25.
woodi PARENT, 1935:82 – Zambia.
zaitzevi GRICHANOV, 1997:38 – Zambia.
zephyrum BIGOT, 1858:361 (*Psilopus*) – Gabon.
zinovjevi GRICHANOV, 1997:31 – Nigeria.

Subgenus *Kalocheta* BECKER

Kalocheta BECKER, 1923:41 (as genus). Type-species: *Kalocheta passiva* BECKER, 1923, by monotypy.

collarti PARENT, 1933:35 (*Kalocheta*) – Congo (Kinshasa), Tanzania, Kenya, Uganda.
cucana NEGROBOV et KULIBALI, 1983:1121 (*Kalochaeta*)

– Congo (Kinshasa), Uganda.
neolibertia BICKEL, 1994a:212 – Liberia.
 = *libertia* CURRAN, 1929:5 (*Kalocheta*) *nec* CURRAN, 1929:4 (preoccupied).
passiva BECKER, 1923:42 (*Kalocheta*) – Cameroons, ?Congo (Brazzaville), ?Congo (Kinshasa).
villiersi VANSCHUYTBROECK, 1970:267 (*Kalocheta*) – Congo (Brazzaville).

Genus *Gigantosciapus* GRICHANOV

Gigantosciapus GRICHANOV, 1997:79. Type-species: *Gigantosciapus oldroydi* GRICHANOV, 1997: original designation.

africanus PARENT, 1933:16 (*Chrysosoma*) – Congo (Kinshasa).
anomalipes PARENT, 1935:112 (*Chrysosoma*) – Congo (Kinshasa), Ghana.
decellei VANSCHUYTBROECK, 1966:202 (*Megistostylus*) – Ivory Coast.
françoisi GRICHANOV, **sp. n.** – Congo (Kinshasa).
gemmarius WALKER, 1849:645 (*Psilopus*) – Sierra Leone, Congo (Brazzaville), Ghana, Congo (Kinshasa), Ivory Coast, Liberia, Cameroons.
 = *fulvicinctus* BIGOT, 1891:372 (*Psilopodius*).
inversus CURRAN, 1927:249 (*Chrysosoma*) – Sierra Leone, Liberia.
kamerunensis BECKER, 1923:27 (*Chrysosoma*) – Cameroons, Guinea, Congo (Kinshasa), ?Madagascar.
meyeri VANSCHUYTBROECK, 1962:353 (*Megistostylus*) – Nigeria.
nataliae GRICHANOV, **sp. n.** – Congo (Kinshasa).
oldroydi GRICHANOV, 1997:80 – Cameroons.
pseudogemmarius PARENT, 1934:118 (*Chrysosoma*) – Congo (Brazzaville).
saegeri VANSCHUYTBROECK, 1959:9 (*Megistostylus*) – Congo (Kinshasa).
tuberculatus CURRAN, 1927:246 (*Chrysosoma*) – Ghana, Ivory Coast.

Genus *Plagiozopelma* ENDERLEIN

Plagiozopelma ENDERLEIN, 1912:367. Type species *Plagiozopelma spengeli* ENDERLEIN, 1912, by original designation [= *Psilopus appendiculatus* BIGOT, 1890].

angulitarse PARENT, 1933:18 (*Chrysosoma*) – Congo (Kinshasa).
bequaerti CURRAN, 1926:2 (*Chrysosoma*) – Congo (Kinshasa), Uganda.
capilliferum PARENT, 1933:22 (*Chrysosoma*) – Congo (Kinshasa).
collarti CURRAN, 1927:249 (*Chrysosoma*) – Congo (Brazzaville), Malawi, Uganda, Congo (Kinshasa).
conjectum PARENT, 1934:116 (*Chrysosoma*) – Ghana.
daveyi PARENT, 1939:261 (*Chrysosoma*) – Malawi.
du CURRAN, 1929:2 (*Chrysosoma*) – Liberia, Congo (Kinshasa).

- ghesquieri** PARENT, 1936:2 (*Chrysosoma*) – Congo (Kinshasa).
- grahami** PARENT, 1939:264 (*Chrysosoma*) – Ghana.
- inops** PARENT, 1929:202 (*Chrysosoma*) – Liberia, Benin, Tanzania, Congo (Kinshasa).
- nalense** CURRAN, 1926:6 (*Chrysosoma*) – Congo (Kinshasa), Nigeria, Tanzania.
- njalense** PARENT, 1934:118 (*Chrysosoma*) – Sierra Leone.
- pallidicorne** CURRAN, 1927:252 (*Chrysosoma*) – Kenya, Tanzania, Congo (Kinshasa), **n. comb.**
- = **lindneri** VANSCHUYTBROECK, 1964:3 (*Megistostylus*), **n. syn.**
- = **puma** DYTE & SMITH, 1980:446 (*Chrysosoma*) ([unnecessary] new name for *Chrysosoma pallidicorne* CURRAN), **n. comb.**
- piliseta** PARENT, 1936:4 (*Chrysosoma*) – Congo (Kinshasa).
- ramiseta** PARENT, 1939:266 (*Chrysosoma*) – Sierra Leone, Zimbabwe, Congo (Kinshasa).
- tritseta** PARENT, 1929:271 (*Chrysosoma*) – Camerouns, Ghana, Nigeria, Congo (Kinshasa).
- vagator** BECKER, 1923:36 (*Chrysosoma*) – Togo, Congo (Kinshasa), Equatorial Guinea.

Genus *Amblypsilopus* BIGOT

- Amblypsilopus** BIGOT, 1889:24. Type species *Psilopus pittacinus* LOEW, 1861 (as *pitacinus* FABRICIUS), by original designation.
- = **Gnamptopsilopus** ALDRICH, 1893:48. Type species *Psilopus scintillans* LOEW, designated by COQUILLET, 1910:547.
- = **Leptorhethum** ALDRICH, 1893:50. Type species *Leptorhethum angustatum* ALDRICH, 1893, by monotypy.
- = **Sciopolina** CURRAN, 1924:216. Type species *Sciopolina fasciatum* CURRAN, 1924, by monotypy.
- = **Australiola** PARENT, 1932:127. Type species *Australiola tonnoiri* PARENT, 1932 (= *Sciapus zonatus* PARENT, 1932), by original designation.
- = **Labeneura** PARENT, 1937:126 (as subgenus of *Sciapus*). Type species *Labeneura barbipalpis* PARENT, 1937 (= *Sciapus lenga* CURRAN, 1929), by monotypy.
- aenescens** VANSCHUYTBROECK, 1952:138 (*Sciapus*) – Madagascar.
- auratus** CURRAN, 1924:217 (*Chrysosoma*) – South Africa, Zimbabwe, Zambia, Angola, Congo (Kinshasa), Tanzania, Nigeria, Guinea.
- barkalovi** GRICHANOV, **sp. n.** – Congo (Kinshasa).
- basilewskyi** VANSCHUYTBROECK, 1960:319 (*Sciapus*) – Tanzania, Kenya, Uganda.
- bevisi** CURRAN, 1927:11 (*Sciapus*) – South Africa.
- biplectinatus** PARENT, 1934:120 (*Sciapus*) – Kenya.
- bonniae** IRWIN, 1974:245 (*Sciopolina*) – South Africa.
- bruneli** GRICHANOV, **sp. n.** – Madagascar.
- cilifrons** PARENT, 1937:126 (*Chrysosoma*) – Nigeria, Togo, Congo (Kinshasa), Kenya, Madagascar.

- cuthbertsoni** PARENT, 1937:129 (*Sciapus*) – Zimbabwe, Burundi.
- dallastai** GRICHANOV, **sp. n.** – Madagascar.
- disjunctus** PARENT, 1936:1 (*Chrysosoma*) – Congo (Kinshasa), Nigeria, Burundi.
- fasciatus** CURRAN, 1924:216 (*Sciopolina*) – South Africa.
- = **pallidatus** CURRAN, 1927:12 (*Sciapus*).
- flabellifer** BECKER, 1923:45 (*Sciapus*) – Madagascar, ?Congo (Kinshasa).
- flavicollis** BECKER, 1923:40 (*Leptorhethum*) – Camerouns, Equatorial Guinea.
- flavus** VANSCHUYTBROECK, 1962:353 (*Megistostylus*) – Madagascar, **n. comb.**
- gorodkovi** GRICHANOV, 1996:291 – Tanzania.
- grootaerti** GRICHANOV, **sp. n.** – Madagascar.
- kraussi** GRICHANOV, **sp. n.** – Madagascar.
- lenga** CURRAN, 1929:1 (*Sciapus*) Liberia, Sierra Leone, – Zimbabwe.
- = **barbipalpis** PARENT, 1937:128 (*Labeneura*, as subgenus of *Sciapus*).
- longifilis** BECKER, 1923:28 (*Chrysosoma*) – Tanzania, Kenya, Uganda, Congo (Kinshasa), St. Helena.
- macularivenus** IRWIN, 1974:251 (*Sciopolina*) – South Africa.
- madagascarensis** VANSCHUYTBROECK, 1952:89 (*Chrysosoma*) – Madagascar.
- miserus** PARENT, 1935:81 (*Chrysosoma*) Mozambique, – Zimbabwe.
- munroi** CURRAN, 1924:218 (*Chrysosoma*) – South Africa, Namibia, Angola, Mozambique; Sri Lanka.
- = **ernestus** CURRAN, 1924:218 (*Chrysosoma*).
- nanus** PARENT, 1929:243 (*Sciapus*) – Senegal, Congo (Kinshasa).
- nartshukae** GRICHANOV, 1996:290 – Angola.
- nubilis** PARENT, 1935:87 (*Sciapus*) – Madagascar.
- pallidicornis** GRIMSHAW, 1901:12 (*Gnamptopsilopus*) – Madagascar, 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, Congo (Kinshasa), Nigeria.
- pernigrus** BECKER, 1923:30 (*Chrysosoma*) – Malawi, Congo (Kinshasa).
- rectangularis** PARENT, 1937:13 (*Sciapus*) – Congo (Kinshasa), ?Madagascar.
- retrovenus** IRWIN, 1974:242 (*Sciopolina*) – South Africa.
- rosaceus** WIEDEMANN, 1824:40 (*Dolichopus*) – South Africa.
- = **peringueyi** CURRAN, 1926:2 (*Sciapus*).
- signatus** BECKER, 1923:35 (*Chrysosoma*) – Malawi, Congo (Kinshasa).
- simplex** DE MEIJERE, 1910:99 (*Agonosoma*) – ?Seychelles; Java.
- steelei** GRICHANOV, 1996:289 Kenya.
- stuckenbergi** VANSCHUYTBROECK, 1957:3 (*Sciapus*) – Madagascar.
- stuckenbergerorum** IRWIN, 1974:236 (*Sciopolina*) – South Africa.

subfascipennis CURRAN, 1926:386 (*Sciapus*) – Uganda, Congo (Kinshasa), St. Helena, ?Madagascar.

sudanensis PARENT, 1939:271 (*Sciapus*) – Sudan, Congo (Kinshasa).

tenuicauda PARENT, 1936:7 (*Sciapus*) – Congo (Kinshasa).

tropicalis PARENT, 1933:40 (*Sciapus*) – Congo (Kinshasa).

REVIEW OF TYPE MATERIAL EXAMINED, DESCRIPTIONS AND NEW RECORDS

1. *Mesorhaga africana* CURRAN

Type material examined. Holotypus, ♀ [red label] / Musee du Congo, Bas-Uele: Buta, Congo, Jan. 23-31.1925, Dr. H. SCHOUTEDEN / Type *Mesorhaga africana* CURRAN.

Diagnosis. *M. africana* differs from other Afrotropical species of the genus in smaller size (2.25 mm) and, in addition, right-angular, rather than gentle, bend of M_{1+2} vein.

Distribution. Congo (Kinshasa).

2. *Mesorhaga demeyeri* sp. n. (Fig. 1)

Holotype. ♂ in glycerol. Madagascar: Ambatondrazaka, 26.II.1991, A. PAULY col. [RINS].

Paratypes [all in alcohol]. 3 ♀♀ with the same label as holotype. 3 ♀♀, Madagascar: Foulpointe, forêt, lagune, X.1993, A. PAULY col. P.M. [RINS].

Description. Frons and face metallic dark-green. 2 short front vertical seta bends forward on each side; ocellar tubercle with 2 pairs of strong bristles and 1 or 2 pairs of weak posterior setae; 2 long postvertical setae positioned as a linear continuation of the postocular setal row. Ventral postcranium covered with irregular white hairs. Face narrowed, approximately 1.5 times as high as wide under antennae. Proboscis and palpus black-brown, with short light hairs; palpus with 1 black seta in addition. Antennae black. Pedicel with ring of short setae; 1 or 2 ventral setae slightly longer than pedicel. First flagellomere rounded, as long as high, with very short hairs. Arista apicodorsal. Length ratio of scape to pedicel to of first flagellomere to arista, 5 : 5 : 6 : 38.

Mesonotum and scutellum metallic green. Pleura bronze-black. 5 strong dorsocentral setae, 3 long acrostichals, a pair of strong and pair of fine scutellar setae.

Legs mostly black-brown; fore knee, tibia and basitarsus yellow; middle knee yellow-brown. Fore and middle coxae with numerous dark cilia anteriorly; hind coxa with external seta. All femora with double ventral row of black cilia, approximately equal in length to femora diameter. Fore tibia bare; tarsus simple. Length ratio of fore femora to tibia to tarsus (segments from first to fifth),

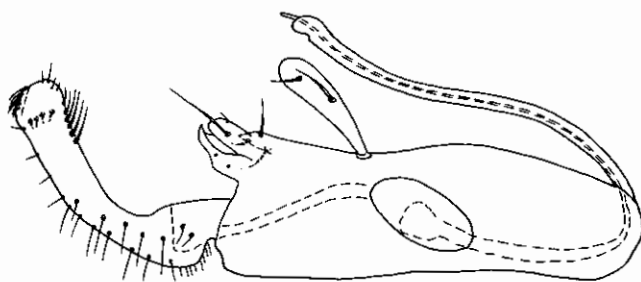


Fig. 1. – Hypopygium, left lateral view. *Mesorhaga demeyeri* sp. n.

55 : 62 : 26 : 11 : 8 : 5 : 7. Middle tibia with 1 very short dorsal and 3 or 4 apical setae, tarsus simple. Length ratio of middle tibia to tarsus (segments from first to fifth), 80 : 46 : 17 : 11 : 7 : 7. Hind tibia with several inconspicuous dorsal and 2 or 3 apical setae. Last tarsomere of hind tarsus slightly flattened. Length ratio of hind tibia to tarsus (segments from first to fifth), 90 : 37 : 29 : 18 : 10 : 8.

Wings brownish in anterior half, densely brown at base; veins brown. R_1 reaching mid-wing. R_{2+3} straight. R_{4+5} gently curved to M_1 at apex. M_1 with two right-angular bends. Ratio of parts of costa between R_{2+3} and R_{4+5} to those between R_{4+5} and M_1 , 50 : 8. M_2 absent. Crossvein *m-cu* straight. Ratio of crossvein *m-cu* to apical part of M_{1+2} (up to curvation) to apical part of CuA_1 , 31 : 40 : 32. Alula with somewhat longer than usually, flattened cilia. Fold-like anal vein and anal lobe present. Lower calypter brownish, with fan of black setae. Halter brown.

Abdomen bronze-black, with short, though laterally long, black hairs. First tergite with medial triangular excavation and several long black distolateral bristles. Sixth and seventh segments shortened. Hypopygium black-brown, epandrium elongate. Cercus mostly brown, digitiform, slightly curved ventrad, with short black dorsolateral setae, several subapical ventral setae, apicodorsal fringe of short curved setae and transverse inner row of several short subapical spines. Surstylus bi- or trilobate, with several dorsal and lateral setae. Epandrial lobe long, flattened, bearing one strong seta in the middle and short seta at apex.

Female. Similar to male except lacking male secondary sexual characters, otherwise as follows. Middle tibia and basitarsus entirely yellow-brownish; wing only slightly darkened.

Length: body 3.8 mm; antenna 0.8 mm; wing-length 3.6 mm; wing-width 1.3 mm.

Distribution: Madagascar.

Etymology. The species is named for Belgian entomologist Marc De Meyer.

Diagnosis. The new species is related to *M. pauliani*, differing in partly yellow legs, white postocular setae, different ratio of wing veins *m-cu* to CuA_1 and hypopygium morphology.

3. *Mesorhaga pauliani* VANSCHUYTBROECK (Fig. 2)

Material examined. ♂ in glycerol, Madagascar: Tamatave Prov., Morarano-chrome, 1630.IX.1991, A. PAULY, forêt, 25 km W. ♂ in alcohol, Madagascar: Tamatave Prov., Morarano-chrome, 115.IX.1991, A. PAULY, forêt, 25 km W. 10 ♂♂, 7 ♀♀ in alcohol, Madagascar: Fianarantsoa Prov. (= Fia.), Ranomafana, 19.I.1992, A. PAULY, forêt [RINS].

Description. Male. Frons and face metallic green. A strong front vertical seta bends forward; ocellar tubercle with a pair of strong bristles; 5 or 6 long postvertical setae positioned as a linear continuation of the postocular setal row. Lower postocular setae black. Face narrowed, approximately 1.5 times as high as wide under antennae. Proboscis and palpus black-brown, with short light hairs; palpus supplemented with one black seta. Antennae black. Pedicel with short dorsal and 2 very long ventral setae, 4 times longer than pedicel. First flagellomere rounded, approximately as long as high. Arista dorsal. Length ratio of scape to pedicel to first flagellomere to arista, 6 : 5 : 6 : 40.

Mesonotum and scutellum metallic green-black. Pleura bronze-black. 5 strong dorsocentral setae, 3 long acrostichals, a pair of strong and pair of fine scutellar setae.

Legs black-brown, fore tibia and basitarsus somewhat lighter. Fore and middle coxae with black setae anteriorly; hind coxa with strong external seta at base. All femora with double ventral row of black setae, longer than femora diameter. Last tarsomere of all tarsi slightly flattened. Fore tibia with 2 posterodorsal seta. Length ratio of fore tibia to tarsus (segments from first to fifth), 57 : 30 : 10 : 7 : 5 : 6. Middle tibia with 2 anterodorsal, 1 posterodorsal setae. Length ratio of middle tibia to tarsus (segments from first to fifth), 74 : 44 : 15 : 12 : 6 : 6. Hind tibia with 4 dorsal setae. Length ratio of hind tibia to tarsus (segments from first to fifth), 85 : 33 : 26 : 16 : 9 : 8.

Wings evenly darkened in anterior half; veins brown. R_1 nearly reaching mid-wing. R_{2+3} straight. R_{4+5} gently curved to M_1 at apex. M_1 with double, nearly right-angular bend. Ratio of parts of costa between R_{2+3} and R_{4+5} to those between R_{4+5} and M_1 , 34 : 6. M_2 absent. Crossvein *m-cu* nearly straight. Ratio of crossvein *m-cu* to

apical part of M_{1+2} (section from *m-cu* to curvature) to apical part of CuA_1 , 23 : 33 : 34. Fold-like anal vein and anal lobe present. Lower calypter brown, with fan of long black setae. Halter brown.

Abdomen bronze-black, with short, though laterally long, black hairs. First tergite without membranous excavation, with several long black distolateral bristles. Sixth and seventh segments shortened. Hypopygium black, epandrium elongate. Cercus mostly brown, dorso-laterally with several black setae in basal third, apically trilobate; the widest ventral lobe bearing 4 short thick dorsal setae and thin ventral apophysis. Surstylus broad, with four distal setae. Epandrial lobe long, flattened, bearing 2 subapical setae.

Female. Similar to male except lacking male secondary sexual characters. Wing only slightly darkened, almost hyaline.

Length: body 3.3 mm; antenna 0.9 mm; wing-length 3.0 mm; wing-width 1.1 mm.

Distribution: Madagascar.

Diagnosis. *M. pauliani* differs from other Afrotropical species of the genus in entirely black-brown leg. 2nd to 5th segments of fore tarsus shortened. M_{1+2} with two nearly right-angular bends; *m-cu* 2/3 as long as middle section of M_{1+2} (from *m-cu* to curvature) or CuA_1 .

4. *Mesorhaga tsurikovi* sp. n. (Fig. 3)

Holotype. ♂, Urundi: Bururi, alt. 1950, 8.I.1949, F.J. FRANÇOIS / R.I.Sc.N.B. I.G. 24.452. [RINS]

Paratypes. 2 ♂♂, Urundi: Bururi, alt. 2000, 10.X.1948, F. FRANÇOIS / R.I.Sc.N.B. I.G. 24.452. [RINS]

Description. Frons and face metallic green, mostly grey pollinose. A hairlike front vertical seta bends forward; ocellar tubercle with a pair of strong bristles and a pair

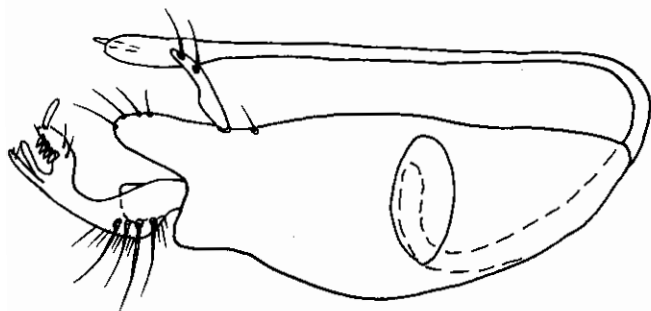


Fig. 2. — Hypopygium, left lateral view. *Mesorhaga pauliani* VANSCHUYTBROECK.

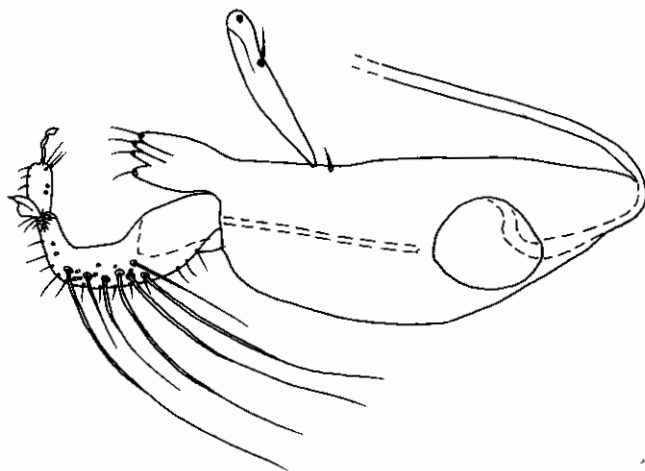


Fig. 3. — Hypopygium, left lateral view. *Mesorhaga tsurikovi* sp. n.

of weak posterior hairs; 3 long postvertical setae are positioned as a linear continuation of the postocular setal row. Ventral postcranium covered with irregular white hairs. Face narrowed, 1.6 times as high as wide under antennae; clypeus separated from margins of eyes, 1/3 as high as epistome. Proboscis and palpus black-brown, with short light hairs. Antennae black. Pedicel with short dorsal and ventral bristles. First flagellomere transverse-oval, shorter than high, with very short hairs. Arista apicodorsal, microscopically haired. Length ratio of scape to pedicel to first flagellomere to arista, 5 : 5 : 5 : 7 : 65.

Mesonotum and scutellum metallic green, slightly brownish pollinose. Pleura bronze-black, densely grey pollinose. 5 strong dorsocentral setae, 3 long acrostichals, a pair of strong and pair of fine scutellar setae.

Legs mostly dark-yellow; fore coxa yellow-brownish, blackish at base; middle and hind coxae black; anterior four femora brown at base; hind femora brown at base and apex; hind tibia black at extreme apex; basitarsi light-brown in basal half; tarsi otherwise black. Fore and middle coxae with numerous dark cilia anteriorly; hind coxa with fine external seta. Fore femora with posterior hairs, longer than femora diameter; fore tibia bare; tarsus simple. Length ratio of fore coxa to femora to tibia to tarsus (segments from first to fifth), 55 : 90 : 99 : 60 : 25 : 17 : 8 : 9. Middle femora with fine brownish posteroventral hairs, as long as femora diameter. Middle tibia with 2 or 3 apical setae, tarsus simple. Length ratio of middle coxa to femora to tibia to tarsus (segments from first to fifth), 35 : 100 : 136 : 90 : 34 : 23 : 12 : 11. Hind femora with posteroventral hairs, half as long as femora diameter; tibia with 2 or 3 apical setae. Last tarsomere of hind tarsus slightly flattened. Length ratio of hind coxa to femora to tibia to tarsus (segments from first to fifth), 25 : 135 : 167 : 60 : 52 : 33 : 19 : 11.

Wings mostly hyaline, brownish in anterior half; veins brown. R_1 nearly reaching mid-wing. R_{2+3} straight. R_{4+5} gently curved to M_1 at apex. M_1 with strong, 60° bend, than gently curved apicad. Ratio of parts of costa between R_{2+3} and R_{4+5} to those between R_{4+5} and M_1 , 6 : 1. M_2 absent. Crossvein *m-cu* straight. Ratio of crossvein *m-cu* to apical part of M_{1+2} (up to curvation) to apical part of CuA_1 , 38 : 70 : 50. Fold-like anal vein and anal lobe present. Lower calypter brown, with black setae. Halter black-brown.

Abdomen bronze-black, with short, though laterally long, black hairs. First tergite with narrow membranous excavation and a few long black distolateral bristles. Fifth tergite ventrally swollen, with numerous long black setae; sixth and seventh segments shortened; first to sixth segments combined 2.5 times longer than mesonotum. Hypopygium black, epandrium elongate. Cercus mostly brown, strongly curved, dorsolaterally with several long black setae in the middle, apically with 2 lobes; broad ventral lobe without thick setae, bearing soft thin appendix on apex; dorsal lobe half as long as ventral, pointed, arising from rosette of short spinules. Surstylus elongate, with four apical lobes, each of them bearing 1 or 2 setae.

Epandrial lobe long, flattened, fine at apex and bearing 2 setae in apical third.

Female unknown.

Length: body 4.7–5.3 mm; antenna 1.2 mm; wing-length 5.8 mm; wing-width 1.6 mm.

Distribution: Burundi.

Etymology. The species is named for Russian dipterologist Mikhail Tsurikov.

Diagnosis. The new species can be separated from *M. mahunkai* in larger size, another ratio of middle tarsomeres and $CuA_1/m-cu$, mostly yellow femora and morphology of cercus. It cannot be associated with *M. pauliani* and female of *M. africana* having smaller size (2.25–3.3 mm) and right-angular, rather than gentle, bend of M_{1+2} vein.

5. *Sciapus longimanus* BECKER

Remark. *S. longimanus* determined by P. VANSCHUYT-BROECK (female examined, RINS) to be from Madagascar belongs to undescribed species of *Amblypsilopus* and should be excluded from the fauna of the island. Four females and male (examined, RINS) from Congo (Kinshasa) labelled by the same author as *S. longimanus* belongs to undescribed or indeterminable species of *Amblypsilopus* and *Condylostylus*. So, the species does not occur in the Afrotropical region.

Distribution. Palearctic region.

6. *Dytomyia deconinckae* sp. n. (Figs. 4, 5)

Holotype. ♂, Fort Dauphin, R.P. / Institut Scientifique Madagascar [RINS].

Paratypes. 5 ♂♂ with the same labels.

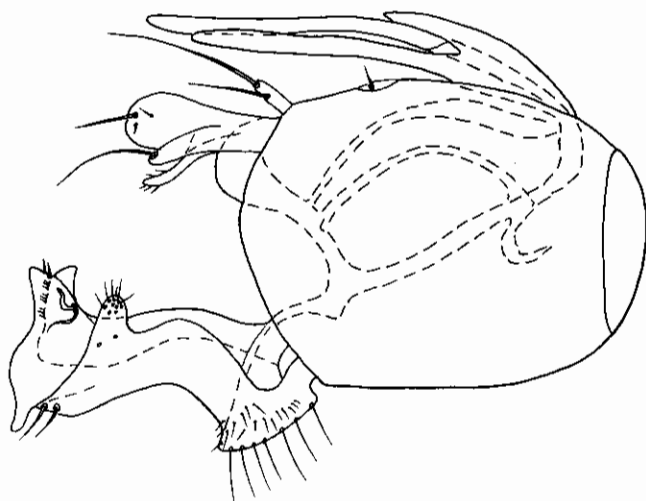


Fig. 4. —. Hypopygium, left lateral view. *Dytomyia deconinckae* sp. n.

Description. Frons broad, shining metallic blue-green, slightly pollinose. A weak long front vertical bristle bending forward, a strong long postvertical one positioned as a linear continuation of the postocular setal row. Ventral postcranium covered with dense irregular white hairs. Face blue-green, white pollinose, slightly convex; clypeus separated from eyes, not coming down eyes, widely rounded at apex; face slightly narrowed, 1.4 times as high as wide under antennae. Palpi and proboscis yellow, with light hairs, palpus also with two black bristles. Antenna mostly yellow, with scape and 1st flagellomere darkened dorsally, in total 1.2 times as long as height of head. Scape slightly swollen; pedicel with a ring of short setae and one dorsal bristle equal in length to first flagellomere. The latter rounded, slightly longer than high, with short yellow hairs. Arista apicodorsal, bare. Length ratio of scape to pedicel to first flagellomere to arista, 4 : 4 : 7 : 75.

Mesonotum and scutellum shining blue-green. Pleura bronze-green, densely grey pollinose. 4 dorsocentral setae with anterior one hairlike; 1 or 2 pairs of long acrostichals. Scutellum with two strong setae.

Legs including trochanters yellow. Middle and hind coxae brown-black, apical segments of tarsi brown. Fore coxa yellow, from the front with long white hairs and 3 or 4 long yellow apical setae. Middle and hind coxae from the outside with a few yellow hairs, hind coxa also with 3 or 4 fine long yellow external setae in basal half. Fore femora with 3 or 4 long posteroventral setae in the middle, the longest is half as long as femora length; with several anteroventral setae, the longest is longer than femora diameter. Fore tibia with 1 posteroventral seta at basal fourth and microscopic semi-erect setulae along entire length. Fore basitarsus slightly broadened, ventrally flattened, with pale pile; other tarsomeres simple. Length ratio of fore coxa to femora to tibia to tarsus (segments from first to fifth), 52 : 83 : 63 : 52 : 24 : 15 : 8 : 7. Middle femora bare. Middle tibia with 1 anterodorsal, 1 anterior, 1 posterodorsal and 2 or 3 apical setae; all setae short. Length ratio of middle coxa to femora to tibia to tarsus (segments from first to fifth), 28 : 80 : 101 : 80 : 32 : 18 : 8 : 8. Hind femora bare. Hind tibia with several short dorsal and posterodorsal, 2 or 3

apical setae. Length ratio of hind coxa to femora to tibia to tarsus (segments from first to fifth), 25 : 100 : 138 : 61 : 32 : 20 : 12 : 10.

Wings hyaline, veins brown. R_1 reaching 0.4 of wing length. 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 , 16 : 4. M_2 present as short stub vein and faint fold on membrane. Crossvein *m-cu* almost straight. Ratio of crossvein *m-cu* to apical part of M_{1+2} (fork-handle) to apical part of CuA, 31 : 38 : 19. Anal vein and lobe present. Anal angle acute. Lower calypter yellow, with brown edging and fine light hairs. Halteres yellow, halter stem thin, nearly twice as long as knob, with short row of dark setulae in front of knob.

Abdomen shining blue-green, with copper reflection in places, weakly white pollinose, with short black hairs and long black marginal bristles. Base of segments mat-black; first and second segments with short white hairs; unmodified segments combined nearly twice as long as mesonotum; seventh segment invisible; 8th segment positioned symmetrically, covering epandrium basodorsally. Hypopygium brown. Surstylus brown, with two thin mid-dorsal apophysis. Epandrial lobe distinct, with 2 setae, and having several long setae. Cercus yellow, with light hairs and wide articulated apical lobe. Basoventral lobes of both cerci forming capitulate "Organ X" with longitudinal suture, fused along entire length, long, with 2 short ventral setae.

Female. Unknown.

Length: body 3.6 mm; antenna 1.05 mm; postabdomen 0.5 mm; wing-length 3.6 mm; wing-width 1.1 mm.

Distribution. Madagascar.

Etymology. The species is named for Belgian dipterologist Dr. E. De Coninck.

Diagnosis. Five species of the genus were earlier known from Australia (BICKEL, 1994a). *D. deconinckae* has some similarities with Australian *D. flaviseta* BICKEL, strongly differing from the latter in black setae on head and thorax, long posteroventral seta at base of fore tibia, more complex hypopygium morphology and many other characters.

7. *Dytomyia elenae* sp. n. (Fig. 6)

Holotype. ♂ in glycerol. Madagascar: Foulpointe, X.1993, A. PAULY col., forêt de lagune, P.M. [RINS].

Paratype. ♂ in alcohol, Madagascar: Tamatave Province, Foulpointe, X.1993, A. PAULY col. [RINS].

Description. Frons broad, metallic blue-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 metallic green, clypeus separated from eyes; face slightly narrowed, 1.4 times as high as wide

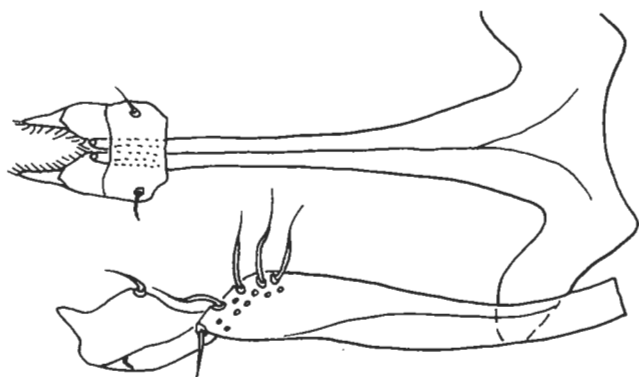


Fig. 5. – Cercus, ventral view. *Dytomyia deconinckae* sp. n.

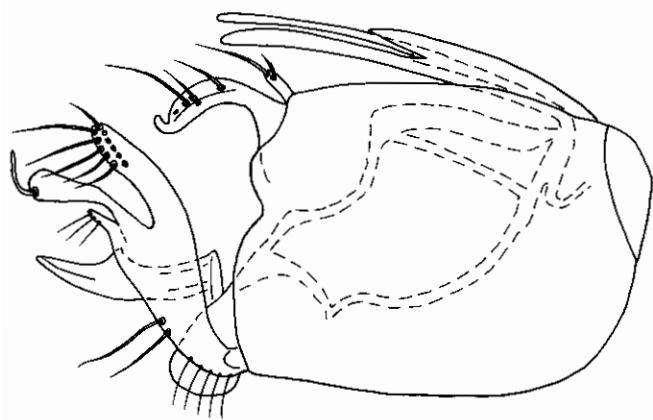


Fig. 6. — Hypopygium, left lateral view. *Dytomyia elenae* sp. n.

under antennae. Palpi and proboscis orange, with light hairs, palpus with 2 black bristles. Antennae mostly blackish-brown, longer than height of head. Pedicel with ring of short setae. First flagellomere ovate, a little longer than high, with short hairs. Arista dorsal to apicodorsal, bare and simple. Length ratio of scape to pedicel to first flagellomere to arista, 5 : 5 : 7 : 65.

Mesonotum and scutellum metallic blue-green. Pleura bronze-green. 3 strong and 1 or 2 short anterior dorso-central setae; 3 pairs of short acrostichals, restricted to anterior third of mesonotum. Scutellum with two strong setae.

Legs including trochanters and fore coxa yellow. Middle and hind coxae bronze-black, apical segments of tarsi brown. Fore coxae from the front with white hairs and several yellow setae. Middle and hind coxae with sparse yellow cilia. All femora practically bare. Fore tibia with long posteroventral seta just before the middle, nearly half as long as tibia length. Fore basitarsus ventrally flattened, with dense pale pile. Length ratio of fore coxa to femora to tibia to tarsus (segments from first to fifth), 45 : 75 : 72 : 42 : 40 : 27 : 15 : 8. Middle tibia with 2 anterodorsal and 2 or 3 apical setae. Length ratio of middle coxa to femora to tibia to tarsus (segments from first to fifth), 34 : 77 : 112 : 85 : 34 : 23 : 11 : 8. Hind tibia with weak setae. Length ratio of hind coxa to femora to tibia to tarsus (segments from first to fifth), 25 : 95 : 143 : 80 : 42 : 25 : 12 : 8.

Wings hyaline, veins brown. R_1 2/5 as long as wing. R_{2+3} almost parallel to costa. 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 , 16 : 4. M_1 widely arcuate. M_{1+2} and M_1 forming right angle. M_2 present as short stub vein and faint fold on membrane. Crossvein *m-cu* straight, oblique. Ratio of crossvein *m-cu* to apical part of M_{1+2} (fork-handle) to apical part of CuA , 30 : 35 : 15. Anal vein fold-like, anal lobe developed. Anal angle acute. Alula small but distinct. Lower calypter yellow, with brown edging and dark hairs. Halteres yellow, halter stem as long as knob.

Abdomen metallic dark-green, with short black hairs and long black marginal setae. Sternite with short hairs. Hypopygium green-black. 8th segment positioned symmetrically, as a continuation of 7th tergite, covering epanthrium basodorsally and having several long setae. Cercus yellow at base, with two brown narrow lobes in apical half and small middorsal process; basoventral lobes of both cerci long, bare, fused in basal 2/3.

Female. Unknown.

Length: body 3.4 mm; antenna 1.2 mm; wing-length 3.4 mm; wing-width 1.1 mm.

Distribution. Madagascar.

Diagnosis. *D. elenae* is related to *D. paulyi* (see diagnosis of this species), differing in posteroventral seta positioned just before the middle of fore tibia and narrow cercal lobes having shorter setae.

8. *Dytomyia paulyi* sp. n. (Fig. 7)

Holotype. ♂ in glycerol. Madagascar: Foulpointe, forêt, lagune, X.1993, A. PAULY col., , P.M. [RINS].

Paratypes [in alcohol]. 7 ♂♂, Madagascar: Foulpointe, 2.XI.1991, A. PAULY., plage, bac jaune. 5 ♂♂, Madagascar: Foulpointe, XI.1995, A. PAULY. 4 ♂♂, Madagascar: Foulpointe, XI.1995, A. PAULY rec., plage, bac jaune. [RINS].

Description. Frons broad, metallic blue-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 metallic green, clypeus separated from eyes; face slightly narrowed, slightly higher than wide under antennae. Palpi and proboscis orange, palpus with light hairs and 2 black bristles. Antennae mostly black, as long as height of head. Scape yellow, brownish dorsally. Pedicel with ring of short setae; the longest dorsal seta longer than pedicel. First flagellomere rounded, as long as high, with short hairs. Arista subapical, bare and simple.

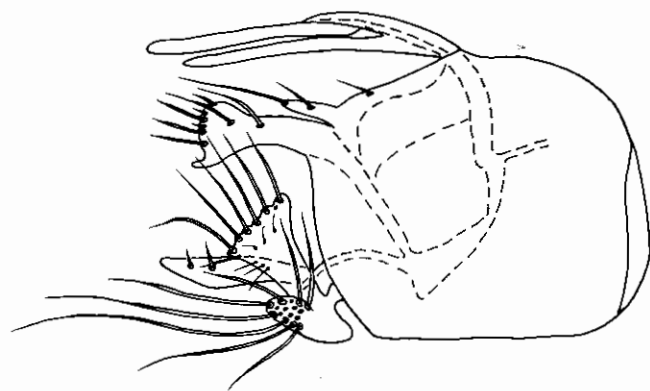


Fig. 7. — Hypopygium, left lateral view. *Dytomyia paulyi* sp. n.

Length ratio of scape to pedicel to first flagellomere to arista, 5 : 5 : 5 : 70.

Mesonotum and scutellum metallic blue-green. Pleura bronze-green. Three strong posterior and one short anterior dorsocentral setae; one pair of long and 1 or 2 pairs of microscopic acrostichals, restricted to anterior third of mesonotum. Scutellum with two strong setae.

Legs including anterior four trochanters yellow. Middle and hind coxae bronze-black, hind trochanter and apical segments of tarsi brown. Fore coxa from the front with numerous white hairs and several strong yellow setae. Middle and hind coxae from the outside with several yellow cilia. Fore and hind femora with very short light and dark ventral hairs, middle femora with row of dark and light ventral cilia, at most equal in length to femora diameter. Fore tibia with 1 posteroventral seta at basal 1/3, half as long as tibia length. Fore basitarsus ventrally flattened, with dense pale pile. Length ratio of fore coxa to femora to tibia to tarsus (segments from first to fifth), 40 : 70 : 58 : 39 : 25 : 18 : 10 : 8. Middle tibia with 2 anterodorsal and 2 or 3 apical setae. Length ratio of middle coxa to femora to tibia to tarsus (segments from first to fifth), 28 : 85 : 98 : 77 : 29 : 18 : 10 : 7. Hind tibia with 1 anterodorsal, 2 short dorsal and 2 or 3 apical setae. Length ratio of hind coxa to femora to tibia to tarsus (segments from first to fifth), 20 : 100 : 140 : 64 : 36 : 24 : 12 : 7.

Wings transparent, veins brown. R_1 5/12 as long as wing. R_{2+3} almost parallel to costa in apical half. R_{4+5} gently curved to M_1 in apical fourth. M_{1+2} and M_1 form the right angle. Ratio of parts of costa between R_{2+3} and R_{4+5} to those between R_{4+5} and M_1 , 16 : 3. M_2 present as short stub vein and faint fold on membrane. Crossvein $m-cu$ straight, oblique. Ratio of crossvein $m-cu$ to apical part of M_{1+2} (fork-handle) to apical part of CuA_1 , 30 : 43 : 16. Anal vein weak, anal lobe present. Anal angle acute. Alula small but distinct. Lower calypter yellow, with brown edging and dark cilia. Halteres yellow, halter stem a little longer than knob.

Abdomen metallic dark-green, with short black hairs and long black marginal setae.

Sternite with short sparse hairs. Hypopygium green-black. 8th segment positioned symmetrically, covering epandrium basodorsally and having several long setae. Cercus orange, bilobate; dorsal lobe with apical brush of long yellow undulate setae, as long as epandrium; ventral lobe twice longer than dorsal, slightly widened apicad, with black flattened setae. Basoventral lobes of both cerci forming "Organ X", fused along entire

length, with longitudinal suture, long, with 2 short ventral setae.

Female. Unknown.

Length: body 3.3 mm; antenna 1.1 mm; wing-length 3.3 mm; wing-width 1.0 mm.

Distribution. Madagascar.

Etymology. The species is named for the collector, A. PAULY.

Diagnosis. *B. paulyi* is related to *B. deconinckae*, strongly differing in bilobate cercus with long thick setae, long posteroventral seta at basal third of fore tibia, one pair of long acrostichal setae. Antenna mostly black, scape mostly yellow. 8th segment positioned symmetrically, covering epandrium basodorsally. "Organ X" simple, almost bare.

9. *Condylostylus basovi* sp. n. (Fig. 8)

Holotype [in alcohol]. ♂, Madagascar: Tamatave Province, Morarano-chrome, 25.V.1992, A. PAULY.

Paratypes [in alcohol]: 51 ♂♂, Madagascar: 25 km W. Morarano-chrome, forêt, XI.1991, bac jaune. A. PAULY. 9 ♂♂, Madagascar: Tam., Morarano-chrome, XII.1991, A. PAULY, forêt, 25 km W. ♂ in glycerol. Madagascar: Tam., W. Morarano-chrome, 16.V.1991, A. PAULY, forêt, bac jaune.

Description. Frons metallic blue-green, shining. A strong front vertical bristle (broken) arising from small mound; postocular setae black, short. Ventral posteranium covered with irregular white hairs. Face greenish-black, silvery-white pollinose, narrow. Bulging clypeus 2/3 as long as epistome. Proboscis dark-brown; palpi black, with black hairs. Antennae black, as long as height of head. Pedicel with short dorsal and ventral bristles. First flagellomere rounded, as long as high, with short hairs. Arista dorsal, microscopically haired. Length ratio of scape to pedicel to first flagellomere to arista, 5 : 5 : 5 : 60.

Mesonotum and scutellum metallic blue-green. Pleura bronze-green, white pollinose. Five dorsocentral bristles (broken in holotype) gradually decreasing in size anteriorly with two strongest posterior pairs. Acrostichals short, biseriate. Scutellum with two pairs of strong setae (broken in holotype).

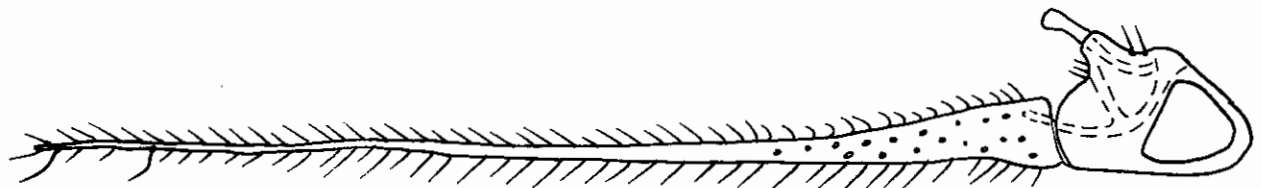


Fig. 8. — Hypopygium, left lateral view. *Condylostylus basovi* sp. n.

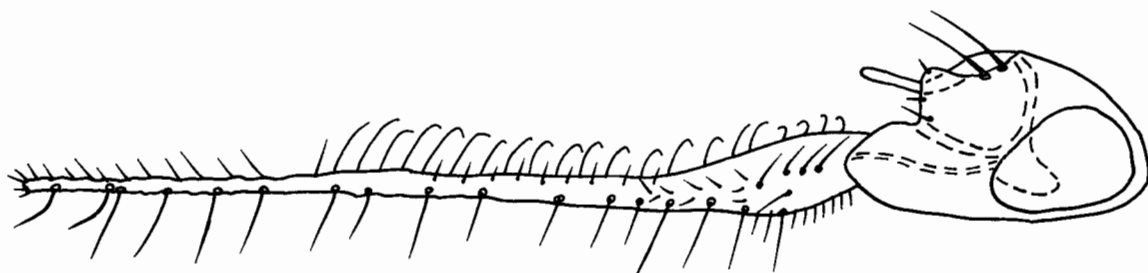


Fig. 9. – Hypopygium, left lateral view. *Condyllostylus burgeoni* PARENT.

Legs mostly black-brown. Coxae black. Fore coxa at apex, trochanter, tibia and basitarsus yellow; fore femora brown in the middle, with yellow apices; middle trochanter, tibia and basitarsus dark-brown. Legs otherwise black. Fore coxa from the front with numerous yellow hairs and 3 black subapical setae. Middle coxa from the outside with light hairs and cilia. Hind coxa with one external seta. Femora without strong or long setae. All femora with light ventral hairs in basal half, half as long as femora diameter. Fore tibia without seta. Fore basitarsus 4 times longer than wide, flattened and widened except basal two fifths, with ventral pile, posteroventral row of hooked setulae in basal two fifths, row of elongate setulae along dorsal margin of flattened part and 1 or 2 short apicodorsal setae. Length ratio of fore coxa to femora to tibia to tarsus (segments from first to fifth), 50 : 63 : 75 : 53 : 22 : 13 : 9 : 7. Middle tibia with 3 short posterodorsals in basal half and 2 short ventral setae in apical half. Third and fourth tarsomeres with elongate setulae; fourth and fifth tarsomeres slightly enlarged and flattened. Length ratio of middle coxa to femora to tibia to tarsus (segments from first to fifth), 25 : 50 : 103 : 82 : 20 : 15 : 14 : 10. Last tarsomeres of hind tarsi slightly thickened. Length ratio of hind coxa to femora to tibia to tarsus (segments from first to fifth), 25 : 105 : 153 : 72 : 23 : 18 : 12 : 9.

Wings widened apically, hyaline in basal part, dark in apical half, brownish along veins, veins brown. R_{4+5} gently curved to M_1 in apical fifth. M_{1+2} straight in basal half, slightly convex anteriad in middle part. M_1 with nearly right-angular elbow, forming right angle with M_{1+2} and M_2 . Ratio of parts of costa between R_{2+3} and R_{4+5} to those between R_{4+5} and M_1 , 33 : 4. Crossvein *m-cu* straight. Ratio of crossvein *m-cu* to apical part of M_{1+2} (fork-handle) to apical part of CuA_1 , 26 : 49 : 15. Anal vein and lobe reduced. Anal angle absent. Lower calypter brownish, with fine cilia. Halter yellow.

Abdomen thin and long, metallic green-black, with short black hairs. Unmodified segments combined 3 times as long as mesonotum. Hypopygium black, with short black hairs. Cercus brown, long, filiform, slightly broadened at base, without basoventral lobe, with numerous black hairs; the ventral hairs at base somewhat hooked. Cercus 5 times longer than epandrium. Surstylus and epandrial lobe greatly reduced.

Female unknown.

Length: body 5.3 mm; antenna 1.1 mm; postabdomen 2.1 mm; wing-length 3.7 mm; wing-width 1.1 mm.

Distribution: Madagascar.

Etymology. The species is named for Russian dipterologist V.M. Basov.

Diagnosis. Males of *C. basovi* are included into the group of species with normal female-type venation of wings, differing from other species in long filiform cercus without basal swelling, simple tibiae without remarkable setae or hairs, and other characters.

10. *Condyllostylus burgeoni* PARENT (Fig 9)

Type material examined. Holotypus, ♂ [red label] / Musée du Congo, Kivu: Tshibinda, 18/26.XI.1932, L. Burgeon / R. Det. Z. 2966 / *Condyllostylus burgeoni* n.sp. Type. O. PARENT.

Additional material. 3 ♂♂, Urundi, Bururi, 4.XII.1950, 2000 m [20.XII.1948, 1950 m], F.J. FRANÇOIS / R.I.Sc.N.B. I.G. 24.452.

Diagnosis. *C. burgeoni* is closely related to *C. galinae*, differing in brown-black middle and hind legs and quantitative characters as follows: apical part of M_{1+2} (fork-handle) at least twice as long as *m-cu*; cercus nearly twice as long as 7th tergite and epandrium combined, with long setae from base to apex. Frons usually bare in both sexes, with strong vertical seta and at most one fine hair on small mound.

Distribution. Congo (Kinshasa), Tanzania, Kenya, Rwanda, Burundi.

11. *Condyllostylus chaineyi* sp. n. (Fig. 10)

Holotype. ♂, Fort Daufin, R.P. / Institut Scientifique Madagascar [RINS].

Paratypes [in alcohol]: 1 ♂, Madagascar: Tamatave Province, Morarano-chrome, 115.VIII.1991, A. PAULY, forêt, 25 km W. 3 ♂♂, Madagascar: Morarano-chrome, 115.IX.1991, A. PAULY, forêt, 25 km W. 1 ♂, Madagas-

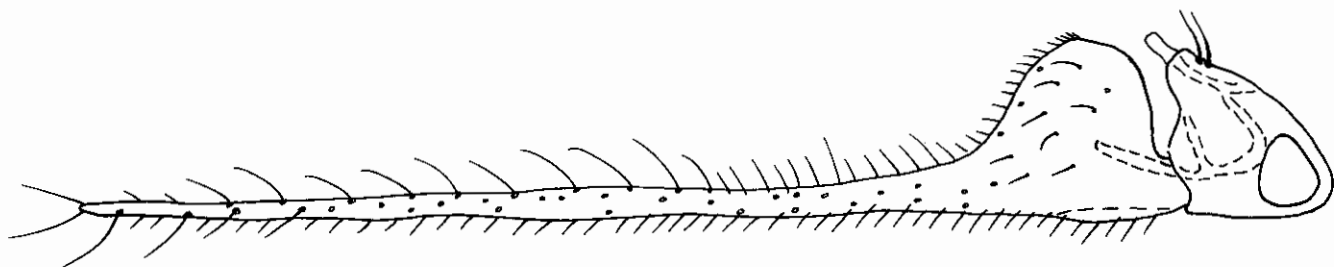


Fig. 10. – Hypopygium, left lateral view. *Condyllostylus chaineyi* sp. n.

car: Tamatave Province, Morarano-chrome, VII.1991, A. PAULY col., forêt, 25 km W. 14 ♂♂, Madagascar: Tamatave Province, Morarano-chrome, XII.1991, A. PAULY col., forêt, 25 km W. 62 ♂♂, Madagascar: 25 km W. Morarano-chrome, forêt, XI.1991, bac jaune. A. PAULY. 17 ♂♂, Madagascar: Tamatave Province, Morarano-chrome, A. PAULY, X.1991. 1 ♂, Madagascar: Tamatave Province, Morarano-chrome, 25.V.1992, A. PAULY col. 8 ♂♂, Madagascar: Tamatave Province, W. Morarano-chrome, 16.V.1991, A. PAULY, forêt, bac jaune. [RINS].

Description. Frons shining blue-violet, pollinose at base of antennae. A strong front vertical bristle bends forward, arising from small bare mound; strong postvertical bristle is positioned as a linear continuation of the postocular setal row. Ventral postcranium covered with irregular white hairs. Face black, white pollinose, narrow, 17 times as high as wide in the middle and 4 times as high as wide under antennae. Slightly bulging clypeus half as wide as epistome under antennae. Proboscis dark-brown, palpus black, with short hairs and 1 or 2 fine black setae. Antenna black, nearly as long as height of head. Pedicel with short dorsal and ventral bristles. First flagellomere rounded, as long as high, with short pubescence. Arista dorsal, microscopically haired. Length ratio of scape to pedicel to first flagellomere to arista, 4 : 4 : 5 : 55.

Mesonotum and scutellum shining green-violet, slightly pollinose. Pleura bronze-green, white pollinose. 5 dorsocentral setae gradually decreasing in size anteriorly (most setae broken in holotype). Short acrostichals in two rows. Scutellum with two pair of strong bristles, with somewhat smaller lateral setae.

Legs. Fore coxa and leg yellow, tarsus brownish; middle and hind coxae black, whitish pollinose; middle femora mostly black-brown, yellow in basal third or half; middle and hind trochanters yellow; middle tibia yellow-brown; hind femora mostly black, yellow at base; hind tibia black-brown; middle and hind tarsi black. Fore coxa from the front with yellow hairs and 3 strong black setae at apex. Middle and hind coxae from the outside with sparse yellow hairs. Hind coxa with fine yellow seta at base. Femora almost bare. Fore tibia with fine apicoven-tral seta. Fore basitarsus flattened and widened except basal fifth, 4 times longer than wide, with ventral pile and elongate apicodorsal setulae. Length ratio of fore coxa to femora to tibia to tarsus (segments from first to

fifth), 30 : 65 : 85 : 60 : 23 : 12 : 8 : 7. Middle tibia with 1 anterodorsal, 2 or 3 short posterodorsal and 2 or 3 apical setae. 3rd and 4th tarsomeres of middle tarsus somewhat thickened, with elongate setulae. Length ratio of middle coxa to femora to tibia to tarsus (segments from first to fifth), 30 : 90 : 122 : 92 : 24 : 15 : 10 : 9. Hind tibia with inconspicuous ordinary setae, 1 or 2 short apical setae; basitarsus with 1 basoventral short seta. Last tarsomeres of hind tarsi slightly thickened. Length ratio of hind coxa to femora to tibia to tarsus (segments from first to fifth), 40 : 110 : 158 : 80 : 25 : 15 : 10 : 8.

Wings mostly hyaline, darkened anteriorly in apical half; veins brown, undisturbed. R_{4+5} gently curved to M_1 in apical fifth. M_{1+2} slightly curved posterad in apical part. M_1 with nearly right-angular elbow, forming right angle with M_{1+2} and M_2 . Ratio of part of costa between R_{2+3} and R_{4+5} to this between R_{4+5} and M_1 , 29 : 4. Crossvein *m-cu* straight. Ratio of crossvein *m-cu* to apical part of M_{1+2} (fork-handle) to apical part of CuA_1 , 25 : 41 : 13. Anal vein and lobe reduced. Anal angle absent. Lower calypter yellow, with light cilia. Halteres yellow-brown, halter stem thin and long, nearly twice longer than knob.

Abdomen thin and long, mostly black-violet, with short black hairs. First two segments mostly metallic blue-green; first tergite with broad membranous excavation, longitudinal dorsal furrow and several long white lateral hairs. Unmodified segments combined 3 times longer than mesonotum. 5th and 6th segments swollen ventrally; 7th segment short. Hypopygium black, with short black hairs. Cercus black, strongly swollen at base, narrowed apicad, 6 times longer than epandrium, laterally with a row of long black setae. Surstylus and epandrial lobe greatly reduced.

Female unknown.

Length: male body 4.8 mm; antenna 0.9 mm; postabdomen 1.3 mm; wing-length 3.5 mm; wing-width 1.05 mm.

Distribution. Madagascar.

Etymology. The species is named for English dipterologist John Chainey.

Diagnosis. Males of *C. chaineyi* are included into the group of species with normal female-type venation of wings, differing from other species in the following complex of characters: anterior four tibia without long setae,

hind tibia without sicatrix, pedicel with comparatively short setae; cercus simple, swollen at base, strongly narrowed apicad; basoventral lobe of cercus undeveloped.

12. *Condylostylus congensis* CURRAN

Type material examined. Holotypus, ♂ [red label] / Musée du Congo, Mayumbe Lemba, 110.XII.1915, R. MAYNE / D. Det. I 1954 / Type. *Condylostylus congensis* CURRAN.

Additional material. 1 ♂, 1 ♀, Kenya: Ongata Longai, 29.X.1995, T. KANASUGI [NMK].

Diagnosis. Similar to *C. pateraeformis* except as noted. Face 9 times as high as wide in the middle; legs mostly brown-black, fore coxa in apical half and fore tibia yellow; fore femora and basitarsus and sometimes middle tibia yellowish-brown; ratio of fore tibia to length of basitarsus to width of the same joint to second tarsomere, 98 : 53 : 13 : 25; fore basitarsus usually shorter than 2nd to 5th tarsomeres combined. M_{1+2} and M_1 form the right angle; M_1 nearly straight; cercus nearly twice as long as 7th tergite and epandrium combined, with egg-shaped ventral lobe.

Remark. *C. congensis* from Madagascar determined by P. VANSCHUYTBROECK belongs to *C. skuffini*.

Distribution: Congo (Brazzaville), Cameroons, Congo (Kinshasa), Uganda, Tanzania, Kenya, South Africa.

13. *Condylostylus galinae* GRICHANOV (Fig. 11)

Type material examined. Holotype. ♂, Uganda: Ruwenzori Range, XII.1934-I.1935. B.M.E.Afr. Exp. B.M.1935-203 / Namwamba Valley, 6500 ft (F.W.EDWARDS) / *Condylostylus galinae* GRICHANOV. Paratypes. 2 ♂♂ and 1 ♀, the same labels.

Additional material. ♂, Congo Belge: P.N.A., 5.II.1953, P. VANSCHUYTBROECK & J. KEKENBOSCH, 2033-34 / Masif Ruwenzori, Kalonge, 2010 m, Riv. Kamahoro affl. Butahu.

Diagnosis. Males of *C. galinae* are closely related to *C.*

burgeoni and can be separated by the following combination of attributes: fore femora, fore and middle tibiae yellow, middle and hind femora mostly yellow; wing fork-handle 1.5 times as long as *m-cu*; cercus nearly thrice as long as seventh tergite and epandrium combined, with long bristles in basal half. Female is probably similar to *C. burgeoni*.

Distribution: West Uganda, Congo (Kinshasa).

14. *Condylostylus imitator* CURRAN

Material examined. 1 ♀, Kenya: Taita hills, Chawia forest, 12.2.1997 [NMK]. 6 ♂♂, Urundi, Rumonge, alt. 780 m, 20.II.1949 [Kitaba, 11.II.1950, 1700 m; Terr. de Rutana, 10.XI.1951, 1400 m and 25.XII.1951, 1850 m; Terr. de Kitega, 13.I.1952, 1750 m], F.J. FRANÇOIS / R.I.Sc.N.B. I.G. 24.452.

Diagnosis. Similar to *C. pateraeformis* except as noted. Face 7 times as high as wide in the middle; legs mostly yellow, middle and hind coxae, 2nd5th tarsomeres of fore tarsus, apex of middle tibia, middle and hind tarsi, middle femora in apical fifth black-brown, hind tibia brown; ratio of fore tibia to length of basitarsus to width of the same joint to second tarsomere, 95 : 50 : 12 : 28; fore basitarsus usually shorter than 2nd to 5th tarsomeres combined. M_{1+2} and M_1 form the right angle; M_1 with distinct elbow; cercus thin, nearly thrice as long as 7th tergite and epandrium combined, ventral lobe of cercus with pointed apex.

Distribution. Congo (Kinshasa), Kenya, Tanzania, Burundi, Malawi, Zimbabwe, Mozambique, South Africa, Angola, Namibia.

15. *Condylostylus kivuensis* VANSCHUYTBROECK

Type material examined. Holotypus, ♂ [red label] / Coll. Mus. Congo, Kamogobe (Sud Masisi), 4.III.1936, L. LIPPENS (4849) / P. VANSCHUYTBROECK det. 195? *Condylostylus kivuensis* n.sp.

Diagnosis. *C. kivuensis* is rather similar to *C. congensis* and *C. imitator*, differing by legs entirely black-brown, with only fore trochanter and knee yellowish. M_{1+2} and

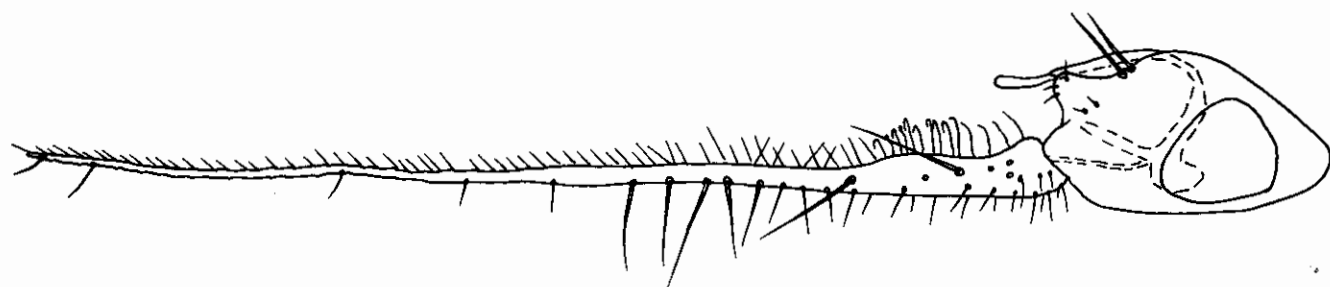


Fig. 11. – Hypopygium, left lateral view. *Condylostylus galinae* GRICHANOV.

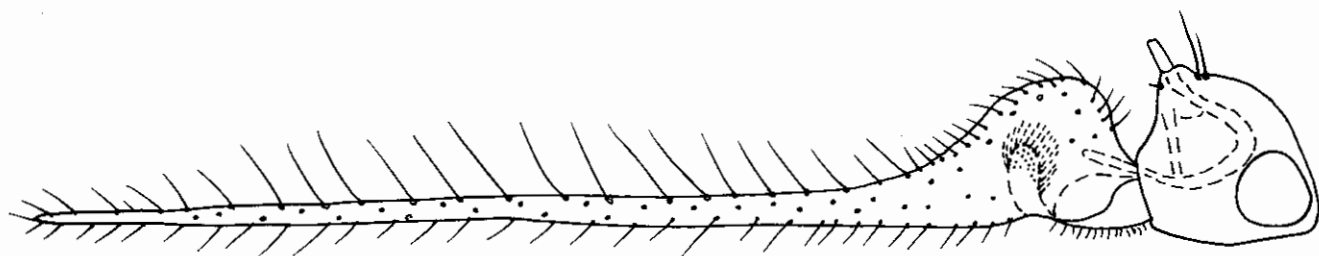


Fig. 12. – Hypopygium, left lateral view. *Condyllostylus selitskayae* sp. n.

M_1 form right angle. Fore and middle tibia without very long setae. Fore basitarsus longer than 2nd to 5th tarsomeres combined. Cercus 4 times longer than epandrium. Body length 7 mm.

Distribution. Congo (Kinshasa).

16. *Condyllostylus paricoxa* PARENT

Material examined. 1 ♀, Kenya: Tavara, Kitovo Forest, 24.5.1985, J. MUHANGANI [NMK].

Diagnosis. *C. paricoxa* is the only species in Africa with two long preapical setae on the male fore tibia (GRICHANOV, 1996c). It can be separated by the following combination of attributes: frons with white hairs; fore tibia with a long black preapical ventral hair, with 2 long thick black apicoventral setae of equal length, half as long as fore basitarsus. First tarsomere slightly swollen in middle half, with short dense ventral hairs and one thin apicodorsal seta. Cercus yellow, short, spoon-shaped, curved, especially on apex, with yellow hairs. Surstylus greatly reduced, narrow, epandrial lobe very short, with strong setae. Females differ in having a mostly yellow middle coxa and entirely yellow hind coxa.

Distribution. Kenya, Zimbabwe, Tanzania.

17. *Condyllostylus selitskayae* sp. n. (Fig. 12)

Holotype. ♂, Coll. R.I.Sc.N.B., Congo belge: Kasai, Port Francqui, 18.I.1958, F. FRANÇOIS.

Description. Frons metallic blue-green, shining. A strong front vertical bristle bends forward, arising from small bare mound; shorter postvertical bristle is positioned as a linear continuation of the postocular setal row. Ocellar tubercle with a pair of strong setae and pair of hairs. Ventral postcranium covered with irregular white hairs. Face greenish-black, silvery-white pollinose, narrow, 10 times as high as wide in the middle and 4 times as high as wide under antennae. Bulging clypeus nearly half as wide as epistome under antennae. Proboscis black, palpi black, with black hairs. Antennae black, nearly as long as height of head. Pedicel with short dorsal and ventral bristles. First flagellomere rounded, as long as high, with short

hairs. Arista dorsal, microscopically haired. Length ratio of scape to pedicel to first flagellomere to arista, 5 : 5 : 5 : 60.

Mesonotum and scutellum metallic green, slightly pollinose. Pleura bronze-green, white pollinose. Five dorso-central bristles gradually decreasing in size anteriorly with two strongest posterior pairs. Short acrostichals in two rows, restricted to anterior 2/3 of mesonotum. Scutellum with two pairs of strong setae of approximately equal length.

Legs mostly black. Fore coxa mostly black, yellow in apical 1/3; fore trochanter yellow; fore femora brown in basal half, yellow in apical half; fore tibia mostly yellow, progressively brown in apical half; fore basitarsus brown; middle coxa at apex, trochanter and knee brownish. Fore coxa from the front with numerous yellow hairs and 3 black subapical setae. Middle coxa from the outside with light hairs and black cilia. Hind coxa with one black external seta. Femora without strong or long setae. Fore and hind femora with posteroventral hairs, half as long as femora diameter. Fore tibia with short black subapical ventral seta. Fore basitarsus 4 times longer than wide, flattened and widened except basal fifth, with ventral pile and 2 short apicodorsal setae. Length ratio of fore coxa to femora to tibia to tarsus (segments from first to fifth), 50 : 85 : 90 : 47 : 22 : 14 : 9 : 10. Middle tibia with 2 short posterodorsals in basal half and several apical setae, and erect ventral setulae in apical half. Third and fourth tarsomeres with elongate setulae; fourth and fifth tarsomeres slightly enlarged and flattened. Length ratio of middle coxa to femora to tibia to tarsus (segments from first to fifth), 40 : 100 : 125 : 70 : 21 : 15 : 13 : 10. Last tarsomeres of hind tarsi slightly thickened. Length ratio of hind coxa to femora to tibia to tarsus (segments from first to fifth), 25 : 130 : 175 : 75 : 25 : 17 : 11 : 10.

Wings widened apically, mostly hyaline, with brownish stripe along costa in apical half and smoky spot at *m-cu*, veins brown. R_{4+5} gently curved to M_1 in apical fifth. M_{1+2} convex posteriad in basal half, convex anteriad in apical half. M_1 slightly convex basad, forming right angle with M_{1+2} . M_2 short, forming wide arc with M_1 . Ratio of part of costa between R_{2+3} and R_{4+5} to this between R_{4+5} and M_1 , 75 : 8. Crossvein *m-cu* straight. Ratio of crossvein *m-cu* to apical part of M_{1+2} (fork-handle) to apical part of CuA , 21 : 83 : 29. Anal vein and lobe reduced.

Anal angle absent. Lower calypter brownish, with fine, shining light, cilia. Halter brown, halter stem thin, 1.5 times longer than knob, with row of setulae in front of knob.

Abdomen thin and long, metallic green-black, posteriorly entirely black, with short black hairs. First tergite with broad membranous excavation, longitudinal dorsal furrow and short white lateral hairs. Unmodified segments combined 3 times as long as mesonotum. Hypopygium black, with short black hairs. Cercus long, filiform, swollen at base, black, with distinct hairy inner apophysis at base and numerous black hairs along entire length. Cercus nearly 6 times as long as epandrium. Surstylus and epandrial lobe greatly reduced.

Female unknown.

Length: body 5.3 mm; antenna 1.15 mm; postabdomen 1.8 mm; wing-length 4.1 mm; wing-width 1.4 mm.

Distribution: Congo (Kinshasa).

Etymology. The species is named for Russian entomologist Oksana SELITSKAYA.

Diagnosis. Males of *C. selitskayae* is related to *C. congensis*, differing in erect ventral setulae in apical half of middle tibia and weakly developed basoventral lobe of cercus. Fore coxa yellow in apical third; fore femora and tibia half yellow; fore basitarsus shorter than 2nd to 5th tarsomeres combined. M_{1+2} and M_1 forming right angle. Venation abnormal: M_{1+2} curved towards posterior wing margin, M_2 short, forming wide arc with M_1 .

18. *Condylostylus skuffini* sp. n. (Fig. 13)

Holotype. ♂ on pin, Fenerive, Madagascar, Dec. 1955, B. STUCKENBERG / P. VANSCHUYTBOECK det. 1957, *Condylostylus congoensis* CURRAN / R.I.Sc.N.B. I.G. 20938 [RINS].

Paratypes [mostly in alcohol]. ♂ on pin, La Mandraka,

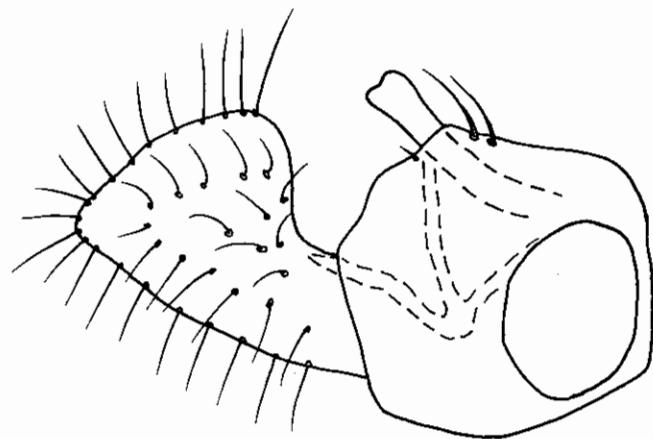


Fig. 13. — Hypopygium, left lateral view. *Condylostylus skuffini* sp. n.

XII.1951, N.S.H. Krauss / Institut Scientifique Madagascar. 17 ♂♂, Madagascar: Tam., Morarano-chrome, A. PAULY, X.1991. 1 ♂, Madagascar: Tam., Morarano-chrome, XII.1991, A. PAULY. 12 ♂♂, Madagascar: Tam., W. Morarano-chrome, 1-6.V.1991, A. PAULY, forêt, bac jaune. 1 ♂, Madagascar: Tam., Morarano-chrome, 16-30.IX.1991, A. PAULY, forêt, 25 km W. 5 ♂♂, Madagascar: Foulpointe, 11.XI.1993, A. PAULY col., bac jaune, forêt. 1 ♂, Madagascar: Tam., Foulpointe, X.1993, A. PAULY col. 1 ♂, Madagascar: Foulpointe, X.1993, A. PAULY col., forêt. 1 ♂, Madagascar: Foulpointe, 2.XI.1991, A. PAULY., plage, bac jaune. [RINS].

Description. Frons metallic bluish-green, white pollinose at base of antennae. A strong front vertical bristle bends forward, arising from small bare mound; strong postvertical bristle is positioned as a linear continuation of the postocular setal row. Ventral postcranium covered with irregular white hairs. Face greenish-black, silvery-white pollinose, narrow, 12 times as high as wide in the middle and 4 times as high as wide under antennae. Bulging clypeus nearly half as wide as epistome under antennae. Proboscis black, palpus black, with light hairs and 2 fine black setae. Antenna black, as long as height of head. Pedicel with short dorsal and ventral bristles. First flagellomere rounded, as long as high, with short pubescence. Arista dorsal, microscopically haired. Length ratio of scape to pedicel to first flagellomere to arista, 4 : 4 : 5 : 67.

Mesonotum and scutellum brilliantly shining green-blue. Pleura bronze-black, white pollinose. 5 dorsocentral setae gradually decreasing in size anteriorly with two strongest posterior pairs. Short acrostichals in two rows, restricted to anterior half of mesonotum. Scutellum with two pairs of strong bristles, with lateral setae somewhat smaller.

Legs mostly yellow. Middle and hind coxae dark-brown; middle femora in apical fourth, middle tibia and 2nd to 5th tarsomeres of fore tarsus brownish; hind femora in apical third, hind tibia, middle and hind tarsi black-brown. Fore coxa from the front with yellow hairs and 2 or 3 black setae at apex. Middle and hind coxae from the outside with sparse yellow hairs. Hind coxa with fine light seta at base. Femora without strong or long bristles and hairs. Fore tibia with 1 black apicoven-tral seta. Fore basitarsus flattened and widened except basal third, 4.6 times longer than wide, with ventral pile and elongate apicodorsal setulae. Length ratio of fore coxa to femora to tibia to tarsus (segments from first to fifth), 46 : 66 : 80 : 55 : 19 : 11 : 6 : 6. Middle tibia with ventral row of 5 setae in apical fifth, twice longer than tibia diameter, and preceding row of several elongate setulae, otherwise bare. 3rd to 5th tarsomeres of middle tarsus slightly flattened. Length ratio of middle coxa to femora to tibia to tarsus (segments from first to fifth), 33 : 90 : 130 : 87 : 26 : 23 : 10 : 10. 1st to 4th tarsomeres of hind tarsi flattened and slightly widened. Length ratio of hind coxa to femora to tibia to tarsus

(segments from first to fifth), 25 : 120 : 173 : 86 : 27 : 18 : 10 : 9.

Wings mostly hyaline, slightly darkened anteriorly at apex including base of M_1 ; veins brown, undisturbed. R_{4+5} nearly straight, gently curved to M_1 in apical fifth. M_{1+2} slightly curved posterad in apical part. M_1 with nearly right-angular elbow, forming right angle with M_{1+2} and M_2 . Ratio of part of costa between R_{2+3} and R_{4+5} to this between R_{4+5} and M_1 , 28 : 4. Crossvein *m-cu* straight. Ratio of crossvein *m-cu* to apical part of M_{1+2} (fork-handle) to apical part of CuA_1 , 23 : 43 : 14. Anal vein and lobe reduced. Anal angle absent. Lower calypter yellow, with light cilia. Halteres yellow, halter stem thin and long, twice longer than knob, with several dark setulae at the middle.

Abdomen thin and long, mostly black, with short black hairs. First two segments mostly metallic green; first tergite with broad membranous excavation, longitudinal dorsal furrow and several long white lateral hairs. Unmodified segments combined nearly 3 times longer than mesonotum. Hypopygium black, with short black hairs. Epandrium rounded. Cercus black-brown, short, widened apicad and truncated at apex, with rounded angles and short black hairs along entire surface. Cercus as long as epandrium. Surstylus and epandrial lobe greatly reduced.

Female unknown.

Length: body 4.7-5.3 mm; antenna 1.1 mm; post-abdomen 0.6 mm; wing-length 3.6 mm; wing-width 1.0 mm.

Distribution. Madagascar.

Etymology. The species is named for Russian dipterologist Prof. K.V. SKUFFJIN.

Diagnosis. *C. skuffini* is related to *C. chaineyi*, differing in short cercus and long ventral setae on middle tibia (see diagnosis of *C. chaineyi*).

19. *Ethiosciapus bicalcaratus* (PARENT)

Type material examined. Holotypus, ♂ [red label] / Musee du Congo, Ituri: Mont Wago, 24.XI.1928, A. COLLART / R. Det. R. 2413 / *Sciopus bicalcaratus* n.sp. Type. O. PARENT.

Additional type material. Holotype ♂, Congo Belge: Eala, 27.IV.1936, J. GHESQUIERE / R. Mus. Hist. Nat. Belg. I.G. 10.482 / *Sciopus cilifrons* [nomen nudum] n.sp. Type. O. PARENT / O. PARENT, 1936. *Sciopus cilifrons* n.sp. / Type [red label] / *S. setifrons* sp. of Bull. Mus. Hist. Nat. Belg., XII-18 (1937) p. 14, pl. 4, fig. 33, 34 / *Ethiosciapus bicalcaratus* (Par.), det. GRICHANOV.

Additional material. 1 ♂, Urundi, Bururi, alt. 1950 m., VI.1948, F.J. FRANÇOIS / R.I.Sc.N.B. I.G. 24.452. [RINS].

Diagnosis. Male with a group of hairs laterally on frons, 2

strong posterior and hairlike anterior dorsocentral setae; 3 long acrostichals. Fore coxa yellow except base, other coxae black; femora yellow, with long black ventral hairs, fore tibia with 2 long posteroventral bristles; fore basitarsus ventrally flattened. Lower calypter with dark, though shining light, cilia. Third sternite with 2 strong black setae. Cercus yellow, with brown margin on apex, pale ventral hairs and black lateral and apical hairs, with thin basoventral hook.

Remark. Holotype of *Sciapus bicalcaratus* is identical to holotype of *Sciapus setifrons*.

Distribution. Congo (Kinshasa), Uganda, Burundi, Madagascar, Comores, St. Helena.

20. *Ethiosciapus exarmatus* (PARENT)

Type material examined. Holotypus, ♂ [red label] / Musee du Congo, Ituri: Missa Moke (Faradji), 20.II.1930, A. COLLART / R. Det. O. 2413 / *Sciopus exarmatus* n.sp. Type. O. PARENT.

Diagnosis. Males with group of hairs laterally on frons; femora with long black ventral hairs; 3 long acrostichal setae; alula well developed. All coxae black. Femora mostly yellow. Fore femora black ventrally in basal half, hind femora black on apex. Fore tibia with at most 2 long posteroventrals. Cercus with short setae, without distinct groups of hairs, with strong pointed and strongly curved basoventral hook.

Remark. *E. exarmatus* determined by P. VANSCHUYT-BROECK (male and female from Madagascar are examined, RINS) belongs to *Amblypsilopus cilifrons*, although I have seen several males from Madagascar (RINS), quite similar to this species.

Distribution. Congo (Kinshasa), ?Madagascar.

21. *Ethiosciapus finitimus* (PARENT) (Fig. 14)

Type material examined. Holotype, ♂, Congo Belge: Rutshuru, XII.1936, J. GHESQUIERE, 3566 / R. Mus. Hist. Nat. Belg. 10.482 / O. PARENT det., 1937: *Sciopus finitimus* [nomen nudum]. Type. O. PARENT.

Additional type material. Holotype, ♂, Uganda: Ruwenzori Range, XII.1934-I.1935. B.M. E. Afr. Exp. B.M. 1935-203 / Kilembe, 4500 ft., F.W. EDWARDS / Holotype *Ethiosciapus skuffini* GRICHANOV; paratype, ♂ with the same labels.

Additional material. 1 ♂, Congo Belge: P.N.A., 26-28.VIII.1953, P. VANSCHUYT-BROECK & V. HENDRICKS 4999-5005 / Secteur Tshiaberimu, Riv. Mbulikerere, affl. dr. Talia N, 2720 m [RINS].

Diagnosis. *E. finitimus* is close to *E. latipes*, differing in

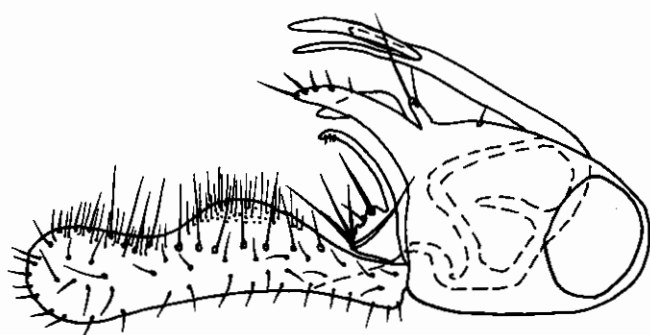


Fig. 14. – Hypopygium, left lateral view. *Ethiosciapus finitimus* (PARENT).

longer ventral setae on all femora, black halteres, other colour characters, and hypopygium morphology.

Remark. *E. finitimus* was described as *Chrysosoma* (*Sciopus*?) *finitimus* PARENT (1939). So, the name *Sciopus finitimus* in this paper is *nomen nudum*. Holotype of *C. finitimus* is identical to holotype of *E. skufjini*.

Distribution. Congo (Kinshasa), Uganda.

22. *Ethiosciapus flavirostris* (LOEW)

Material examined. 1 ♂ [in glycerol], Madagascar: Fia., Ambalamanakana, 13.III.1994, A. PAULY [RINS].

Diagnosis. Male with a group of hairs laterally on frons, 2 strong posterior and hairlike anterior dorsocentral setae; 3 long acrostichals. Fore coxa yellow except base, other coxae black; femora yellow, with long black ventral hairs, fore tibia with 2 long posteroventral bristles; fore basitarsomere ventrally flattened. Lower calypter with light cilia. Third sternite with 2 strong black setae. Cercus yellow, with brown margin on apex, pale ventral hairs and black lateral and apical hairs, with thin basoventral hook. *E. integer* is possible synonym to this species. *E. flavirostris* is very closely related to *E. bicalcaratus*.

Distribution. South Africa, Mozambique, Madagascar, ?Ethiopia.

23. *Ethiosciapus inflexus* (BECKER)

Material examined. 1 ♂, Kenya: Kakamega bridge, Isiukhu river, 17.IX.1995, N 0°16'46", E 34°46'61", Leg. Earthwatch Team 5 [NMK]. 3 ♂♂, Urundi, Bururi, alt. 1950 m, III.1948 [Terr. de Kitega, 23.II.1952, 1750 m], F.J. FRANÇOIS / R.I.Sc.N.B. I.G. 24.452. 1 ♂, Costermansville, Congo Belge, J. Wolfs / R.I.Sc.N.B. 24.236, Coll. M. Bequaert. 11 ♂♂, Madagascar: Tam., Morarano-chrome, X.1991, A. PAULY. 20 ♂♂, Madagascar: 25 km W. Morarano-chrome, forêt, XI.1991,

bac jaune. A. PAULY. 3 ♂♂, Madagascar: Tam., Morarano-chrome, XII.1991, A. PAULY, forêt, 25 km W. 12 ♂♂, Madagascar: Tam., Morarano-chrome, 16-30.IX.1991, A. PAULY, forêt, 25 km W. 1 ♂♂, Madagascar: Tam., Manakambahiny Atn., 18-25.I.1991, A. PAULY col., forêt. 3 ♂♂, Madagascar: Tam., Manakambahiny Atn., 17-23.III.1991, A. PAULY, forêt. 3 ♂♂, Madagascar: Tam., Morarano-chrome, 25.V.1992, A. PAULY. 28 ♂♀, Madagascar: Tam., Morarano-chrome, VII, 1-15.VIII and 1-15.IX.1991, A. PAULY., forêt, 25 km W. [RINS].

Diagnosis. Male with a group of hairs laterally on frons, 2 strong posterior and hairlike anterior dorsocentral setae; 3 long acrostichals. All coxae black; femora mostly black, with long black ventral hairs, fore tibia with 1 to 3 long posteroventral bristles; fore basitarsus ventrally flattened. Lower calypter with black cilia. Third sternite with long black bristles; first tergite and sternite with long white hairs. Cercus yellow, strap-like, slightly broadened towards apex, with dense pale ventral hairs, a row of black lateral bristles, and sclerotized pointed basoventral hook.

Remark. Descriptions of *E. inflexus* and *E. dilectus* have no significant difference and the two species are possible synonyms. Large series of males collected on Madagascar in yellow water traps displays a great variability of specimens in anterior four femora coloration (black in basal 1/3 to 4/5) and number of long posteroventral setae on fore tibia (1 to 3).

Distribution. Tanzania, Uganda, Kenya, Burundi, Congo (Kinshasa), South Africa, Madagascar, St. Helena.

24. *Ethiosciapus latipes* (PARENT)

Material examined (all in alcohol). 2 ♂♂, Madagascar: Tam., Morarano-chrome, XII.1991, A. PAULY, forêt, 25 km W. 10 ♂♂, 1 ♀, Madagascar: Morarano-chrome, VII, 1-15.VIII, 1-15, 16-30.IX.1991, A. PAULY., forêt, 25 km W. 2 ♂♂, Madagascar: Tam., Morarano-chrome, 25.V.1991, A. PAULY. 26 ♂♂, Madagascar: Tam., Morarano-chrome, X.1991, A. PAULY. About 300 ♂♂, Madagascar: 25 km W. Morarano-chrome, forêt, XI.1991, bac jaune. A. PAULY. 4 ♂♂, Madagascar: Tam., W. Morarano-chrome, forêt, 1-6.V.1991, bac jaune. A. PAULY. 1 ♂, Madagascar: Tam., Manakambahiny Atn., 17-23.III.1991, A. PAULY, forêt. 2 ♂♂, Madagascar: Foulpointe, 11.XI.1993, A. PAULY col., bac jaune, forêt.

Diagnosis. *E. latipes* is closely related to *E. finitimus*, differing in shorter setae on femora (a little longer than diameter of fore and hind femora, half as long as mid-femora diameter). Despite the description of this species by PARENT, frons has a group of lateral hairs; 4th and 5th segments of hind tarsus slightly broadened and flattened; halteres brown. All coxae black; hind femora brown at

apex; fore tibia with 2 or 3 moderately long posteroventral setae. 3rd abdominal sternite without strong setae. Cercus with short lateral setae; these setae stronger, than corresponding setae in *E. finitimus*, and cercal basoventral hook somewhat smaller.

Distribution. Madagascar.

25. *Bickeliolus alluaudi* (PARENT)

Material examined [all in alcohol]. 14 ♂♂, Madagascar: Tam., Morarano-chrome, XII.1991, A. PAULY col., forêt, 25 km W. 1 ♂, Madagascar: Tam., Manahambahiny-Atn, 18-25.I.1991, A. PAULY col., forêt. 1 ♂, Madagascar: Tam., Morarano-chrome, VII.1991, A. PAULY col., forêt. 1 ♂, Madagascar: Tam., Morarano-chrome, 25.V.1992, A. PAULY col. About 80 ♂♂, Madagascar: 25 km W. Morarano-chrome, forêt, XI.1991, bac jaune. A. PAULY. 14 ♂♂, Madagascar: Ambatondrazaka, 26.II.1991, A. PAULY col. [RINS].

Diagnosis. *B. alluaudi* is very close to *B. trochanteralis* from South Africa, differing in suboval, rather than subtriangular, basoventral process of cercus. Male with strong vertical seta; acrostichals very short. Antenna black. Legs including trochanters yellow, middle trochanter with a fringe of long yellow ventral hairs, middle femora with a few fine yellow ventral hairs at base, fore basitarsus ventrally flattened. Cercus narrowed in the middle, with apical brush of long setae and suboval basoventral sclerotized process on thin stem.

Distribution. Madagascar.

26. *Bickeliolus haemorrhoidalis* (BECKER)

Material examined. 2 ♂♂, Urundi: Rumonge, alt. 780 m, 15.X.1948 [26.XI.1948], F.J. FRANÇOIS / R.I.Sc.N.B. I.G. 24.452; 1 ♂, Urundi: Terr. de Bubanza, 23.VI.1953, F.J. FRANÇOIS / Colline: Kagunuzi (Imbo), alt. 900 m. [RINS].

Diagnosis. Male with strong vertical seta, 4 strong dorsocentrals and microscopic acrostichals. Antenna black. Legs yellow; middle and hind coxae black; fore coxa yellow, with 4 long thick yellow setae in middle and 1 yellow apical seta of glued hairs. All femora with white ventral hairs at base, longer than femora diameter; fore basitarsus ventrally flattened, with pale pile. Cercus practically bilobate; ventral lobe short, wide, with ventral spine-like process; dorsal lobe thin, twice longer than ventral lobe, slightly widened at apex, with subapical ventral brush of short hairs and apical brush of long hairs. Basoventral sclerotized process club-shaped, truncate at apex, with strong apical setae.

Distribution. Ethiopia, Uganda, Burundi, South Africa.

27. *Bickeliolus lamellatus* (PARENT)

Type material examined. Holotypus, ♂ [red label] / Musée du Congo, Rutshuru, I-1934, Dr. De WULF / R. Det. CC.2966 / *Sciopus lamellatus* n.sp. Type. O. PARENT.

Additional material. 1 ♂, N'Goma (Kivu), 17/19.IX.1935, Dr. H. DAMAS, Parc Nat. Albert / P. VANSCHUYTBROECK det. 1950, *Sciopus rectangularis* PARENT; 7 ♂♂, 1 ♀, Congo Belge: P.N.A., 26-28.VIII.1953 [26.X.1953; 29.VIII.1956; 10.VIII.1957; 6.IX.1956; 18.XI.1956], P. VANSCHUYTBROECK & V. HENDRICKS / Secteur Tshiaberimu, Riv. Mbulikerere, affl. dr. Talia N, 2720 m [Massif Ruwenzori, Kiurama, 2100 m; Secteur Nord, riv. Mukandwe affl. dr. Talia, 1200 m; Secteur Nord, Kamusonge, massif pres Mutsora, 1420 m; Massif Ruwenzori, riv. Lume (moyenne) affl. Semliki, 1830 m]; 2 ♂♂, 5 ♀♀, Congo belge: Kivu [P.N.A.], Rutshuru [Nyongera-Butumba; Lubirizi; Riv. Fuku], 20 au 21.XII.1933 [6 au 8, 18 au 23.VI.1934; 5-17.VII.1935], 1218-1285 m, G.F. DE WITTE: 1669 [131, 431, 448, 1622, 1645, 1662]. [RINS].

Diagnosis. *B. lamellatus* is closely related to *B. maslovae*. Male with strong vertical seta and 4 strong dorsocentral bristles, the anteriormost short; acrostichals very short. Antenna black. Legs including trochanters yellow, fore and middle femora with short white ventral hairs, fore basitarsus ventrally flattened. Cercus tapering, with apical brush of long hairs and subtriangular basoventral sclerotized process.

Distribution. Congo (Kinshasa), Ruanda, Uganda, Tanzania, St. Helena.

28. *Bickeliolus lutescens* (VANSCHUYTBROECK)

Type material examined. Paratype ♂, Ambila, VII.51, R.P. Forêt cotière / Institut Scientifique Madagascar / R.I.Sc.Nat.Belg. I.G. 18441 / Paratype / P. VANSCHUYTBROECK det. 195? *Chrysosoma lutescens* n.sp. [RINS].

Additional material (all in alcohol). About 95 ♂♂, Madagascar: Foulpointe, XI.1995, A. PAULY rec., plage, bac j. About 100 ♂♂, Madagascar: Foulpointe, 2.XI.1991, A. PAULY., plage, bac j. 7 ♂♂, Madagascar: Foulpointe, 11.XI.1993, A. PAULY col., bac jaune, forêt. 1 ♂, 4 ♀, Madagascar: Foulpointe, X.1993, A. PAULY col., forêt, bac j. 9 ♂♂, Madagascar: Foulpointe, XI.1995, A. PAULY. [RINS].

Diagnosis. Scape yellow, other articles dark brown dorsally; first flagellomere triangular, with rounded apex. Anterior coxa yellow, black at extreme base, with yellow setae; middle and hind coxae black. Legs yellow except apical tarsomeres. Femora bare. Fore tibia with 1 dorsal seta at base, 1 long posterior seta at basal 1/3. Middle tibia with 1 dorsal, 2 anterior setae. Hind tibia with 1 ante-

rodorsal, 2 posterodorsal, 1 anterior setae. Fore basitarsus enlarged and ventrally flattened, with pile of hairs; 5th tarsomere of the same tarsus black, slightly flattened. Hind basitarsus with 1 short basoventral seta. Cross-vein *m-cu* nearly straight, slightly sinuous, approximately equal to fork-handle M; CuA₁ approximately 2/3 as long as *m-cu*. Alula developed. Anal angle sharp. Cercus approximately 5 times longer than wide at base; cercus at base twice wider than in middle; cercal basoventral hook thick, 1/5 as long as cercus; apex of cercus slightly enlarged and rounded, with spade-like fringe of yellow cilia at basal 1/3; cercal cilia entirely yellow, 1/3 or 1/4 as long as cercus.

Distribution. Madagascar.

29. *Chrysosoma (Chrysosoma) aequatoriale* PARENT

Type material examined. Holotype, ♂, WENDJI, 30.VI.27, A. COLLART / Prov. Equateur (Congo Belge / *Chrysosoma aequatoriale* n.sp. Type. O. PARENT rev., 1933.

Diagnosis. Antenna red-brown; mesonotum without distinct stripes. Lower calypter with black cilia. Male middle basitarsus without long setae. All coxae black, sometimes fore coxa yellow at apex; fore femora black in basal quarter, middle femora black in basal 3/5; middle femora with black ventral setae in the middle; hind tibia black; middle tarsus whitish; 2nd to 4th tarsomeres of middle tarsus with posterodorsal fringe of white flat setae, as long as tarsomeres diameter. Cercus simple, tapering, without tooth.

Distribution. Congo (Kinshasa), Uganda.

Chrysosoma (Chrysosoma) aequilobatum PARENT

Type material examined. Holotype, ♂, Musée du Congo, Mayumbe Lemba, XII.1915, R. MAYNE / *Chrysosoma aequilobatum* n.sp. Type. O. PARENT.

Diagnosis. *C. aequilobatum* is included into the group of species with very long setae on middle basitarsus. Hind femora entirely black. Middle tibia without long setae. Middle basitarsus with two long setae, without white preapical ring. Cercus shallow bifurcated, with equal lobes.

Distribution. Congo (Kinshasa), Congo (Brazzaville).

30. *Chrysosoma (Chrysosoma) albocrinitatum* CURRAN

Type material examined. Holotypus, ♂ [red label] / Musée du Congo, Mayumbe: Kiniati, 7.IV.1911, R. MAYNE / R. Det. G. 1155 / Holotype *Chrysosoma albocrinitatum* CURRAN.

Diagnosis. *C. albocrinitatum* is related to a group of species having a row of cilia on middle basitarsus; these

cilia 3 or 4 times as long as tarsomere diameter. It differs from *C. crinipes* in second tarsomere of fore tarsus 2/3 to 3/4 as long as basitarsus, the latter swollen, with ventral pile of short hairs in basal 1/2 or 2/3 and pectination of long hooked hairs in apical half; second tarsomere also with hooked hairs along ventral side, the hairs longer than tarsomere diameter.

Distribution. Congo (Kinshasa), Congo (Brazzaville).

31. *Chrysosoma (Chrysosoma) alboguttatum* PARENT

Material examined. 2 ♂♂, 2 ♀♀, Urundi: Bururi, alt. 1950 [1900] m, III.1948 [8.I.1949; 5.III.1953], F.J. FRANÇOIS / R.I.Sc.N.B. I.G. 24.452[RINS]. 1 ♂, Labé-Guinée, 21-IX-1981, C. Bakary.

Diagnosis. Male tibiae and tarsi without long setae, with very short erect setulae; fore coxa yellow; antenna black; wing brown with two hyaline windows and transparent posterior edge; cercus simple, short, narrow, slightly widened at apex.

Distribution. Cameroons, Guinea, Burundi.

32. *Chrysosoma (Chrysosoma) arduus* (PARENT)

Type material examined. Holotype, ♀, Congo Belge: Eala, XI.1934, J. GHESQUIERE / Reg. Mus. Hist. Nat. Belg. I.G. 10.482 / *Sciopus arduus* n.sp. Type. O. PARENT det., 1935 / Type [red label]; paratypes, 4 ♀♀, same locality, with additional red label "cotype".

Diagnosis. Face widely bulging, clypeus slightly separated from eyes. Wings strongly maculated; *m-cu* strongly sinuate. Middle femora with ventral seta at base. 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, middle basitarsus with 5 ventral setulae; hind tibia with 1 anterodorsal and 1 posterodorsal at base, 4 dorsal, 3 anterior and 3-4 short ventral setae; hind basitarsus with 1 basoventral seta. Despite the description by PARENT (1936), the fore femora has 0 to 2 dark and 5 to 10 light fine ventral cilia approximately as long as femora diameter; these cilia arranged in two irregular rows in basal half of femora. The species is possible synonym to *C. norma*.

Distribution. Congo (Kinshasa).

33. *Chrysosoma (Chrysosoma) bacchi* DYTE

Material examined. 1 ♂, Urundi: Rutana, 24.V.1950, 1800 m, F.J. FRANÇOIS / R.I.Sc.N.B. I.G. 24.452 [RINS].

Diagnosis. Male middle basitarsus with white preapical ring, usually covered with very short yellow pectination on dorsal side; middle basitarsus with only three long

setae; middle tibia with two long setae; hind femora black except apical quarter and almost bare.

Distribution. Tanzania, Burundi.

34. *Chrysosoma (Chrysosoma) bredoi* PARENT

Type material examined. Holotype, ♂, Musee du Congo, Lukolela, III.1929, H.J. Bredo / *Chrysosoma bredoi* n.sp. Type. O. PARENT; 3 ♂♂, 1 ♀, Congo Belge: Eala, 7.V, IX, XI.1935, IX.1936, J. GHESQUIERE / R. Mus. Hist. Nat. Belg. I.G. 10.482 / *Chrysosoma bredoi* Par. O. PARENT det., 1936.

Diagnosis. Closely related to *C. hirsutulum*, differing in at most 1 or 2 long setae at base of middle tibia; middle basitarsus with 3 to 5 long setae; middle tarsus with erect pectination from the middle of 1st joint; femora dark-brown except apices. Holotype with head missing.

Distribution. Congo (Kinshasa).

35. *Chrysosoma (Kalocheta) collarti* (PARENT)

Type material examined. Holotypus, ♂ [red label] / Musee du Congo, Ituri: Gaduma Mala (Faradji), 13.III.1930, A. COLLART / R. Det. T.2414 / *Kalocheta collarti* n.sp. Type. O. PARENT.

Additional material. 2 ♂♂, 1 ♀, Kenya: Kakamega forest, Ikuywa river, 25.VI.1995, N 0°12'73", E 34°55'42", Leg. Earthwatch Team 4; 2 males, 2 ♀♀, Kenya: Kakamega forest, Buyungu Res., 21.I, 2.XII 1995, 21.XI.1994, far end path (Salazar circ), N 0°20'84", E 34°51'93", Leg. Earthwatch Team 1, 2, 6 [NMK]; 1 ♀, Kenya: Kakamega forest, nr. road betw. Rondo estate & Isecheno, 23.I.1995, Leg. Earthwatch Team 2 [NMK]; 1 ♂, Kenya: Kakamega forest, path betw. Isecheno stat. & Kalunya glade, 20.I.1995, N 0°14'48", E 34°51'88", Leg. Earthwatch Team 2 [NMK].

Diagnosis. Fore coxae with white hairs and black bristles; apical and median brown spots have crosspiece near junction of M 3+4 and posterior transverse (*m-cu*) wing veins. Males with hairlike part of arista twice as long as strap-like part; lower calypter with black hairs; Cercus with short dorsal tooth at basal third and short thin subapical dorsal tooth. Metallic epistome and clypeus appearing white pollinose under certain lightening. See also description of female by GRICHANOV (1995).

Distribution. Congo (Kinshasa), Tanzania, Kenya, Uganda.

36. *Chrysosoma (Chrysosoma) consentium* CURRAN

Type material examined. Holotypus, ♂ [red label] / Musee du Congo, Mayumbe: Kinyati, 7.VI.1911, R. MAYNE /

R. Det. H. 1155 / Holotype *Chrysosoma consentium* CURRAN. [RMCA].

Additional type material. Holotype, ♂, Yumbi, 1.VII.1912, Dr. P. Mouchet / *Chrysosoma fortunatum* n.sp. Type. O. PARENT det., 1933 / Type [red label] [RINS].

Diagnosis. *C. consentium* is similar to *C. mesotrichum* and *C. schoutedeni*, differing mainly in morphology of hypopygium. Fore and middle femora black in basal third; hind leg entirely black; middle tibia and tarsus except apex yellow. All femora with white ventral hairs in basal half. First and second tarsomeres of middle tarsus with additional row of short dorsal hairs, which more than twice as long as tarsomere diameter; middle tibia with 7 to 10 long posterodorsal setae; middle basitarsus with 6 to 10 long setae. 2nd to 5th tarsomeres of middle tarsus with black hairs; 5th tarsomere with pile of white hairs. Cercus with short dorsal tooth, at most half as long as width of cercus at apex, with short hairs in apical half of cercus.

Remark. Despite CURRAN (1925), *C. consentium* has nothing to do with *C. albocrinatum*, but is identical to the holotype of *C. fortunatum*.

Distribution. Congo (Kinshasa), Congo (Brazzaville).

37. *Chrysosoma (Chrysosoma) continuum* CURRAN

Type material examined. Holotypus, ♂ [red label] / Musee du Congo, Bas-Uele: Koteli, I.1925, Dr. H. SCHOUTEDEN / Type *Chrysosoma continuum* CURRAN.

Diagnosis. *C. continuum* is associated with a group of species having long setae on middle tibia and basitarsus. Middle tibia with 7-8 long setae; middle basitarsus without white preapical ring, with 7 long setae in apical half; second to fifth tarsomeres with a row of white hairs, without black hairs. Fore femora widely black at base; hind femora mostly blackish. Antenna red. Wing vein *m-cu*, measured along sinuation, nearly thrice as long as fork-handle. Cercus simple, with short dorsal apophysis.

Distribution. Congo (Kinshasa), Congo (Brazzaville).

38. *Chrysosoma (Chrysosoma) corruptor* PARENT

Type material examined. Holotypus, ♂ [red label] / Musee du Congo, Stanleyville, 19.II.1928, A. COLLART / R. Det. J. 2413 / *Chrysosoma corruptor* n.sp. Type. O. PARENT.

Diagnosis. Holotype of *C. corruptor* is similar to description of *C. minusculum* BECKER (1923). Antenna black. Mesonotum metallic, pleura and coxae with silvery tinge. Two dorsocentrals. Vein *m-cu* sinuate. First and second abdominal segment with white tinge (see from behind). Only fore coxa yellow. Middle and hind coxae with pale

ciliation. Middle tibia and tarsus without erect pubescence. Middle basitarsus without long setae. Cercus bifurcated, with lobes more than half as long as cercus.

Distribution. Congo (Kinshasa).

39. *Chrysosoma (Chrysosoma) hirsutulum* PARENT

Type material examined. Holotypus, ♂ [red label] / Musée du Congo, Equateur, Boende, 11.III.1926, R.P. Hulstaert / *Chrysosoma hirsutulum* n.sp. Type. O. PARENT.

Diagnosis. *C. hirsutulum* is associated with a group of species having long setae on middle tibia and basitarsus. Middle tibia with 3 long setae (basal one shorter) in basal half; middle basitarsus without white preapical ring, with three long setae in apical half; middle tibia and tarsus with erect pectination (holotype with broken 3rd-5th tarsomeres of middle tarsus). Cercus simple, with short dorsal apophysis.

Distribution. Congo (Kinshasa).

40. *Chrysosoma (Chrysosoma) ituriense* PARENT

Type material examined. Holotypus, ♂ [red label] / Musée du Congo, Ituri: Genge (Nizi), 16.III.1929, A. COLLART / R. Det. A.2413 / *Chrysosoma ituriense* n.sp. Type. O. PARENT.

Diagnosis. Antenna black. Lower calypter with pale cilia. All coxae black, femora yellow. Middle tibia and basitarsus without long setae, middle tarsus without white hairs; middle tibia with erect pectination on all sides, hairs half as long as tibia diameter; 1st to 4th tarsomeres with mostly dorsal pectination. Cercus not bifurcated, short, rounded in apical half, with short hairs.

Distribution. Congo (Kinshasa), Malawi.

41. *Chrysosoma (Chrysosoma) katangense* CURRAN

Type material examined. Holotypus, ♂ [red label] / Musée du Congo, Lubumbashi, Mt. Katanga, 1.XI.21, Dr. M. Bequaert / R. Det. D. 1155 / Holotype *Chrysosoma katangensis* CURRAN.

Additional type material. Holotypus, ♂ [red label] / Musée du Congo, Elisabethville, 1927, Dr. M. Bequaert / R. Det. H. 2412 / *Chrysosoma speciosum* n.sp. Type. O. PARENT.

Diagnosis. *C. katangense* is associated with a group of species having black antenna and numerous long setae on middle tibia and basitarsus. It differs from other species in sinuous vein *m-cu*, middle basitarsus with four or five long setae and row of shorter setae, half as long as the longest setae; middle tibia with 1 very long apical seta

and 3 or 4 long setae, half as long as the longest setae on basitarsus; middle basitarsus dark or yellow, without white preapical ring covered with yellow pectination; second to fifth tarsomeres of middle tarsus without remarkable ciliation; cercus not bifurcated, rounded on apex, with dorsoapical excavation and short pointed apophysis at the middle.

Remark. Holotype of *C. speciosum* PARENT has no difference from holotype of *C. katangense* CURRAN.

Distribution. Congo (Kinshasa), Sudan.

42. *Chrysosoma (Chrysosoma) lavinia* CURRAN

Type material examined. Holotypus, ♂ [red label] / Musée du Congo, Bas-Uele: Koteli, 1-21.I.1925, Dr. SCHOUTEDEN / Type *Chrysosoma lavinia* CURRAN.

Additional material. 6 ♂♂, Urundi, For. M'Bururi, alt. 2000 m, 4.IX.1948 [3.IX.1949; 10.X.1948], F.J. FRANÇOIS / R.I.Sc.N.B. I.G. 24.452.

Diagnosis. Cercus long and thin, truncated and widest at apex, with apophysis at apical third; middle tibia with 5 to 7 long setae, decreasing in length towards base (with two very long subapical setae); middle basitarsus with 5 long setae; fifth and sometimes fourth tarsomeres white haired; femora almost entirely yellow; antenna black; wing vein *m-cu* strongly sinuate.

Distribution. Congo (Kinshasa), Tanzania, Burundi.

43. *Chrysosoma (Chrysosoma) leucopogon* (WIEDEMANN)

Remark. I re-examined material including several specimens determined by C.E. DYTE from the Natural History Museum in London (GRICHANOV, 1997) and collected in Kenya, Tanzania, on Chagos and Maldives. All males strongly differ from *C. leucopogon* as described by BICKEL (1994a) in hypopygium morphology, belonging apparently to *C. snelli* described and figured accurately by CURRAN (1927). Long seta on 7th tergite and unequal arms of cercus figured by LAMB (1922) show that his description of *C. leucopogon* from Seychelles belongs also to *C. snelli*. Among other authors, only PARENT (1934) recorded this species for western Indian Ocean Region (Mauritius).

Distribution. ?Mauritius, ?Aldabra; Chagos Archipelago, Burma, Sri Lanka, Taiwan, India, Indochina, Java, Sumatra, Thailand, Queensland, New Caledonia, Tahiti.

44. *Chrysosoma (Kalocheta) neoliberia* BICKEL

Type material examined. Paratypes, 3 ♂♂, [red label] / Musée du Congo, Liberia: Du River, Camp N 3-1926, D. J. Bequaert / D. Det. U 1954 / Paratype, *Kalocheta liberia* CURRAN.

Diagnosis. Face thinly whitish pollinose, propleural hairs black. Fore coxa with white hairs and black bristles; wing distinctly maculated. Males with hairlike part of arista as long as strap-like part; lower calypter with black hairs.

Distribution. Liberia.

45. *Chrysosoma (Chrysosoma) mesotrichum* (BEZZI)
(Fig. 15)

Type material examined. Holotype, ♂, Congo Belg.: P.N.G. Miss H. De Saeger, II/fd/17.9.VII.1952, H. De Saeger, 3763 / Holotypus [red label] / Coll. Mus. Congo (ex coll. IPNCB) / P. VANSCHUYTBROECK det. 1959, *Chrysosoma garambaensis* n.sp. [RMCA]. **New synonym.**

Additional material. 1 ♂, Kenya: Kakamega forest, Isecheno stat., pump house trail, 22.VI.1995 (afternoon), N 0°16'46", E 34°46'61", Leg. Earthwatch Team 4; 1 ♂, Kenya: Kakamega bridge, Isiukhu river, 17.IX.1995, N 0°16'46", E 34°46'61", Leg. Earthwatch Team 5. 1 ♂, Kenya: Kakamega, Virembe nr. trading center, 17.IX.1995, N 0°14'26", E 34°50'93", Leg. Earthwatch Team 5 [NMK]. 1 ♂, Congo: FRANÇOIS / R.I.Sc.N.B. I.G. 24.452. 1 ♂, Congo Belge: Kivu, Beni (poste), 18.VI.1953, J. Verbeke, - KEA [RINS].

Diagnosis. *C. mesotrichum* is associated with a group of species having black antenna and numerous long setae on middle tibia and basitarsus. It differs from other species in strongly sinuous vein *m-cu*, which 1.5-2 times as long as fork-handle M_{1+2} ; also in simple cercus with rounded apex and pointed dorsal apophysis, and additional row of short dorsal hairs on first and second joints of middle tarsus, which hardly longer than tarsomere diameter. Cercus with a row of dorsal setae in basal half, with 1 strong and a few fine dorsal setae in apical half, with 2 strong setae and short hairs on apex, which evenly cut and slightly broadened; dorsal dens with 3 or 4 preapical setae. Males with a group of lateral hairs on frons and mostly black femora, whereas females have strong vertical seta and yellow femora.

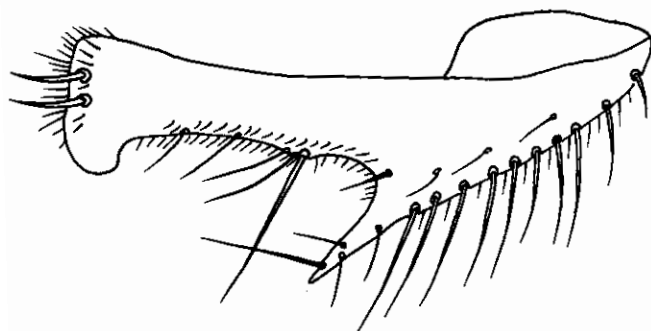


Fig. 15. — Cercus, lateral view. *Chrysosoma (Chrysosoma) mesotrichum* (BEZZI).

Distribution. Congo (Kinshasa), Sierra Leone, Uganda, Kenya.

46. *Chrysosoma (Chrysosoma) norma* CURRAN

Type material examined. Holotypus, ♂ [red label] / Musée du Congo, Albertville, Congo, Oct. 1925, Dr. H. SCHOUTEDEN / Type *Chrysosoma norma* CURRAN.

Additional material. 3 ♂♂, Kasai: Terr. de Dekese, Itunda, XI.1959, F.J. FRANÇOIS / R.I.Sc.N.B. I.G. 24.452.

Diagnosis. Middle basitarsus without long setae; all coxae black, sometimes fore coxa yellow at apex; fore and middle femora black except apical quarter; first three tarsomeres of middle tarsus brownish; lower calypter with black cilia; antenna at least partly yellow-red; cercus with long pointed dorsal apophysis at basal third, thin in the middle, slightly enlarged and setosed at apex, with very thin and sharp subapical dorsal hook.

Distribution. Congo (Kinshasa).

47. *Chrysosoma (Chrysosoma) pauperculum* PARENT

Type material examined. Holotypus, ♂ [red label] / Musée du Congo, Ituri: Gaduma Malo (Faradji), III.1930, A. COLLART / *Chrysosoma pauperculum* n.sp. Type. O. PARENT.

Diagnosis. *C. pauperculum* is placed within the group of species having no long setae on middle basitarsus. Antenna black. Wing hyaline, vein *m-cu* sinuate. Only fore coxa yellow. Posterior four coxae black. Middle tibia and tarsus without erect pubescence. Cercus not bifurcated, digitiform, with short dens in the middle.

Distribution. Congo (Kinshasa).

48. *Chrysosoma (Chrysosoma) praecipuum* PARENT

Type material examined. Holotypus, ♂ [red label] / Musée du Congo, Bambesa, 15.IX.1933, J.V. Leroy / *Chrysosoma praecipuum* n.sp. Type. O. PARENT.

Diagnosis. The species with unclear position within the genus *Chrysosoma*. It has coxae black, femora mostly black; wing black-brown, whitish along posterior edge, with narrow white transverse band, falling down from R_1 ; lower calypter with pale cilia.

Distribution. Congo (Kinshasa).

49. *Chrysosoma (Chrysosoma) pseudorepertum* sp. n.
(Fig. 16)

Holotype. ♂. Congo Belge, Uele: Bili, III.1953 [RINS].

Description. Frons broad, metallic blue-violet, with one

fine black lateral seta; postvertical seta positioned as a linear continuation of short postocular setal row. Ocellar tubercle with a pair of strong curved setae and one pair of short hairs. Ventral postcranium covered with dense irregular white hairs. Face metallic blue-green, mostly whitish pollinose; clypeus bulging, separated from eyes; face narrowed, 1.3 times as high as wide under antennae. Palpi and proboscis brown, with pale hairs; palpus also with a pair of black bristles. Antenna mostly orange-brownish, 1.8 times as long as height of head. Scape simple. Pedicel with a ring of strong bristles, at most as long as 1st flagellomere. First flagellomere dark-brown at apex, subtriangular, asymmetric, slightly longer than high. Arista apical, bare and simple. Length ratio of scape to pedicel to first flagellomere to arista, 5 : 5 : 12 : 190.

Mesonotum metallic blue-green; pleura bronze-black, grey pollinose. Two strong posterior and 2 microscopic anterior dorsocentral setae; 3 pairs of strong long acrostichals. Scutellum with two strong bristles, without lateral hairs.

Legs mostly yellow. Fore coxa black except apex; middle and hind coxae and trochanters black; hind femora blackish at extreme apex; hind tibia black at apex; 2nd to 5th segments of fore tarsus brown; hind tarsus entirely black. Fore coxa from the front with numerous white hairs and 3 black subapical setae. Middle coxa with white anterior hairs and 2 black subapical setae; hind coxa with several white external hairs and one black seta in the middle. All femora with light ventral hairs in basal half, slightly longer than femora diameter, gradually decreasing in length from fore to hind femora and from base towards the middle of corresponding femora. Fore tibia with 3 dorsal, 1 anterodorsal and 1 or 2 apical setae. Fore basitarsus with posteroventral row of elongate setulae, at most equal in length to basitarsus diameter. Length ratio of fore coxa to femora to tibia to tarsus (segments from first to fifth), 40 : 78 : 90 : 67 : 17 : 9 : 7 : 8. Middle tibia with 5 or 6 (including apical one) long posterodorsal setae, gradually increasing in length towards apex, and additional posterodorsal row of hairs, slightly longer than tibia diameter, 5 strong anterodorsal, 1 ventral and 3 or 4 apical setae. Middle basitarsus with 4 to 6 long posterodorsal setae and additional posterodorsal row of hairs, twice longer than tarsomere diameter; other tarsomeres without rows or brushes of remarkable hairs. Length ratio of middle coxa to femora to tibia to tarsus (segments from first to fifth), 33 : 100 : 156 : 120 : 30 : 17 : 8 : 8. Hind tibia with 7 dorsal, 4 anterior, 6 short ventral and 3 apical setae. Hind basitarsus with one basoventral seta. Length ratio of hind coxa to femora to tibia to basitarsus (other tarsomeres broken), 21 : 110 : 175 : 85.

Wing widely brownish anteriorly and along veins, with hyaline medial and posterior cells; veins brown. R₁ 0.4 times as long as wing. M₁ convex anteriorly. M₁₊₂ and M₁ forming obtuse angle. Ratio of part of costa between R₂₊₃ and R₄₊₅ to this between R₄₊₅ and M₁, 23 : 7. M₂ present as short stub vein and faint curved fold on membrane. Crossvein *m-cu* strongly sinuate. Ratio of crossvein *m-cu*, measured along sinuation, to apical part of M₁₊₂ (fork-

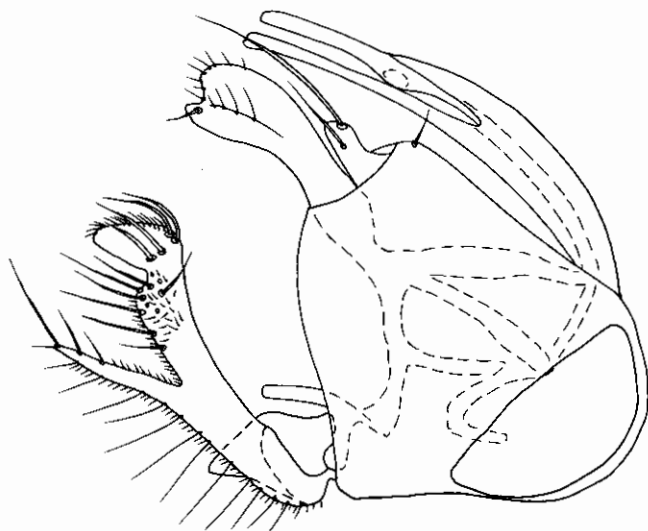


Fig. 16. – Hypopygium, left lateral view. *Chrysosoma pseudorepertum* sp. n.

handle), 10 : 7. Anal vein faint, anal lobe and alula present. Anal angle acute. Lower calypter brown, with fine, shining light, cilia. Halteres black-brown, halter stem yellow at base, thin, 3 or 4 times as long as knob, with short row of black setulae.

Abdomen metallic blue-green, whitish pollinose, with black sutures, short black hairs and long setae. First tergite with pale lateral hairs; sternite with pale and dark hairs. 1st to 6th segments combined twice longer than mesonotum. 7th segment as long as epandrium, with 2 pairs of strong setae; 7th and 8th tergites with long black cilia. Hypopygium small, black. Cercus black, digitiform, with suboval apex and thin long mid-dorsal apophysis, 1/3 as long as cercus; dorsal side of cercus densely covered with long cilia; apex with 2 pairs of thick setae and dense short hairs. Surstylus black, shallow excavated on apex, with short apical setulae and short apicodorsal process.

Female unknown.

Length: body 7.9 mm; antenna 3.5 mm; wing-length 8.7 mm; wing-width 2.2 mm.

Distribution. Congo (Kinshasa).

Diagnosis. *C. pseudorepertum* is associated with a group of species having yellow antenna and numerous long setae on middle basitarsus and tibia. It differs from *C. repertum* species in yellow femora and bare 2nd to 5th segments of middle tarsus. It has some similarities with *C. katangense*, differing from the latter species in long thin pointed mid-dorsal apophysis on cercus and distinctly orange antenna.

50. *Chrysosoma (Chrysosoma) schoutedeni* CURRAN (Fig. 17)

Type material examined. Holotypus, ♂ [red label] / Mu-

see du Congo, Albertville, Congo, Oct. 1925, Dr. H. SCHOUTEDEN / Holotype *Chrysosoma schoutedeni* CURRAN.

Diagnosis. *C. schoutedeni* is similar to *C. mesotrichum* and *C. consentium*, differing mainly in morphology of the hypopygium. Fore and middle femora black in basal third; hind femora entirely black; middle tibia and tarsus except apex yellow. All femora with white ventral hairs in basal half. First and second tarsomeres of middle tarsus with additional row of short dorsal hairs, which are more than twice as long as tarsomere diameter; middle tibia with 7 to 10 long posterodorsal setae; middle basitarsus with 6 to 10 long setae. 2nd to 5th tarsomeres of middle tarsus with black hairs; 5th tarsomere with pile of white hairs. Cercus with long thin dorsal apophysis, longer than width of cercus at apex, with short hairs in apical half of cercus.

Distribution. Congo (Brazzaville), Congo (Kinshasa), Tanzania, Angola, Zambia.

51. *Chrysosoma (Chrysosoma) singulare* PARENT

Type material examined. Holotype ♂, Leopoldville, August 1911, Muileman / *Chrysosoma singulare* n.sp. Type. O. PARENT rev., 1933 / Type [red label]. Paratype ♀, Mateba, Aug. 1911, Muileman / det. O. PARENT 93, *Chrysosoma singulare* PARENT / Paratype [red label].

Additional type material. Holotype, ♂, Congo Belg.: P.N.G. Miss H. De Saeger, Akain, 19.V.1950, Rec. H. De Saeger, 529 / Holotypus [red label] / Coll. Mus. Congo (ex coll. IPNCB) / P. VANSCHUYTBROECK det. 1959, *Chrysosoma gracilis* n.sp. [RMCA].

Diagnosis. Antenna black. Middle basitarsus without long setae; fore coxa yellow; middle tibia and tarsus with erect pubescence. Wing without spots; apical part of CuA₁ nearly half as long as *m-cu*; *m-cu* sinuate. Cercus bifurcated with dorsal lobe longer than ventral; ventral lobe with apical incision. Holotype of *C. gracile* without abdomen.

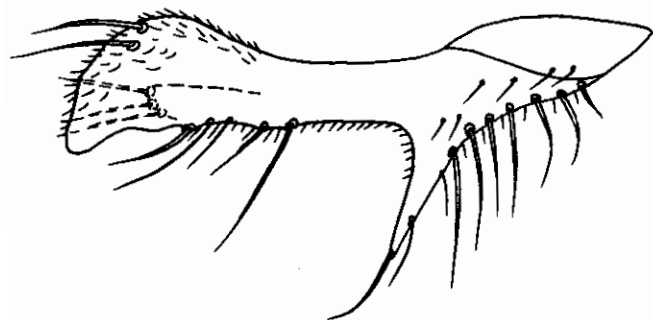


Fig. 17. — Cercus, lateral view. *Chrysosoma (Chrysosoma) schoutedeni* CURRAN.

Distribution. Congo (Kinshasa)

52. *Chrysosoma (Chrysosoma) snelli* CURRAN

Material examined. ♂, Coll. R.I.Sc.N.B., Seychelles: I. Mahe, Anse Royale: riv. sans. nom. 29-IX-1976 (Stat. 14), G. Marlier. ♀, Coll. R.I.Sc.N.B., Seychelles: I. Mahe, Riv. Gd. Anse pres embouchure, 4/10-IX-1976 (Stat. 26), G. Marlier.

Diagnosis. *C. snelli* is almost identical to *C. leucopogon* (see BICKEL, 1994a), differing from the latter species in genital morphology. Seventh tergite with long curved subapical lateral seta; cercus with long narrow arms; dorsal arm longer than base of cercus and 1/3 longer than ventral arm, dorsally densely white haired, with 3 or 4 long apical setae; ventral arm distinctly bifurcated in apical half, with subequal setosed lobes. Female differs, probably, in only one strong anterodorsal (rather than pair of short antero- and posterodorsals in *C. leucopogon*) seta at basal fifth of hind tibia.

Distribution. Tanzania, Kenya, Madagascar, Seychelles, Reunion, Rodriguez; Maldives, Chagos Archipelago.

53. *Chrysosoma (Chrysosoma) stolyarovi* sp. n. (Fig. 18)

Holotype. ♂. Ruanda: Shangugu, alt. 1460 m, 14.XI.1949, F. FRANÇOIS / Le long riv. Ruzizi / R.I.Sc.N.B. I.G. 24.452 [RINS].

Paratypes. ♂ with the same labels; 6 ♂♂, Ruanda: Shangugu, alt. 1500 m, 2.XI.1948, F. FRANÇOIS / Le long riv. Ruzizi / R.I.Sc.N.B. I.G. 24.452 [RINS].

Description. Frons broad, metallic bluish-green, with one black lateral seta; postvertical seta positioned as a linear continuation of short postocular setal row. Ocellar tubercle with a pair of strong curved setae and 2 pairs of hairs. Ventral postcranium covered with dense irregular white hairs. Face metallic blue-green, mostly whitish pollinose; clypeus bulging, separated from eyes; face narrowed, 1.3 times as high as wide under antennae. Palpi and proboscis black-brown, with pale hairs; palpus also with a pair of black bristles. Antenna black, 1.7 times as long as height of head. Scape simple. Pedicel with strong bristles, at most as long as 1st flagellomere. First flagellomere subtriangular, slightly longer than high, with short hairs. Arista apical, bare and simple. Length ratio of scape to pedicel to first flagellomere to arista, 7 : 6 : 12 : 150.

Mesonotum metallic blue-green; pleura bronze-black, grey pollinose. Two strong posterior and 4 hairlike anterior dorsocentral setae; 3 or 4 pairs of strong acrostichals. Scutellum with two strong bristles, without lateral hairs.

Legs mostly black-brown. Anterior four tibiae, knees and basitarsi yellow. Fore coxa from the front with numerous white hairs and 3 black subapical setae. Middle

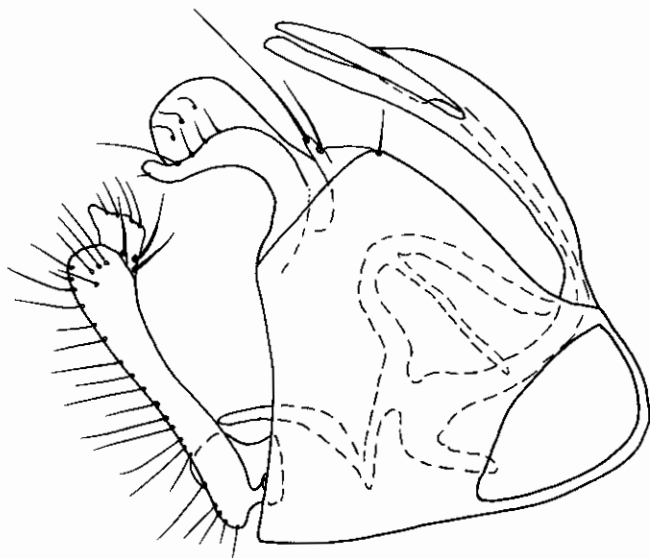


Fig. 18. — Hypopygium, left lateral view. *Chrysosoma stolyarovi* sp. n. (Fig. 18).

coxa with white anterior hairs; hind coxa with white external hairs and one black seta in the middle. All femora with ventral hairs, twice longer than femora diameter. Fore femora with full row of black anteroventral hairs and row of white posteroventral hairs in basal half; middle femora with the same rows and additional posterior row of dark hairs in apical half; hind femora with full row of black ventral hairs, several long dorsal hairs at base and posterior cilia at apex. Fore tibia with 8 to 10 long dorsal setae. Fore basitarsus with 5 or 6 long dorsal setae and ventral pile of very short hairs. Length ratio of fore coxa to femora to tibia to tarsus (segments from first to fifth), 38 : 62 : 75 : 60 : 12 : 8 : 5 : 5. Middle tibia with 10 to 12 long posterodorsal setae and additional posterodorsal row of hairs, nearly twice longer than tibia diameter, 5 short anterodorsal, 1 short ventral and 3-4 apical setae. Middle basitarsus with 5 to 7 long posterodorsal setae and additional posterodorsal row of hairs, twice longer than tarsomere diameter; 2nd to 4th tarsomeres with posterior row of black hairs and one long apical seta, 5th tarsomere with dorsal brush of white hairs. Length ratio of middle coxa to femora to tibia to tarsus (segments from first to fifth), 26 : 83 : 124 : 97 : 24 : 14 : 8 : 8. Hind tibia with several short dorsal and ventral setae. Hind basitarsus with one basoventral seta. Length ratio of hind coxa to femora to tibia to tarsus (segments from first to fifth), 18 : 92 : 145 : 75 : 24 : 14 : 9 : 9.

Wing widely brownish along veins, with partly hyaline medial and posterior cells; veins brown. M_1 slightly convex anteriorly. M_{1+2} and M_1 forming obtuse angle. Ratio of part of costa between R_{2+3} and R_{4+5} to this between R_{4+5} and M_1 , 23 : 7. M_2 present as short stub vein and faint fold on membrane. Crossvein *m-cu* strongly sinuate. Ratio of crossvein *m-cu*, measured along situation, to apical part of M_{1+2} (fork-handle), 95 : 55. Anal vein faint, anal lobe

and alula present. Anal angle acute. Lower calypter black, with fine, shining light, cilia. Halteres black-brown, halter stem thin, twice as long as knob, with a row of black setulae.

Abdomen metallic blue-green, with black sutures, long black hairs and setae. First tergite with pale lateral hairs; sternite with long sparse pale and dark hairs. 1st to 6th segments combined 2.5 times longer than mesonotum. 7th segment as long as epandrium; 7th and 8th tergites with long black hairs. Hypopygium small, black. Cercus black, narrow, digitiform, with short subtriangular apicoventral lobe; dorsal and distal margins of cercus with fine hairs. Surstylus black, with several short setulae at apex and short distodorsal apophysis.

Female unknown.

Length: body 6.1 mm; antenna 2.3 mm; wing-length 7.6 mm; wing-width 2.15 mm.

Distribution: Burundi.

Etymology. The species is named for Russian entomologist Dr. Mark Stolyarov.

Diagnosis. *C. stolyarovi* is associated with a group of species having black antenna and numerous long setae on middle basitarsus and tibia. It differs from other species in long dorsal setae on fore tibia and basitarsus, additional posterodorsal hairs on middle tibia and tarsus; narrow digitiform cercus with rectangular apicoventral apophysis, without middorsal tooth.

54. *Chrysosoma (Chrysosoma) tanasijtshuki* GRICHANOV (Fig. 19)

Type material examined. Holotype. ♂. [Kenya:] Van

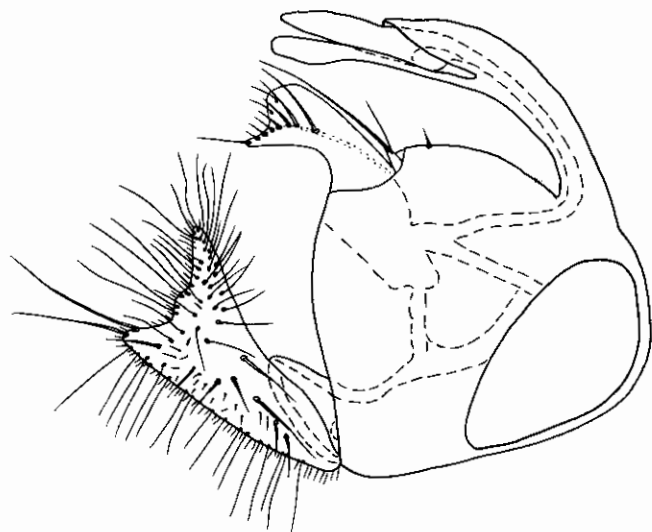


Fig. 19. — Hypopygium, left lateral view. *Chrysosoma (Chrysosoma) tanasijtshuki* GRICHANOV.

Someren, Ngong K.C., April 1936 / *Chrysosoma*) *tanasijshtshuki* GRICHANOV [Natural History Museum (London)].

Additional material. ♂, Kasai: Terr. de Dekese, Itunda, XII.1959, F.J. FRANÇOIS / R.I.Sc.N.B. I.G. 24.452.

Diagnosis. *C. tanasijshtshuki* is associated with large group of species having numerous and very long dorsal setae on middle tibia and basitarsus. Male of the species differs in unusually broad and broadened apicad, shallow excavated on apex, densely haired cercus and other characters such as following: antenna black; *m-cu* strongly sinuate; all femora black except apex; middle tibia with 8 long setae; middle basitarsus with 6 setae.

Distribution. Kenya, Congo (Kinshasa).

55. *Chrysosoma (Chrysosoma) tenuipenne* CURRAN

Type material examined. Holotypus, ♂ [red label] / Musee du Congo, Kwamouth, Jan. 1922, Dr. H. SCHOUTEDEN / Holotype *Chrysosoma tenuipenne* CURRAN.

Diagnosis. *C. tenuipenne* is associated with a group of species having black coxae and simple middle leg. Frons with one vertical and one postvertical whitish hairs; antenna black; wing hyaline, but with a brown round spot at apex; M_2 as faint fold; lower calypter with white cilia; cercus bifurcated, with densely setosed branches, ventral branch with bladelike setae.

Distribution. Senegal, Nigeria, Congo (Brazzaville), Congo (Kinshasa), Uganda.

56. *Chrysosoma (Chrysosoma) triumphator* PARENT

Type material examined. Holotypus, ♂ [red label] / Musee du Congo, Ituri: Mont Wago, 24.XI.1928, A. COLLART / R. Det. L. 2413 / *Chrysosoma triumphator* n.sp. Type. O. PARENT.

Diagnosis. *C. triumphator* is associated with a group of species having black antenna and numerous long setae on middle tibia and basitarsus. It differs from other species by sinuous vein *m-cu*; middle basitarsus with 8 long setae, middle tibia with 5 short anterodorsal and 8 or 9 long posterodorsal, 3 or 4 ventral and 2 apicoventral setae, both tibia and basitarsus with additional anterodorsal row of shorter setae, 3 or 4 times as long as tibia (tarsomere) diameter; middle basitarsus without white preapical ring; second to fourth tarsomeres of middle tarsus without remarkable ciliation except 1 short apicodorsal seta; cercus not bifurcated, thin, with pointed apex, with short pointed apophysis at basal third.

Distribution. Congo (Kinshasa)

57. *Chrysosoma (Chrysosoma) varivittatum* CURRAN

Type material examined. Holotypus, ♂ [red label] / Musee du Congo, Watsa a Niangara, VII.1920, L. Burgeon / R. Det. V. 1155 / Holotype *Chrysosoma varivittatum* CURRAN.

Diagnosis. Antenna reddish-brown. Middle femora yellow; hind femora dark yellow, black at extreme base and on apex; hind tibia and tarsus black. Middle tibia with 6 long setae decreasing towards base; middle basitarsus with 6 long setae; second and third tarsomeres with black dorsal setation; third to fifth tarsomeres with white hairs. Wing vein *m-cu* strongly sinuate, measured along sinuation, 3.5-4.0 times as long as fork-handle. Cercus with one dorsal apophysis. Holotype lacked fore legs, middle tibia and tarsus, and arista.

Distribution. Congo (Kinshasa)

58. *Gigantosciapus africanus* (PARENT)

Type material examined. Holotypus, ♂ [red label], Musee du Congo, Munjungani (Likimi), 4.X.1922, A. COLLART / R. Det. O.2412 / *Chrysosoma africanum* n.sp. Type. O. PARENT.

Additional material. 6 ♂♂, 10 ♀♀, Congo Belge: Eala, V-VII.1935 [II, XI.1936], J. GHESQUIERE / R. Mus. Hist. Nat. Belg. I.G. 10.482 / *Chrysosoma africanum* Par. PARENT det. 3 ♀♀, Congo Belg.: Bambesa, 30.VII, I.VIII, 11.XI.1938, J. Vrijdagh / R. Mus. Hist. Nat. Belg. I.G. 12234 [11.952] / Holotypus [Paratypus] *Chrysosoma bambesaensis* B. Coulibaly [red label; *nomen nudum*].

Diagnosis. Face narrow. Scape swollen. First flagellomere entirely brown-black, 5-6 times longer than high at base; female 1st flagellomere as long as height of face. Lower calypter reduced, without cilia. Wings darkened anteriorly at apex. Tarsi simple; fore basitarsus with 2 strong subapical posteroventral, 2 fine anteroventral in the middle, 1 basoventral setae; 2nd to 4th tarsomeres of the same tarsus with ventral spiculi; hind basitarsus with 1 short dorsal seta in both sexes; middle femora with posteroventral cilia in basal half, longer than femora diameter; other femora bare; fore tibia with 1 fine dorsal seta at base; female fore basitarsus with three bristles on either side of lower surface. Male middle femora dorsally and hind femora entirely black-brown; female middle femora mostly yellow, slightly brownish dorsally; posterior tibia entirely whitish. Male cercus elongate, with rounded apex and long cilia in apical half, but without brush.

Distribution. Congo (Kinshasa).

59. *Gigantosciapus anomalipes* (PARENT)

Type material examined. Holotypus, ♂ [red label] / Mu-

see du Congo, Uele, Dingila, VII.1933, J.W. Leroy / *Chrysosoma anomalipes* n.sp. Type. O. PARENT.

Diagnosis. *G. anomalipes* is keyed to *G. pseudogemmarius*. Face narrow. Scape swollen. First flagellomere partly brown-black. Lower calypter reduced, without cilia. Hind femora with a posteroventral row of cilia, as long as femora diameter, and a group of 7 or 8 strong posteroventral setae at apical third. Fore basitarsus simple, with 2 strong bristles in the middle and 2 short apical bristles. Middle basitarsus with 2 posterior rows of long hairs; 3rd tarsomere with subapical ventral excavation, 4th tarsomere with basoventral tooth. Hind basitarsus with erect posterior hairs. Cercus with rounded apex.

Distribution. Congo (Kinshasa), Ghana.

60. *Gigantosciapus decellei* (VANSCHUYTBROECK)

Type material examined. Holotypus, ♂ [red label] / Re-colte sur cacayoer / Coll. Mus. Tervuren, Cote d'Ivoire: Amanikro, 50 km N.W. Abengourou, J. Decelle, V/VI.1961 / P. VANSCHUYTBROECK det. 195?, *Megistostylus decellei* n.sp.

Diagnosis. Face narrow. Scape swollen. First flagellomere partly brown-black. Lower calypter reduced, without cilia. Wings darkened anteriorly at apex. Fore femora whitish; middle femora yellow, brownish posteriorly; fore and middle femora with ventral hairs, longer than femora diameter; hind femora brown, somewhat swollen in apical fourth, with group of erect ventral hairs in apical fourth, half as long as femora diameter, and group of posteroventral hairs, slightly longer than femora diameter. Fore tibia and basitarsus white ventrally, brown dorsally; fore basitarsus with 2 posteroventral in apical half, 2 anteroventral in basal half, 1 fine dorsal, 1 basoventral setae; basitarsus slightly swollen at apex, 2nd tarsomere curved and swollen. Middle tibia brownish dorsally, whitish ventrally; middle tibia and basitarsus with numerous ventral hairs and fine cilia, 2-3 times longer than tibia diameter and 3-4 times longer than tarsomere diameter. Hind tibia and basitarsus white; hind tibia with posteroventral row of hairs, 2-3 times longer than tibia diameter. Body length 13-14 mm, antenna 5 mm.

Distribution. Ivory Coast.

61. *Gigantosciapus francoisi* sp. n. (Fig. 20)

Holotype. ♂, Luebo, 27.IV.1958, F.J. FRANÇOIS / R.I.Sc.N.B. I.G. 24.452.

Paratypes. ♀ with the same labels as holotype; ♂ [figured], Kasai, Terr. de Luebo, 10.02.1960, F.J. FRANÇOIS / R.I.Sc.N.B. I.G. 24.452.

Description. Male. Frons shining blue-violet, bare, longer

than wide. Two pairs of postvertical bristles present on the back slope of vertex. Occiput densely whitish pollinose. Upper postocular setae short, black. Face white pollinose, narrow, with nearly parallel sides; ratio of face width in the middle to epistome to clypeus length, 2 : 4 : 4. Clypeus strongly bulging, beak-like, coming down eyes, but adjacent to margin of eyes except apex. Ventral postcranium silvery-white pollinose, covered with dense white hairs. Palpi and proboscis yellow-brownish, not very long, covered with small light and dark hairs, palpus also with a pair of fine black setae. Scape and pedicel yellow; arista and first flagellomere except extreme base dark-brown; scape at apex slightly wider than pedicel; pedicel with a ring of very short setae, first flagellomere microscopically pubescent, tapering, 12-13 times as long as high at base, much longer than face. Arista apical, bare, simple. Length ratio of scape to pedicel to first flagellomere to arista, 14 : 6 : 150 : 180.

Mesonotum and scutellum dark with metallic blue-violet reflection, humeri yellow, pleura mostly yellow except brownish stripe coming down of halter. One or two pairs of strong posterior dorsocentral bristles with 5 hairlike setae in front of them; several microscopic acrostichals in two rows restricted in anterior third of mesonotum. Scutellum with two strong bristles and two very short lateral hairs.

Anterior four coxae and trochanters, fore femora yellow, hind coxa almost entirely brown; fore and middle tibia, middle basitarsus and middle femora yellow-brownish; hind femora dark-brown; hind tibia and basitarsus whitish; fore tarsus, 2nd to 5th tarsomeres of middle and hind tarsi black. Fore coxa from the front with short light hairs and several fine black apical cilia. Middle coxa from the front with a few light hairs and longer black apical cilia. Hind coxa with one long black external seta and several short hairs. Fore and middle femora with numerous fine dark anteroventral and posteroventral hairs, longer than femora diameter; the longest hairs positioned in apical half; hind femora with the same, somewhat stronger, black cilia in apical half only. Fore tibia with one dorsal at base and two or three short ventral setae. First tarsomere simple, with one or two dorsal and 4 ventral short setae, slightly elongate ventral setulae; 2nd and 3rd tarsomeres with short erect ventral setulae; 4th

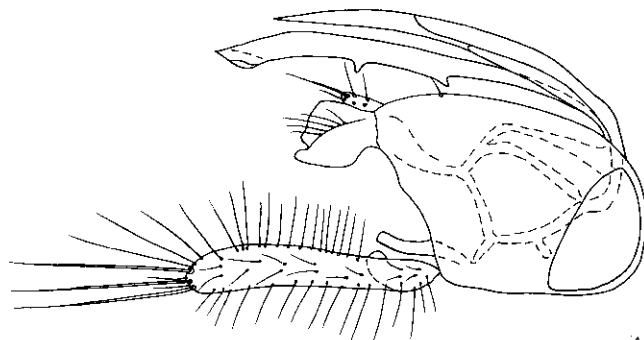


Fig. 20. ♂ Hypopygium, left lateral view. *Gigantosciapus francoisi* sp. n.

tarsomere with posteroventral spinules; 4th and 5th tarsomeres ventrally flattened, with ventral pile of microscopic hairs. Length ratio of fore coxa to femora to tibia to tarsus (segments from first to fifth), 70 : 90 : 130 : 83 : 22 : 14 : 15 : 11. Middle tibia with 8 strong posterodorsal, one or two short posterior, four ventral, three apical bristles; 2nd to 4th tarsomeres with posteroventral hairs, longer than tarsomeres diameter; 2nd tarsomere with apical seta, half as long as 3rd tarsomere; 3rd tarsomere ventrally flattened, with subapical ventral seta. Length ratio of middle coxa to femora to tibia to tarsus (segments from first to fifth), 37 : 130 : 210 : 100 : 25 : 17 : 14 : 7. Hind tibia with 10-12 short dorsal, 6-7 short ventral, numerous dorsal and posterodorsal dark hooked hairs in basal half, longer than tibia diameter; hind basitarsus with one short ventral at base, several inconspicuous setae in middle, yellow posterior accumbent setulae along entire length; 2nd tarsomere simple; other tarsomeres broken. Length ratio of hind coxa to femora to tibia to tarsus (segments first and second), 25 : 145 : 230 : 100 : 30.

Wings mostly hyaline, darkened at apex, veins brown. R₁ reaching first 1/3 of wing. Costa with short simple setulae, posterior margin of wing with short hairs. R₂₊₃ and R₄₊₅ slightly curved posteriad at apex. M₁₊₂ almost straight. M₁ slightly convex anteriad, forming acute angle with M₂; crossvein *m-cu* nearly straight, slightly convex, forming right angle with M₁₊₂. Ratio of parts of costa between R₂₊₃ and R₄₊₅ to those between R₄₊₅ and M₁, 45 : 5. Ratio of crossvein *m-cu* to apical part of M₁₊₂ (fork-handle) to apical part of CuA₁, 80 : 155 : 23. Anal vein and lobe undeveloped. Halter stem long and thin, yellow, thrice longer than knob, with row of dark setulae behind the middle, knob brownish. Lower calypter reduced, without setae.

Abdomen thin and long, cylindrical, with short dark hairs and black marginal bristles. 1st segment mostly yellow-brown with metallic reflection dorsally, other segments metallic bronze-green with mat black bands in basal third. 6th segment as long as 5th. 7th tergite half as long as 6th, with several strong marginal bristles; 7th and 8th tergites with long hairs. Hypopygium black-brown, attached to the tip of 7th segment. Hypandrium with left lateral arm, fused with long hypandrial hood, which tapering apicad. Aedeagus with two dorsal angles, slightly broadened apicad. Epandrial lobe prominent, with at least 6 strong setae. Cerci black, digitiform, as long as epandrium, densely covered with black hairs. Surstylus strongly sclerotized, broad, subrectangular, with small apicodorsal dens and several midventral hairs.

Female. Similar to male except lacking male secondary sexual characters, otherwise as follows: frons shining metallic blue-violet, bare; face white pollinose. First flagellomere broken. Proboscis twice longer than palpus.

Fore basitarsus yellow-brownish. Middle and hind femora with a few apicoventral cilia. Fore tibia with three dorsal, three ventral, one or two apical setae; fore basitarsus with one short dorsal in middle, three anteroventral and three posteroventral very short setae, one pair of

strong basoventral setae. Middle tibia with 7 anterodorsal, four posterodorsal, four ventral and four or five apical bristles. Middle basitarsus with one dorsal and several ventral short setae. Hind tibia bearing up to eight anterodorsal, eight posterodorsal and eight ventral bristles. Hind basitarsus with one dorsal at basal third, one basal posteroventral strong bristle. Wing the same as in male. Anal vein and lobe undeveloped. Lower calypter reduced.

Abdominal ventrum pale; 6th segment somewhat smaller than 5th; 7th segment half smaller than 6th; cercus long, with one long and one shorter apical setae.

Length: body 11.1-12.1 mm; hypopygium 1.8 mm, antenna 6.1 mm; wing-length 10.3-11.6 mm; wing-width 2.6 mm.

Distribution: Congo (Kinshasa).

Etymology. The species is named for the collector, F.J. FRANÇOIS.

Diagnosis. *Gigantosciapus françoisi* is close to *G. anomalipes*, differing in long hairs on all femora, fore and middle tibia; short setae on fore basitarsus; simple setulae on middle and hind basitarsus, and other characters. Female differs from *G. anomalipes* in brown mesonotum, mostly brown hind coxa and femora, more numerous setae on middle tibia, another ratio of fork-handle M₁₊₂ to *m-cu*.

62. *Gigantosciapus meyeri* (VANSCHUYTBROECK)

Type material examined. Holotypus, ♂ [red label] / Nigeria, Ogoja County, 3 June 1961 / R.W. Meyer A 6775 / Mus. Roy. Afr. Centr., don P. VANSCHUYTBROECK / P. VANSCHUYTBROECK det. 195?, *Megistostylus meyeri* n.sp.

Diagnosis. 1st flagellomere entirely dark-brown, 9-10 times longer than high at base. Fore femora yellow; middle femora yellow in basal half, brown in apical half; fore tibia except base, fore tarsus and middle tibia brown; middle tarsus broken. Fore tibia with 2 fine dorsal, 1 apicodorsal, 3 fine ventral setae; fore basitarsus with 1 strong subapical posteroventral, 1 fine dorsal and 1 fine ventral setae in the middle; fore tibia and basitarsus also with fine ventralposteroventral hairs, as long as tibia diameter; 2nd to 4th tarsomeres of the same tarsus with ventral spiculi. Middle femora with posteroventral cilia, longer than femora diameter. Hind femora brown; hind tibia and basitarsus white. Cercus narrowed apicad, with sharp apex and short cilia; surstylus slightly widened apicad and truncated on apex, with short apical hairs; epandrial lobe prominent, with numerous setae.

Distribution. Nigeria.

63. *Gigantosciapus nataliae* sp. n. (Fig. 21)

Holotype. ♂, Kasai: Terr. de Bekese Itanda, XII.1959, F.J. FRANÇOIS / R.I.Sc.N.B. I.G. 24.452.

Paratype. ♀ with the same labels as holotype, but collection date 25.XII.1959.

Description. Frons shining blue-violet, bare, longer than wide. Two pairs of postvertical bristles present on the back slope of vertex. Ocellar tubercle with a pair of strong long setae and pair of hairs. Occiput densely whitish pollinose. Upper postocular setae short, black. Face white pollinose, narrow, with nearly parallel sides; ratio of face width in the middle to epistome to clypeus length, 1 : 4 : 3. Clypeus strongly bulging, beak-like, coming down eyes, but adjacent to margin of eyes except apex. Ventral postcranium silvery-white pollinose, covered with dense white hairs. Palpi and proboscis yellow, not very long, covered with small light and dark hairs, palpus also with a pair of fine black setae. Antenna mostly yellow; first flagellomere in apical third and arista dark-brown; scape slightly wider than pedicel; pedicel with a ring of short setae, first flagellomere microscopically pubescent, tapering, 3 or 4 times as long as high at base, much longer than face. Arista apical, bare, simple.

Length ratio of scape to pedicel to first flagellomere to arista, 10 : 5 : 24 : 200.

Mesonotum yellow with narrow metallic violet longitudinal stripe in posterior third; scutellum metallic blue-violet dorsally; thorax otherwise entirely yellow. 5 pairs of dorsocentral setae gradually decreasing in size anteriorly with several anterior hairs; short acrostichals in two rows restricted in anterior half of mesonotum. Scutellum with two strong bristles and two microscopic lateral hairs.

Legs almost entirely yellow; fore tibia except basal third and tarsus dark-yellow; hind tibia and basitarsus whitish-yellow; 2nd to 5th tarsomeres of middle and hind tarsi brownish to brown. Fore coxa from the front with short dark hairs and several black apical setae. Middle coxa from the front with a few dark hairs and several black apical cilia. Hind coxa with one long black external seta and several short hairs. Fore femora with short hairs; middle femora in apical third with anteroventral and posteroventral rows of several fine dark hairs, as long as femora diameter; hind femora with 1 or 2 pairs of subapical antero- and posteroventral black cilia. Fore tibia with one anterodorsal at base, three short posterodorsal, 2 or 3 ventral, 2 or 3 apical setae and ventral row of setulae, half as long as tibia diameter. First tarsomere simple, with one short dorsal, 2 strong posterior in basal half and elongate ventral setulae, as long as basitarsus diameter, becoming denser at apex; 2nd, 3rd and 4th tarsomeres with short erect ventral setulae; 4th tarsomere widened in the middle; 2nd to 5th tarsomeres ventrally flattened, with ventral pile of microscopic hairs. Length ratio of fore coxa to femora to tibia to tarsus (segments from first to fifth), 70 : 80 : 95 : 40 : 16 : 12 : 20 : 11. Middle tibia with 4 or 5 strong anterodorsal, 2 posterodorsal, 1 or 2 ventral, 4 apical setae, anteroventral cilia in apical half, posteroventral cilia along entire length, mostly twice longer than tibia diameter. Middle basitarsus with anteroventral, posteroventral and posterior rows of hairs, with the longest posteroventral hairs, decreasing

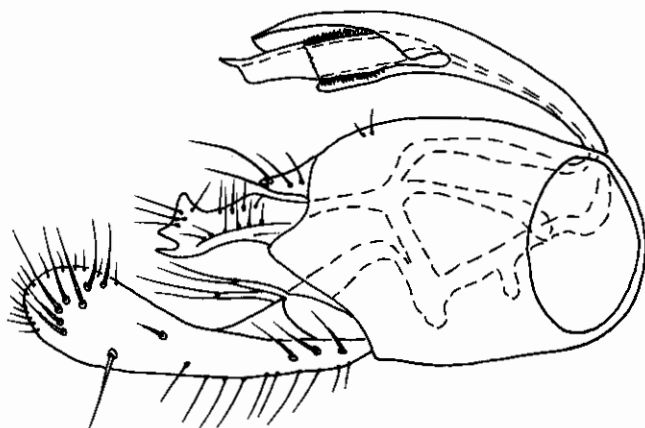


Fig. 21. — Hypopygium, left lateral view. *Gigantosciapus nataliae* sp. n.

in length apicad, at most twice longer than basitarsus diameter; 3rd tarsomere entirely and 4th one at base with ventral hairs, longer than tarsomeres diameter; 3rd tarsomere at apex and 4th one at base ventrally flattened, with shallow ventral excavation; 5th tarsomere flattened. Length ratio of middle coxa to femora to tibia to tarsus (segments from first to fifth), 37 : 118 : 162 : 73 : 18 : 17 : 21 : 8. Hind tibia with 6 or 7 pairs of short dorsal, 3 or 4 long posterior setae in 3rd quarter, elongate posterior and posteroventral setulae in apical half, longer than tibia diameter, and 4 apical setae. Hind basitarsus with one short ventral at base, 2 short apicoventral, 1 or 2 dorsal setae at base, yellow posterior accumbent setulae along entire length, posterodorsal and posterior rows of hairs, twice longer than basitarsus diameter; 2nd and 3rd tarsomeres simple; 4th and 5th tarsomeres flattened and slightly widened. Length ratio of hind coxa to femora to tibia to tarsus (segments from first to fifth), 26 : 120 : 190 : 66 : 28 : 19 : 10 : 7.

Wings practically hyaline, slightly infumate at apex, veins brown. R₁ reaching first 1/3 of wing. Costa with short simple setulae, posterior margin of wing with short hairs. R₂₊₃ and R₄₊₅ slightly curved posteriad at apex. M₁₊₂ almost straight. M₁ slightly convex anteriorly, forming acute angle with M₂; M₂ fold-like; crossvein *m-cu* slightly convex, forming right angles with M₁₊₂ and CuA₁. Ratio of part of costa between R₂₊₃ and R₄₊₅ to this between R₄₊₅ and M₁, 31 : 4. Ratio of crossvein *m-cu* to apical part of M₁₊₂ (fork-handle) to apical part of CuA, 57 : 105 : 17. Anal vein and lobe undeveloped. Halter stem long and thin, yellow, nearly thrice longer than knob, with row of dark setulae behind the middle, knob brownish. Lower calypter reduced, without setae.

Abdomen thin and long, cylindrical, mostly reddish-yellow, with short black hairs and long marginal setae. 1st segment metallic violet dorsally, other segments with large metallic brown-blue subapical spot. 6th segment nearly as long as 5th. 7th tergite half as long as 6th, with several fine long marginal bristles; 7th and 8th tergites

with short black hairs. Hypopygium brown, attached to the tip of 7th segment. Hypandrium with long left lateral arm. Aedeagus with aberrant crenulate swelling. Epandrial lobe prominent, with 4 setae. Cercus black, clavate, widened apicad, rounded at apex, as long as epandrium, with black hairs and setae. Surstylus simple, sclerotized, broadened distad, with 2 acute apical angles, thin apico-dorsal dens and numerous ventral hairs.

Female. Similar to male except lacking male secondary sexual characters, otherwise as follows: frons shining brown-black, bare; face white pollinose. First flagellomere dark-brown except yellow base, 7 times longer than high, approximately 2/3 as long as face. Proboscis twice longer than palpus. Mesonotum posteriorly and scutellum yellow-brown. Legs yellow except 5th tarsomere of fore tarsus and 2nd to 5th tarsomeres of posterior four tarsi. Middle and hind femora with a few apicoventral cilia. Fore tibia with 1 antero- and 2 posterodorsal, 3 ventral, 3 or 4 apical setae; fore basitarsus with 2 short dorsal in middle, 3 or 4 anteroventral and 3 or 4 posteroventral setae; 5th tarsomere flattened. Middle tibia with 6 anterodorsal, 3 posterodorsal, 3 or 4 ventral and 4 apical bristles. Middle basitarsus with 1 dorsal and several ventral short setae. Hind tibia with 6 or 7 dorsal and 5 ventral short setae. Hind basitarsus with one dorsal at basal third or in the middle, one basal posteroventral strong setae. Wing the same as in male. Anal vein and lobe undeveloped. Lower calypter reduced. Abdomen pale ventrally, with brown spots dorsally; 6th segment 1/3 smaller than 5th; 7th segment 1/3 smaller than 6th; cercus long, with a pair of long apical setae.

Length: male body 8.9 mm, female body 8.4; hypopygium 1.3 mm; antenna 4.0 mm in male and 4.6 mm in female; wing-length 6.9 mm in male and 8.4 mm in female; wing-width 1.95 mm in male and 2.3 mm in female.

Distribution. Congo (Kinshasa).

Diagnosis. *Gigantosciapus nataliae* is related to *G. anomalipes* and *G. françoisi*, differing in short hairs on femora (except apical hairs on middle femora) and different ciliation of other podomeres.

64. *Plagiozopelma angulitarse* (PARENT)

Type material examined. Holotypus, ♂ [red label], Musee du Congo, Stanleyville, IX.1928, A. COLLART / R. Det. G. 2413 / [no identification label] / *Megistostylus* BIGOT [on individual pin] / *angulitarsis* PARENT [on individual pin].

Diagnosis. Arista bare and simple. Thorax entirely dark. Vein *m-cu* sinuate. Posterior four coxae black, fore tibia with long apical seta. Cercus with basoventral apophysis and short apical cilia. This species is possible synonym of *P. nalense*.

Distribution. Congo (Kinshasa).

65. *Plagiozopelma capilliferum* (PARENT)

Type material examined. Holotypus, ♂ [red label] / Musee du Congo, Kibali-Ituri: Kilo, G. du Soleil / R. Det. E.2413 / *Chrysosoma capilliferum* n.sp. Type. O. PARENT.

Additional material. 3 ♂♂, Congo Belg.: Bambesa, 1.VIII.1938, J. Vrijdagh / R. Mus. Hist. Nat. Belg. I.G. 11.952 / *Chrysosoma njalense* PARENT [misidentification].

Diagnosis. Thorax entirely dark; *m-cu* sinuate; arista bare and simple; posterior four coxae black; fore tibia with 1 long spine of fused setae; cercus with apical cilia, as long as cercus; cercus with short thin basoventral apophysis.

Remark. Despite the anonymous label, material examined (RINS) belongs apparently to *P. capilliferum*.

Distribution. Congo (Kinshasa).

66. *Plagiozopelma collarti* (CURRAN)

Type material examined. Holotypus, ♂ [red label] / Musee du Congo, Mayumbe: Tibo, 25.IV.1926, A. COLLART / R. Det. D.1344 / Type. *Chrysosoma collarti* CURRAN.

Diagnosis. Thorax entirely dark. Arista narrow, lanceolate in apical half, with longest cilia in front of long flattened lamella, where they 4 times longer than maximum width of arista and twice longer than cilia in basal half of flattened lamella. Fore coxa with a row of lateral spines. Fore tibia with a few long apical setae; third tarsomere of fore tarsus half as long as the next one. Cercus with distinct basoventral apophysis, with short hairs on apex.

Distribution. Congo (Brazzaville), Malawi, Uganda, Congo (Kinshasa).

67. *Plagiozopelma du* (CURRAN)

Material examined. ♂, Musee du Congo, Kasai: Inebo, XI.1921, Van Risseghem, R. Det. C.2413 / *Chrysosoma du* Curr. O. PARENT [det.].

Diagnosis. Thorax entirely dark. Arista narrow, lanceolate in apical half, with longest cilia on the short flattened lamella, where they 2 times longer than maximum width of arista. Fore coxa with a row of lateral spines. Fore tibia with a few long apical setae; third tarsomere of fore tarsus as long as the next one. Cercus with distinct basoventral apophysis, with short hairs on apex.

Distribution. Liberia, Congo (Kinshasa).

68. *Plagiozopelma ghesquieri* (PARENT)

Type material examined. Holotype, ♂, Congo Belge:

Eala, 14.VI.1935, J. GHESQUIERE / R. Mus. Hist. Nat. Belg. I.G. 10.482 / *Chrysosoma ghesquieri* n.sp. Type. O. PARENT det., 1935 / Type [red label]; paratypes, 4 ♀♀, same locality.

Diagnosis. Thorax entirely dark; 2 strong dorsocentrals, 3 acrostichals with short first pair. Arista narrow, lanceolate in apical half, with the same width in apical fifth as in the middle, distinctly flattened and ciliate in apical half, with hairs as long as arista transverse. Fore femora with short ventral cilia in basal 2/3, half as long as femora diameter. Fore tibia with 3-4 long apical setae. Fore coxa with a row of lateral spines. *m-cu* slightly sinuate. Cercus having large midventral prominence, covered entirely with dense hairs, approximately half as long as cercus.

Distribution. Congo (Kinshasa).

69. *Plagiozopelma pallidicorne* (CURRAN)

Type material examined. Paratypes, ♂ and ♀, Usangi: Pare Gebirge, 5.VI.1952, D. O. Afrika Exp. / Paratype / R. I. Sc. N. B. I.G. 22.942 / P. VANSCHUYTBROECK det. 19??, *Megistostylus lindneri* n.sp. **New synonym.**

Diagnosis. Antenna entirely yellow; arista simple, bare. Frons shining, with 1 fine white vertical hair; face silvery white, narrowed apicad, twice higher than wide under antenna and 4 times higher than wide at clypeus. 1st flagellomere twice longer than high. Thorax and abdomen entirely dark. 2 strong dorsocentrals, 3 long acrostichal setae. Fore coxa yellow, middle and hind coxae dark; legs yellow, 2nd to 5th tarsomeres of fore and middle tarsus dark, hind tarsus entirely black-brown; hind tibia only slightly darkened at extreme apex. Fore femora with yellow ventral hairs, approximately equal to femora diameter; fore tibia with 2 or 3 long black apical spines; fore basitarsus swollen and ventrally flattened, with pile of short whitish hairs. Legs otherwise simple. *M*₁ and *M*₂ forming right angle; *M*₂ as short stub, then fold-like; *m-cu* slightly sinuate or convex; *CuA*₁ 1/3 as long as *m-cu*; *m-cu* approximately equal to fork-handle *M*₁₊₂. Cercus distinctly bilobate, with wide lobes and thin basodorsal apophysis. Body length (without antenna) 7.3 mm.

Distribution. Tanzania, Kenya, Congo (Kinshasa).

70. *Plagiozopelma piliseta* (PARENT)

Type material examined. Holotype ♂, Congo Belge: Eala, 24.V.1935, J. GHESQUIERE / R. Mus. Hist. Nat. Belg. I.G. 10.482 / *Chrysosoma piliseta* n.sp. Type. O. PARENT det., 1935 / Type [red label].

Diagnosis. Similar to *P. capilliferum*. Thorax entirely dark; *m-cu* sinuate; arista bare and simple; posterior four coxae black; fore tibia with 2 (anterior and ventral) long apical spines of fused setae; cercus with apical cilia, as

long as cercus; cercus with long basoventral apophysis, half as long as cercus.

Distribution. Congo (Kinshasa).

71. *Amblypsilopus aenescens* (VANSCHUYTBROECK)

Material examined. About 300 ♂♂ in alcohol, Madagascar: Fia., Ranomafana, 19.I.1992, A. PAULY, forêt [RINS].

Diagnosis. *A. aenescens* is an Afrotropical representative of *zonatus* group of species (BICKEL, 1994a) characterising by long posterior seta at basal fourth of fore tibia. Frons laterally with 1 vertical seta. 1st flagellomere with dorsal arista. Legs mostly yellow; fore coxa brown in basal half; middle and hind trochanters and coxae black; hind femora at apex, hind tibia and fore tarsus brownish; middle and hind tarsus brown-black. All femora with ventral row of black cilia, longer than femora diameter. In addition, fore femora with full ventral row of dark cilia, and middle and hind femora with several light cilia in basal half. Fore tibia with posteroventral row of elongate setulae in addition to long seta. The same setulae covering fore basitarsus. The latter slightly broadened, ventrally flattened, with pale pile, 2.3 times longer than 2nd tarsier. Middle tarsus simple; 3rd and 4th tarsomeres of hind tarsus slightly thickened, posteriorly flattened, with brown pad of microscopic hairs; 5th tarsomere flattened. Wing evenly brownish; lower calypter brown, with black cilia; halter black. Cercus short, mostly black, practically trilobate; dorsal and middle lobes forming triangle with distal emargination; dorsal lobe with 2 or 3 long black undulate apical setae, longer than postabdomen; middle lobe with 2 black setae, longer than cercus; ventral lobe looking like long thin yellow basoventral cercal process covered with short hairs. Body length 4.5-4.8 mm, wing 4.2 mm.

Distribution. Madagascar.

72. *Amblypsilopus barkalovi* sp. n. (Fig. 22)

Holotype. ♂, Congo Belge: P.N.U. Lusinga (1760 m), 1-8.XII.1947, Mis. G.F. de WITTE. 1123a / P. VANSCHUYTBROECK det. 1952, *Sciopus longimanus* BECKER [RINS].

Paratypes. 2 ♀♀, same labels with collection dates 9-17.XII.1947 [RINS].

Description. Male. Frons broad, shining metallic blue-green. A front vertical bristle (broken), a strong postvertical one positioned as a linear continuation of the postocular setal row. Ventral postcranium covered with dense irregular white hairs. Face dark-green, pollinose, parallel-sided; clypeus separated from eyes, not coming down eyes, rounded at apex; face thrice higher than wide under antennae. Palpi and proboscis yellow-brownish, with light hairs, palpus also with one black bristle. Antenna black, approximately as long as height of

head. Scape simple; pedicel with a ring of short setulae. First flagellomere with rounded apex, as long as high, with short hairs. Arista basodorsal, bare. Length ratio of scape to pedicel to first flagellomere to arista, 5 : 5 : 7 : 51.

Mesonotum and scutellum shining blue-green, pollinose. Pleura bronze-green, grey pollinose; metaepimere yellow. 2 (?) strong dorsocentral setae (broken); at most 1 or 2 (?) short acrostichals. Scutellum with two strong setae.

Legs including coxae and trochanters yellow, apical segments of tarsi brown (hind tarsi broken). Fore coxa from the front with short white hairs and 2 or 3 yellow apical setae. Middle and hind coxae from the outside with a few yellow hairs, hind coxa also with one fine external seta. Fore femora with ventral hairs, at most half as long as femora diameter. Fore tibia without setae, with ventral row of semi-erect setulae, as long as tibia diameter. Fore tarsus simple, with fifth tarsomere flattened. Length ratio of fore coxa to femora to tibia to tarsus (segments from first to fifth), 50 : 80 : 90 : 104 : 35 : 33 : 17 : 8. Middle femora bare. Middle tibia with 2 or 3 short dorsal setae. Length ratio of middle coxa to femora to tibia to tarsus (segments from first to fifth), 25 : 80 : 140 : 135 : 44 : 30 : 18 : 8. Hind femora bare. Hind tibia with several very short dorsal setae. Length ratio of hind coxa to femora to tibia, 22 : 122 : 185.

Wings (partly broken) hyaline, veins brown. R_{4+5} gently curved to M_1 at apex. Ratio of part of costa between R_{2+3} and R_{4+5} to this between R_{4+5} and M_1 , 31 : 8. Anal vein and lobe present. Anal angle right. Lower calypter yellow, with pale hairs. Halteres yellow.

Abdomen shining blue-green, pollinose, thin, with short hairs and fine setae. Ventrums brownish at base; first and second segments with white hairs; unmodified segments combined 2.5 times as long as mesonotum; seventh segment as long as sixth. Hypopygium brown. Cercus yellow, brown in apical half, narrow, simple, with dense ventral hairs in apical half and dorsal hairs in basal 2/3. Surstylus brown, with broad ventral and long thin dorsal lobes. Epandrial lobe reduced to 2 small tubercles each bearing one seta.

Female. Similar to male except lacking male secondary

sexual characters, otherwise as follows: one strong front vertical seta; 5 strong dorsocentrals, no acrostichals or at most one hairlike acrostichal seta; middle and hind tibiae with 2 or 3 apical setae. Length ratio of tibia to 1st to 2nd tarsomere, 86 : 76 : 32 (fore leg); 130 : 105 : 38 (middle leg); 158 : 66 : 44 (hind leg). M_1 with nearly right-angular bend, forming right angle with M_{1+2} . Crossvein *m-cu* almost straight. Ratio of crossvein *m-cu* to apical part of M_{1+2} (fork-handle) to apical part of CuA_1 , 25 : 46 : 19.

Length: male body 3.6 mm; female body 3.2 mm; antenna 0.8 mm; male postabdomen 0.7 mm; male wing 3.7 mm; female wing 3.8 mm; female wing-width 1.2 mm.

Distribution. Congo (Kinshasa).

Etymology. The species is named for Russian dipterologist Dr. A. Barkalov.

Diagnosis. *A. barkalovi* is similar to *A. basilewskyi*, differing in simple tarsi and cerci, long fore and middle tarsi, and other characters. Female is keyed to *A. stuckenbergi*, differing from the latter in metallic green thorax and shorter fore basitarsus.

73. *Amblypsilopus basilewskyi* (VANSCHUYTBROECK) (Fig. 23)

Type material examined. Holotypus, ♂ [red label] / Region bocagere et zone des cultures / Coll. Mus. Congo. Tanganyika Terr.: Kilimanjaro, Marungu, Versant S.E. 1800-2200 m, 20/27.VII.57 / Mission Zool. I.R.S.A.C. en Afrique orientale (P. Basilewsky et N. Leleup) / P. VANSCHUYTBROECK det. 1959 *Sciopus basilewskyi* n.sp.

Additional material. 1 ♂, Kenya: Kakamega forest, Isecheno stat., 23.VI.1995, near guest house N 0°14'16", E 34°51'88", Leg. Earthwatch Team 4; 1 ♂, 1 ♀, Kenya: Kakamega forest, Isecheno stat., 22.VI.1995, near guest house N 0°14'16", E 34°51'88", Leg. Earthwatch Team 4; 1 ♀, Kenya: Kakamega forest, Isecheno stat., pump house trail, 28.IV.1995 (morning), N 0°16'46", E 34°46'61", Leg. Earthwatch Team 4; 1 ♀, Kenya: Kakamega forest, Buyungu Res., 2.XII.1995, far end path (Salazar circ), N 0°20'84", E 34°51'93", Leg. Earthwatch Team 6 [NMK]. 1 ♂, Nairobi Museum, 26.X.1995. T. Kanasugi.

Diagnosis. Males have yellow flag on broadened fifth tarsomere of fore tarsus. First flagellomere rounded, as long as high; middle and usually hind coxae with blackish-brown external spot (holotype with entirely yellow hind coxa); middle femora with anteroventral row of somewhat elongate dark hairs, which at most as long as femora diameter; seventh abdominal segment with long fine hairs, without strong bristles; cercus with strong setae. See also description of this species by GRICHANOV (1996e). A male collected by T. KANASUGI differs in smaller size (body 6.3 mm, wing 6.7 mm), shorter hairs

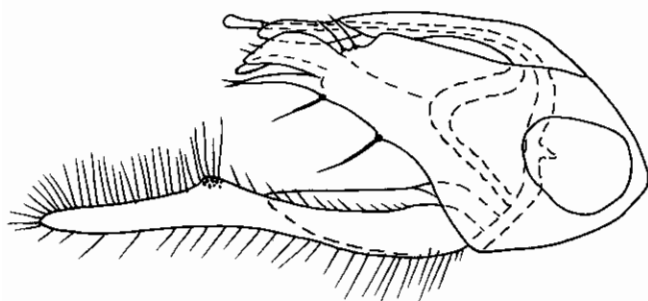


Fig. 22. — Hypopygium, left lateral view. *Amblypsilopus barkalovi* sp. n.

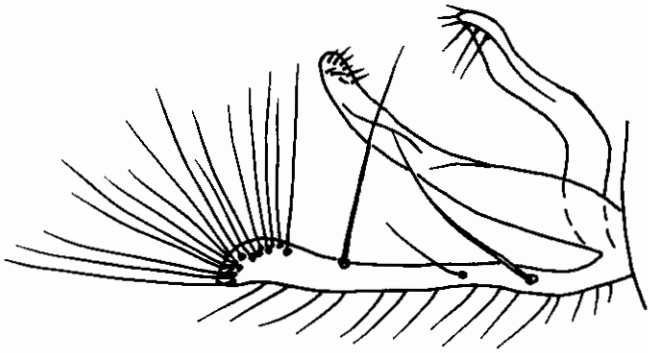


Fig. 23. – Cercus, lateral view. *Amblypsilopus basilewskyi* (VANSCHUYTBROECK).

on 4th and 5th tarsomeres of fore tarsus, *m-cu* approximately twice longer than CuA_1 and fore tibia 1/3 longer than basitarsus.

Distribution. Uganda, Tanzania, Kenya.

74. *Amblypsilopus bruneli* sp. n. (Fig. 24)

Holotype. ♂ in glycerol, Madagascar: 25 km W. Morarano-chrome, XI.1991, forêt, bac jaune. A. PAULY [RINS].

Description. Frons broad, metallic blue-violet. Four front vertical bristles bends forward. Ventral postcranium covered with dense irregular white hairs. Face greenish-blue, slightly convex, clypeus separated from eyes; face slightly narrowed, a little higher than wide under antennae. Palpi and proboscis yellow, with light hairs, palpus also with two black bristles. Antenna black, approximately as long as height of head. Scape simple; pedicel globular, with a ring of short setae. First flagellomere rounded, as long as high. Arista apicodorsal, bare and simple. Length ratio of scape to pedicel to first flagellomere to arista, 7 : 6 : 7 : 70.

Mesonotum and scutellum shining blue-green. Pleura bronze-blue. Four strong dorsocentral setae; two strong acrostichals, scutellum with two strong setae (all setae broken).

Legs mostly yellow. Middle coxa black except apex, hind coxa and trochanter black, 2nd-5th joints of four tarsus and hind knee brownish, 2nd-5th segments of hind tarsus black. Fore coxa yellow, brown at base, with short white hairs from the front and 3 yellow subapical setae. Middle coxa with short and long white hairs in apical half anteriorly, hind coxa with several yellow cilia. Fore femora bare. Fore tibia with 1 short dorsal at base, 1 strong posterior at apical 1/3 (broken) and 1 apical setae. Fore basitarsus slightly broadened, ventrally flattened, with pale pile; other tarsomeres simple. Length ratio of fore coxa to femora to tibia to tarsus (segments from first to fifth), 50 : 72 : 79 : 60 : 18 : 10 : 7 : 7. Middle femora bare. Middle tibia with 1 anterodorsal, 1 posterodorsal, 2 anterior and 1 short ventral setae. Middle tarsus broken. Length ratio of middle coxa to femora to tibia, 35 : 76 :

108. Hind femora with light ventral cilia in basal half, at most equal in length to femora diameter. Hind tibia with 1 anterodorsal, 3 or 4 posterodorsal, 2 anterior, several short ventral setae. 3rd and 4th tarsomeres slightly widened and flattened, with brown pad of microscopic hairs; 5th tarsomere flattened. Length ratio of hind coxa to femora to tibia to tarsus (segments from first to fifth), 25 : 100 : 150 : 54 : 30 : 16 : 12 : 8.

Wings evenly greyish, veins brown. R_1 reaching 0.4 wing length. 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 , 16 : 4. M_2 present as short stub vein and faint fold on membrane. Crossvein *m-cu* almost straight, slightly sinuate. Ratio of *m-cu* to apical part of M_{1+2} (fork-handle) to apical part of CuA_1 , 30 : 40 : 21. Anal vein fold-like, alula and anal lobe developed. Anal angle acute. Lower calypter dark (cilia broken). Halter yellow.

Abdomen shining greenish-violet, with black hairs and marginal setae. Margins of segments from the end of 2nd mat-black; ventrum with white hairs; 7th and 8th segments with black cilia; seventh segment short. Hypopygium with appendages dark-brown. Cercus with widely divergent lobes of equal length; ventral lobe tapering; dorsal lobe twice wider than ventral, with rounded apex and 4 (?) apical seta, as long as cercus. Surstylus straight, with several apical hairs, 1 long subapical pedunculate seta and short distodorsal apophysis. Epandrial lobe distinct, with 1 long and 1 short setae.

Female. Unknown.

Length: body 4.5 mm; antenna 1.4 mm; postabdomen 0.8 mm; wing-length 3.7 mm; wing-width 1.2 mm.

Distribution. Madagascar.

Etymology. The species is named for French entomologist, E. Brunel.

Diagnosis. *A. bruneli* is related to *A. dallastai* (see dia-

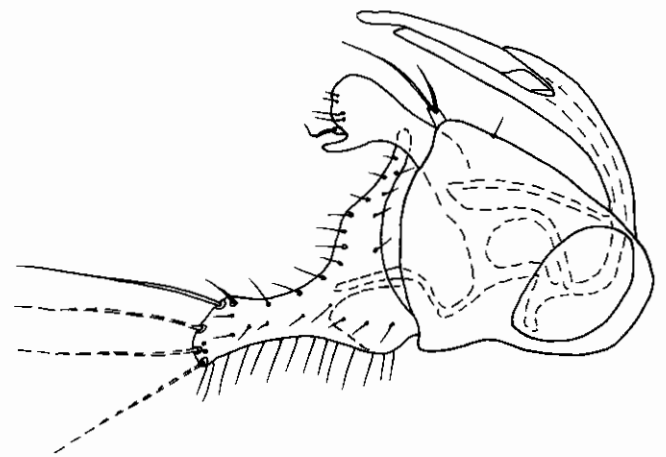


Fig. 24. – Hypopygium, left lateral view. *Amblypsilopus bruneli* sp. n.

gnosis for this species), differing in bare fore and middle femora, light cilia on hind femora, fore basitarsus thrice longer than second tarsomere and morphology of hypopygium.

75. *Amblypsilopus cilifrons* (PARENT) (Fig. 25)

Material examined. 3 ♂♂, 15 ♀♀, Congo Belg.: P.N.G. Miss H. De Saeger, PFSK.5/3 [PFSK.20/11; II/gd/4; II/fd/17; II/hd/8; Inimvua; Pidigala; Nagero], 21.VII.1951 [3.VIII.1951, 26.VI.1951, 23.IV.1952, 20.V.1952, 10.V.1952, 26.VI.1952, 20.VI.1952, 16.VI.1952, 9.VII.1952], H. De Saeger, 3656, 3706, 3488, 3763, 2128, 3328, 3629, 2185, 1981, 3500 [RMCA]. 4 ♂♂, Fort Dauphin, R.P. / Institut Scientifique Madagascar; 1 ♂, Mailaka, I.52 (N.S.H. Krauss) / Institut Scientifique Madagascar; 1 ♂, 10 km est d'Ambilobe, I.52, N.S.H. Krauss / Institut Scientifique Madagascar / R.I.Sc.N.B. I.G. 19793 / P. VANSCHUYTBROECK det. 1954, *Sciopus exarmatus* Par. About 70 ♂♂ in alcohol, Madagascar: Tam., Morarano-chrome, XII.1991, A. PAULY col., forêt, 25 km W. About 150 ♂♂ in alcohol, Madagascar: 25 km W. Morarano-chrome, forêt, XI.1991, bac jaune. A. PAULY.

Diagnosis. *A. cilifrons* is associated with *auratus* group of species, differing by the following combination of characters. Legs mostly black; fore and middle tibiae and basitarsus yellow to dark-brown. All femora with two rows of white ventral hairs in basal 2/3, longer than femora diameter; fore tibia without erect setulae; first tarsomere of fore tarsus 1.5-2 times as long as second article and 2/3 to 9/10 as long as rest tarsomeres; fore basitarsus and following joint 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 thin dorsoapical hook.

Distribution: Nigeria, Togo, Congo (Kinshasa), Kenya, Madagascar.

76. *Amblypsilopus cuthbertsoni* (PARENT)

Material examined. 2 ♂♂, 1 ♀, Urundi, Terr. Bururi, Kumuyunge, alt. 2050 m, 19.V.1948, F. FRANÇOIS / R.I.Sc.N.B. I.G. 24.452.

Diagnosis. Wing hyaline, venation undisturbed; 5 dorso-centrals, no acrostichal setae; fore coxa yellow, legs without remarkable hairs or setae; 5th tarsomere of fore tarsus slightly enlarged, with hypertrophied claws; antenna black; cercus knife-shaped, with 2 mid-dorsal cilia, as long as cercus.

Distribution: Zimbabwe, Burundi.

77. *Amblypsilopus dallastai* sp. n. (Fig. 26)

Holotype. ♂, Madagascar / R.I.Sc.N.B. 24236, Coll. M. Bequaert.

Description. Frons broad, shining metallic blue-violet. Four front vertical bristles bends forward, a strong post-vertical one (broken) positioned as a linear continuation of the postocular setal row. Ocellar tubercle with two extremely strong setae. Ventral postcranium covered with dense irregular white hairs. Face blackish-blue, pollinose, slightly convex, clypeus separated from eyes, not coming down eyes; face slightly narrowed, 1.2 times as high as wide under antennae. Palpi and proboscis yellow, with light hairs, palpus also with two black bristles. Antenna black, approximately as long as height of head. Scape simple; pedicel globular, with a ring of short setulae, longer ventral bristles and one strong dorsal seta. First flagellomere transverse-oval, shorter than high, with short hairs. Arista dorsal, bare. Length ratio of scape to pedicel to first flagellomere to arista, 5 : 5 : 5 : 81.

Mesonotum and scutellum shining blue-green. Pleura bronze-blue, densely grey pollinose. Five strong dorso-central setae; 2 long acrostichals (setae mostly broken). Scutellum with two strong setae.

Legs mostly yellow. Middle and hind coxae and trochanters black, hind knee and basitarsus brownish, apical segments of tarsi brown-black. Fore coxa mostly yellow, brown at base, with short white hairs from the front and 4 or 5 yellow apical setae. Middle coxa with short and long white hairs in apical half anteriorly, hind coxa from the outside with a few yellow hairs and 2 or 3 fine white external seta. Fore femora with anteroventral row of white hairs nearly equal to femora diameter and posteroventral row of hairs, white at base, otherwise dark, longer than femora diameter. Fore tibia with 1 short dorsal at base, 1 very long posterior at apical fourth and ventral row of elongate setulae. Fore basitarsus slightly broadened,

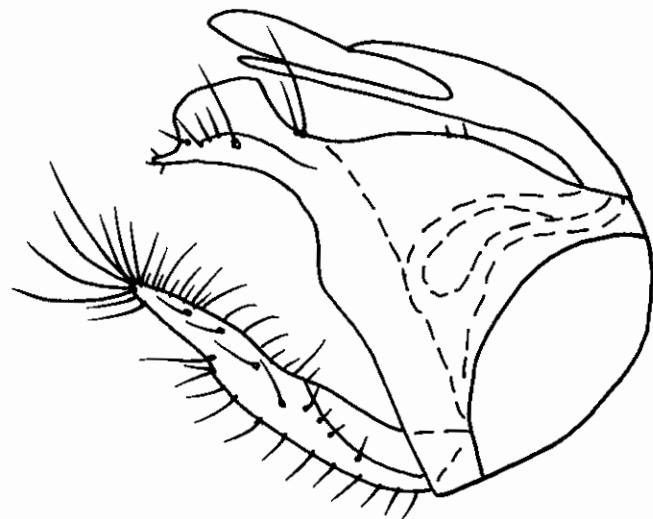


Fig. 25. — Hypopygium, left lateral view. *Amblypsilopus cilifrons* (PARENT).

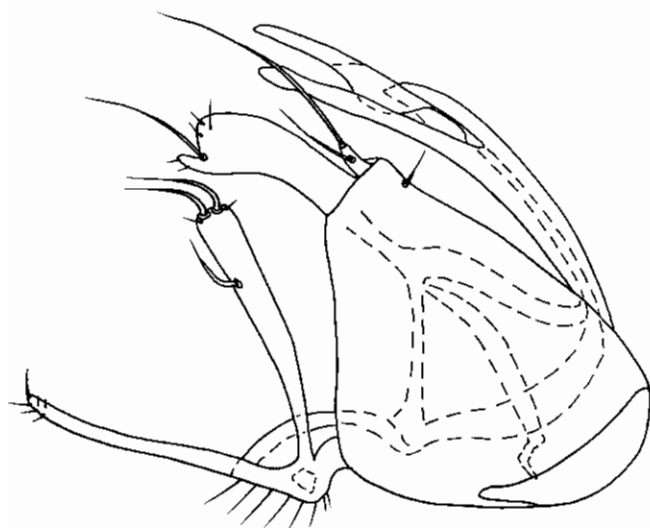


Fig. 26. – Hypopygium, left lateral view. *Amblypsilopus dallastai* sp. n.

ventrally flattened, with pale pile; other tarsomeres simple. Length ratio of fore coxa to femora to tibia to tarsus (segments from first to fifth), 50 : 70 : 80 : 45 : 27 : 16 : 8 : 7. Middle femora with anteroventral row of black setae equal to femora diameter and posteroventral row of white hairs of the same length. Middle tibia with 1 anterodorsal, 2 posterodorsal, 2 anterior and 3 or 4 apical setae. Middle tarsus simple. Length ratio of middle coxa to femora to tibia to tarsus (segments from first to fifth), 30 : 80 : 115 : 73 : 23 : 20 : 10 : 8. Hind femora with anterior, ventral and posterior white hairs in basal half in addition to full row of dark cilia, approximately equal in length to femora diameter. Hind tibia with 1 anterodorsal, 5 or 6 posterodorsal, 2 anterior, several short ventral and 3 or 4 apical setae. 3rd and 4th tarsomeres slightly widened, posteriorly flattened, with brown pad of microscopic hairs; 5th tarsomere flattened. Length ratio of hind coxa to femora to tibia to tarsus (segments from first to fifth), 22 : 95 : 145 : 57 : 30 : 15 : 14 : 9.

Wings hyaline, veins brown. R_1 reaching 0.4 wing length. 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 , 18 : 5. M_2 present as short stub vein and faint fold on membrane. Crossvein $m-cu$ almost straight. Ratio of $m-cu$ to apical part of M_{1+2} (fork-handle) to apical part of CuA_1 , 30 : 42 : 18. Anal vein and lobe developed. Anal angle acute. Lower calypter brown with black cilia. Halteres dark-brown; halter stem thin, twice as long as knob, with a row of short black setulae in front of knob.

Abdomen shining blue-violet, slightly pollinose, with black hairs and marginal setae. Margins of segments from the end of 2nd mat-black; first (laterally) and second (ventrally) segments with white hairs; unmodified segments combined nearly twice as long as mesonotum; apex of 7th tergite and 8th segment with numerous strong black

cilia; seventh segment short. Hypopygium dark-brown. Cercus black, bifurcated, with long thin lobes; dorsal lobe with one short seta; ventral lobe with 2 apical and one subapical thick curved setae. Surstylus black, slightly curved, with strong apical seta and short distodorsal apophysis. Epandrial lobe distinct, with 1 long and 1 short setae.

Female. Unknown.

Length: body 3.8 mm; antenna 1.4 mm; postabdomen 0.8 mm; wing-length 3.7 mm; wing-width 1.2 mm.

Distribution. Madagascar.

Etymology. The species is named for Belgian entomologist, Ugo Dall'Asta.

Diagnosis. *A. dallastai* is keyed to a group of species with yellow fore coxa, black middle and hind coxae and black antenna, differing in very long posterior seta on fore tibia, broadened fore basitarsus, widened and flattened 3rd and 4th tarsomeres of hind tarsus. It has some similarities with *A. aenescens* and *A. flabellifer*, differing in mostly yellow fore coxa, entirely yellow fore femora, bifurcated cercus with long thin lobes. *A. dallastai*, *A. bruneli* and *A. aenescens* are possible representatives of Australian *zonatus* group of species (BICKEL, 1994a).

78. *Amblypsilopus disjunctus* (PARENT)

Type material examined. Holotype ♂, Congo Belge: Eala, 30.XII.1934, J. GHESQUIERE / R. Mus. Hist. Nat. Belg. I.G. 10.482 / *Chrysosoma disjunctum* n.sp. Type. O. PARENT det., 1935 / Type [red label].

Additional material. 1 ♂, 1 ♀, Urundi, Muhinga, 1700 m, 2.III.1952, F.J. FRANÇOIS / R.I.Sc.N.B. I.G. 24.452. 3 ♂♂, 1 ♀, Urundi, Terr. de Kitega, 13.I.1952, F.J. FRANÇOIS / Colline: Kitega, alt. 1750 m / R.I.Sc.N.B. I.G. 24.452.

Diagnosis. Venation normal. Legs including coxae entirely black; all femora with a row of brown or black bristles. Fore tarsus with ventral pile of short light hairs at apex of basitarsus and on the 2nd tarsomere. Cercus simple, with small tubercle.

Distribution. Congo (Kinshasa), Nigeria, Burundi.

79. *Amblypsilopus flavus* (VANSCHUYTBROECK)

Type material examined. Paratypus, ♂, Coll. Mus. Congo, Madagascar: Ambodiwangi, XII.1949, I. Vadon / P. VANSCHUYTBROECK det. 195? *Megistostylus flavus* n.sp.

Additional material. 1 ♂ in glycerol, Madagascar: Fia., Ranomafana, 19.I.1952, A. PAULY, forêt [RINS].

Diagnosis. *A. flavus* has some similarities with *A. basilewskyi*. Antenna yellow; wing venation normal. Coxae yellow; middle coxa with blackish-brown spot. Fore ba-

sitarsus twice longer than tibia, with ventral pectination; 2nd tarsomere equal to 3rd; 2nd to 5th tarsomeres combined equal to fore tibia. Middle basitarsus equal to tibia. Cercus bifurcated, with long thin lobes.

Distribution. Madagascar.

80. *Amblypsilopus grootaerti* sp. n. (Fig. 27)

Holotype [in glycerol]. ♂. Madagascar: 25 km W. Morarano-chrome, forêt, XI.1991, bac jaune. A. PAULY [RINS].

Paratypes. 3 ♂♂ in alcohol, Madagascar: Tam., Manakambahiny Atn., 17-23.III.1991, A. PAULY, forêt. 1 ♂ in glycerol, Madagascar: Fia., Ranomafana, 19.I.1952, A. PAULY, forêt. 1 ♂, 1 ♀ in alcohol, Madagascar: Tam., Morarano-chrome, A. PAULY, X.1991.

Description. Frons broad, shining metallic green. Ventral postcranium covered with dense irregular white hairs. Face blue-green, slightly narrowed apicad, approximately 1.7 times as high as wide under antennae; clypeus separated from eyes, not coming down eyes. Palpi and proboscis yellow, with light hairs, palpus also with two black bristles. Antenna yellow, approximately twice longer than height of head. Scape swollen; pedicel with a ring of short setulae. First flagellomere conoid, asymmetric, slightly longer than high. Arista apical or apicodorsal, simple, bare, fused with 1st flagellomere. Length ratio of scape to pedicel to first flagellomere to arista, 5 : 5 : 7 : 140 (holotype) or 7 : 6 : 8 : 190 (paratype).

Mesonotum and scutellum shining green. Pleura bronze-green, sometimes brown in places; metaepimere yellow. At least three strong dorsocentral setae. Scutellum with two strong bristles (all setae broken).

Legs yellow; middle coxa brown, hind coxa dark-yellow; 5th segment of anterior tarsus brown (middle and hind tarsi mostly broken). Fore and middle coxae from the front with short black hairs and several black apical setae. Hind coxa from the outside with one black external seta. Femora without strong or long setae, but fore femora with several ventral black cilia at base. Fore tibia and tarsus without strong setae; tarsus simple. Length ratio of fore coxa to femora to tibia to tarsus (segments from first to fifth), 50 : 96 : 112 : 113 : 35 : 37 : 20 : 10 (holotype) or 55 : 92 : 104 : 125 : 35 : 40 : 21 : 10 (paratype). Middle tibia with dorsal row of erect cilia, slightly longer than tibia diameter. Length ratio of middle coxa to femora to tibia to basitarsus, 35 : 90 : 177 : 125. Hind tibia with several dorsal and apical setae. Hind basitarsus with row of short flattened ventral setulae in basal half. Length ratio of hind coxa to femora to tibia to tarsus (segments first and second), 30 : 130 : 208 : 80 : 40 (paratype).

Wing yellowish, narrow; veins brown. R₁ reaching first third of wing. R₄₊₅ gently curved to M₁ at apex. M₁ with nearly right-angular curvation and forming the right angle with M₁₊₂. Ratio of part of costa between R₂₊₃ and R₄₊₅ to this between R₄₊₅ and M₁, 3 : 1. M₂ distinct. Crossvein

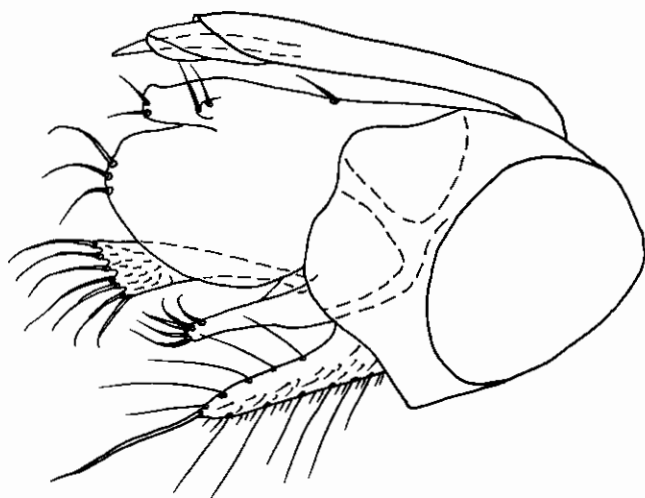


Fig. 27. – Hypopygium, left lateral view. *Amblypsilopus grootaerti* sp. n.

m-cu straight. Ratio of crossvein *m-cu* to apical part of M₁₊₂ (fork-handle) to apical part of CuA₁, 27 : 71 : 22. Anal vein and lobe pronounced. Anal angle right. Lower calypter yellow, with short black cilia. Halteres yellow, halter stem thin, twice as long as knob, with a row of short dark setulae in the middle.

Abdomen with short black setae; 1st to 4th segments mostly yellow; abdomen otherwise greenish-brown. Unmodified segments combined 2.5 times as long as mesonotum; 7th segment half as long as 6th. 8th segment dark-brown, with short hairs. Hypopygium brown. Cercus yellow, simple, narrow, with simple dark dorsal hairs and one apical seta, as long as cercus. Surstylus dark-brown, broad, with several distal setae and apico-dorsal lobe bearing several short setae. Epandrium with two remarkable processes (?lobes of cercus) between cercus and surstylus, each bearing apical brush of strong setae.

Female. Similar to male except lacking male secondary sexual characters. 1st flagellomere somewhat shorter.

Length: body 5.0-6.0 mm; antenna 1.8 mm; hypopygium 0.8 mm; wing-length 4.2-5.5 mm; wing-width 1.4 mm.

Distribution. Madagascar.

Etymology. The species is named for Belgian entomologist, Patrick GROOTAERT.

Diagnosis. *A. grootaerti* is similar in general habitus to *A. basilewskyi* and *A. flavus*, differing in shorter fore basitarsus, simple fore tarsus, pectinate middle tibia and morphology of hypopygium.

81. *Amblypsilopus kraussi* sp. n. (Fig. 28)

Holotype. ♂, La Mandraka, XII.1951, N.S.H. Krauss / Institut Scientifique Madagascar [RINS].

Paratypes. 7 ♂♂ in alcohol and 1 ♂ in glycerol, Madagascar: Fia., Ranomafana, 19.I.1952, A. PAULY, forêt [RINS].

Description. Frons broad, shining metallic blue-green. A group of 10 black front vertical hairs bending forward, a strong postvertical one positioned as a linear continuation of the postocular setal row. Ocellar tubercle with a pair of strong bristles. Ventral postcranium covered with long dense irregular white hairs. Face greenish-blue, pollinose, slightly convex, clypeus separated from eyes, not coming down eyes; face slightly narrowed, 1.25 times as high as wide under antennae. Palpi and proboscis brownish, with light hairs, palpus also with two black bristles. Antenna black, 1.2 times as long as height of head. Scape simple; pedicel globular, with a ring of short setulae and one long dorsal seta. First flagellomere transverse-oval, slightly shorter than high, with short hairs. Arista dorsal, bare. Length ratio of scape to pedicel to first flagellomere to arista, 7 : 5 : 5 : 95.

Mesonotum and scutellum shining blue-green. Pleura blue-green, grey pollinose. Two strong and three anterior hairlike dorsocentral setae; 2 or 3 long acrostichals. Scutellum with two strong setae and two short lateral cilia.

Legs mostly black-brown (hind legs broken in holotype). All coxae black; apex or apical 1/3 of fore femora, fore tibia, and middle femora (in apical third or half) yellow; middle tibia dark-yellow in basal half and light-brown in apical half; hind tibia mostly brown. Fore coxa from the front with white hairs and 2 or 3 yellow apical setae. Middle coxa from the front with yellow hairs, hind coxa with several short external hairs. Fore femora with two rows of ventral white hairs as long as femora diameter. Fore tibia with very long posteroventral seta at apical fifth and elongate ventral setulae along entire length. Fore basitarsus slightly broadened, ventrally flattened, with pale pile; other tarsomeres broken. Length ratio of fore coxa to femora to tibia to basitarsus, 55 : 100 : 100 : 58. Middle femora with row of white ventral hairs shorter than femora diameter. Middle tibia with 2 or 3

short anterodorsal, 2 ventral and 3 or 4 apical setae; 3rd to 5th tarsomeres broken. Length ratio of middle coxa to femora to tibia to tarsus (segments first and second), 30 : 110 : 145 : 97 : 30. Hind femora with ventral row of white cilia in basal half, twice longer than femora diameter. Hind tibia with 3 dorsal, 2 anterior, several short ventral setae. 3rd to 5th segments of hind tarsus slightly widened and flattened. Length ratio of hind coxa to femora to tibia to tarsus (segments first to fifth), 28 : 110 : 180 : 74 : 35 : 15 : 14 : 9.

Wing evenly darkened, veins brown. R_1 reaching 0.4 wing length. 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 part of costa between R_{2+3} and R_{4+5} to this between R_{4+5} and M_1 , 23 : 5. M_2 present as faint fold on membrane. Crossvein *m-cu* almost straight. Ratio of crossvein *m-cu* to apical part of M_{1+2} (fork-handle) to apical part of CuA_1 , 40 : 48 : 21. Anal vein and lobe present. Anal angle acute. Lower calypter brown, cilia broken. Halteres dark-brown, halter stem thin, twice as long as knob, with a row of short black setulae in front of knob.

Abdomen mostly blue-green, slightly pollinose, with black hairs and marginal bristles. Margins of segments from the end of the second mat-black; first (laterally) and second (ventrally) segments with white hairs; fifth to eighth segments entirely black; unmodified segments combined twice longer than mesonotum; seventh segment short; eighth tergite with numerous fine cilia. Hypopygium black. Cercus dark-brown, large, securiform, with long ventral and shorter dorsal projections, short haired. Surstylus black, with several short hairs and distodorsal apophysis. Hypandrium black. Epandrial lobe short, with 2 setae.

Female. Unknown.

Length: body 5.2 mm; antenna 1.5 mm; wing-length 5.0 mm; wing-width 1.4 mm.

Distribution. Madagascar.

Etymology. The species is named for the collector, N.S.H. Krauss.

Diagnosis. *A. kraussi* is keyed to a group of species with mostly black femora and short broad cercus, strongly differing in long posteroventral seta on fore tibia, broadened fore basitarsus and securiform cercus.

82. *Amblypsilopus longifilis* (BECKER) (Fig. 29)

Type material examined. Neotype, ♂. E. Africa: Arusha, 4.I.1961, B. Hocking / Hocking Colln, B.M. 1980386.

Additional material. 1 ♂, Kenya: Taita Hills Exp., Msau Valley, 18.5.1985, J. MUHANGANI [NMK].

Diagnosis. *A. longifilis* is associated with *parilis* group of species, differing by the following combination of char-

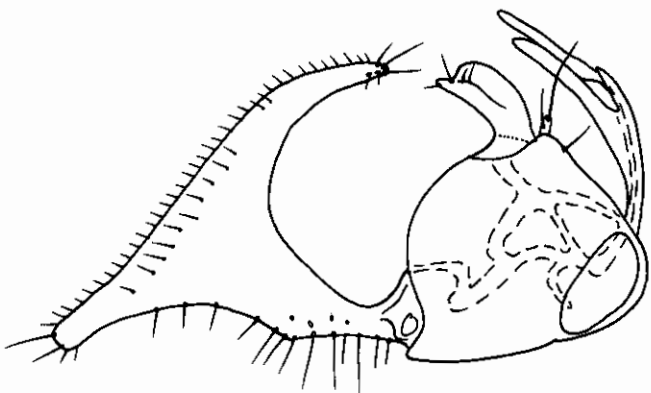


Fig. 28. – Hypopygium, left lateral view. *Amblypsilopus kraussi* sp. n.

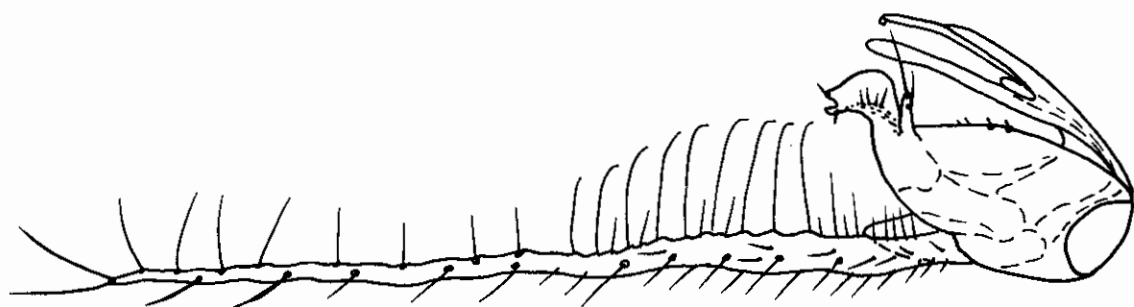


Fig. 29. — Hypopygium, left lateral view. *Amblypsilopus longifilis* (BECKER).

acters. 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, longer than femora diameter; middle femora on posteroventral surface with white hairs turning into long black hairs in apical half; fore and middle basitarsus yellow-brown; fore basitarsus 2.6 times as long as second article; apical third of fore basitarsus with ventral pad of short fine hairs; middle tibia with two short dorsal setae; cercus long, filiform, with long cilia; epandrial lobe prominent. (See redescription of this species by GRICHANOV (1996e).

Distribution. Tanzania, Kenya, Uganda, Congo (Kinshasa), St. Helena.

83. *Amblypsilopus madagascarensis* (VANSCHUYTBROECK)

Type material examined. Holotype, ♂, Manjakatempo, Inst. Scient. Madagascar, I.XI.48, P.C. / R.I.Sc.Nat.Belg. I.G. 18.205 / Type [red label] / P. VANSCHUYTBROECK det. 1951. *Chrysosoma madagascarensis* n.sp.

Redescription. Frons broad, metallic green-violet, slightly pollinose. 10 to 13 fine black front vertical hairs on frons; 2 strong black postvertical setae positioned as a linear continuation of the row of short postocular setae. Ventral postcranium covered with dense irregular white hairs. Face bluish-green, epistome convex, slightly pollinose, clypeus slightly bulging, with dense white microscopic hairs, separated from eyes; face narrowed, approximately as high as wide under antennae. Palpi and proboscis black, palpus with light hairs and 2 black bristles. Antenna black, twice as long as height of head. Scape simple. Pedicel with short but strong bristles. First flagellomere subtriangular, as long as high, with short hairs. Arista apical, bare and simple. Scape approximately equal to pedicel, and pedicel equal to first flagellomere in length.

Mesonotum and scutellum metallic blue-green. Pleura bronze-green, white pollinose. 2 strong posterior and 3 hairlike anterior dorsocentral setae; 4 long acrostichals. Scutellum with two strong bristles (broken). Legs entirely greyish black with fore knee and fore tibia somewhat lighter. Fore coxa from the front with numerous white

hairs, longest at apex. Middle and hind coxae with white cilia, hind coxa without external seta. Fore femora ventrally with dark, though shining light, hairs in basal half, longer than femora diameter; hind femora with black ventral hairs in basal half, where they 1.5 times as long as femora diameter. Middle femora absent. Fore tibia bare. 2nd tarsomere of fore tarsus ventrally with dense pale pile of very short hairs. Length ratio of fore tibia to tarsus (segments from first to fifth), 18 : 6.1 : 8.1 : 3.2 : 1.7 : 1.5. Middle tibia bare. Middle tarsus simple. Length ratio of middle tibia to tarsus (segments from first to fifth), 27 : 22 : 7 : 4.5 : 2.1 : 1.5. Hind tibia bare. Hind basitarsus 1/4 as long as hind tibia. Other joints of hind tarsus broken.

Wings hyaline, veins brown-black. R_1 nearly reaching middle of wing. R_{4+5} convex anteriorly in apical half. M_{1+2} and M_1 forming right angle. M_1 strongly concave. M_2 fold-like. Ratio of part of costa between R_{2+3} and R_{4+5} to this between R_{4+5} and M_1 , 5 : 1. Crossvein *m-cu* slightly sinuate, almost straight. Ratio of crossvein *m-cu*, measured along sinuation, to apical part of M_{1+2} (fork-handle) to apical part of CuA_1 (up to the wing margin), 65 : 65 : 30. Anal vein fold-like, anal lobe and alula present. Anal angle sharp. Lower calypter blackish, with black cilia. Halteres black, halter stem thin, with a row of short setulae at apex.

Abdomen shining green-violet, with long black hairs and bristles. Apical margin of segments narrowly black; first tergite with narrow membranous excavation and black lateral hairs. 1st to 6th segments combined more than twice longer than mesonotum. Hypopygium small, black. Cercus black, narrow, simple, rounded on apex, with short pale dorsal and dark apical hairs, without dorsal apophysis, with small ventral tubercle at basal third and small dorsal tubercle at apical third; apex of cercus nearly reaching apex of surstylus. Surstylus curved, rounded at apex, with narrow subapical tooth and several setae, as long as width of surstylus.

Body length 4.5 mm.

Diagnosis. Having simple, entirely black, legs and all femora with dark ventral cilia, *A. madagascarensis* is keyed to *A. disjunctus*, but differs in having only 2nd tarsomere of fore tarsus with ventral pile; cercus short,

simple, with short pale dorsal and dark apical hairs. The species is possible synonym to *A. auratus*.

Distribution. Madagascar.

84. *Amblypsilopus pallidicornis* (GRIMSHAW)

Material examined. 1 ♂ in glycerol, Madagascar: Foulpointe, forêt, lagune, X.1993, A. PAULY col. P.M. [RINS].

Diagnosis. All coxae wholly yellow. Fore tibia with long curved posterior seta. Venation undisturbed. See BICKEL (1994b) for description of this species.

Distribution. Madagascar, Seychelles; Hawaiian Islands, Society Islands, Marquesas Islands, Guam, Belau, Taiwan.

85. *Amblypsilopus parilis* (PARENT) (Fig. 30)

Material examined. ♂, Congo Belge: Leopoldville, 4.X.1950, M. Leclercq / R.I.Sci.Nat.Belg. I.G. 17818 / Holotypus *Chrysosoma longilamellatus* Coulibaly [red label; *nomen nudum*].

Diagnosis. *A. parilis* is characterised 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 tarsomere 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 erect setulae. Cercus blackish, whip-like, with light and dark dense hairs, at most 1/10 as long as cercus. Epandrial lobe reduced, with setae raising on the ventral side of surstylus base.

Distribution. South Africa, Namibia, Zimbabwe, Tanzania, Congo (Kinshasa), Nigeria.

86. *Amblypsilopus rectangularis* (PARENT)

Type material examined. Holotype, ♀, Congo Belge: Eala, III.1935, J. GHESQUIERE / R. Mus. Hist. Nat. Belg. I.G. 10.482 / *Sciopus rectangularis* n.sp. Type. O. PARENT / Type [red label]; paratype, ♀, same labels [XI.1935].

Remark. Holotype lacks the middle tarsus, 3 to 5th tar-

someres of fore tarsus, cilia on lower calypter. Body size 2.5 mm. Abdomen and most part of legs are absent in paratype. Lower calypter with black cilia. Further investigation is necessary to give a discriminating diagnosis for this true *Amblypsilopus* species.

Distribution. Congo (Kinshasa), ?Madagascar.

87. *Amblypsilopus rosaceus* (WIEDEMANN)

Remark. *A. rosaceus* determined by P. VANSCHUYTBROECK as being from Madagascar (female examined, RINS) belongs to indeterminable species of *Amblypsilopus* and should be excluded from the fauna of the island.

Distribution. South Africa.

88. *Amblypsilopus stuckenbergi* (VANSCHUYTBROECK)

Type material examined. Paratypes, 2 ♀♀, Perinet, Madagascar, Dec. 1955, B. STUCKENBERG / P. VANSCHUYTBROECK det. 1957, *Sciopus stuckenbergi* n.sp. / Paratype [red label] / R.I.Sc.N.B. I.G. 20.938.

Remark. This mostly yellow fly with only small green stripe in front of scutellum is very similar to *A. rosaceus* (WIEDEMANN). Acrostichals absent; 5 dorsocentral setae; fore basitarsus slightly longer than tibia in female. Body size about 3 mm. Further investigation is necessary to give a discriminating diagnosis for the species.

Distribution. Madagascar.

89. *Amblypsilopus tenuicauda* (PARENT)

Type material examined. Holotype ♂, Congo Belge: Eala, V.1935, J. GHESQUIERE / R. Mus. Hist. Nat. Belg. I.G. 10.482 / *Sciopus tenuicauda* n.sp. Type. O. PARENT det., 1935 / Type [red label].

Diagnosis. Fore coxa black; hind femora mostly black; fore and middle femora brown dorsally and yellow ventrally; fore femora with two fine black ventral bristles in basal fourth, other femora bare.

Distribution. Congo (Kinshasa).

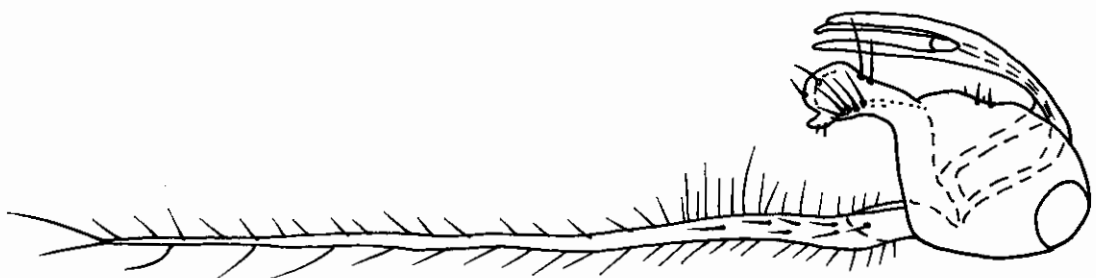


Fig. 30. – Hypopygium, left lateral view. *Amblypsilopus parilis* (PARENT).

90. *Amblypsilopus tropicalis* (PARENT)

Type material examined. Holotypus, ♀ [red label] / Musée du Congo, Kibali-Ituri: Djugu, 13.VIII.1931, Mme L. LEBRUN / R. Det. P.2413 / *Sciopus tropicalis* n.sp. Type. O. PARENT.

Diagnosis. *A. tropicalis* has many similarities with *A. basilewskyi*. It differs in the following key features. Vertex distinctly excavated. First flagellomere yellow-orange. Acrostichals short. Lower calypter with pale cilia; *m-cu* shorter than M_{1+2} distad of *m-cu*. Fore coxa yellow; middle and hind coxae mostly yellow, with brownish spot. Hind coxa without lateral seta, with only light hairs. Middle and hind tibiae brown in apical half. Ratio of tibia to first to second tarsomere of fore, middle and hind tarsi, 2 : 2 : 1; 3.7 : 2.5 : 1; 6 : 2 : 1. Body length 9 mm.

Distribution. Congo (Kinshasa).

KEY TO AFROTROPICAL GENERA OF SCIAPODINAE

1. Middle and/or hind femora with distinct anterior preapical setae 2
 - Femora without strong anterior preapical setae ... 3
2. Hind femora only with anterior preapical seta; propleuron without strong ventral setae *Sciapus*
 - Both middle and hind femora with anterior preapical setae; propleuron with more or less strong ventral setae *Bickelia*
3. Vein M_2 absent, without fold or indication on membrane; dorsocentral bristles strong in both sexes; arista usually dorsal; strong vertical seta present in both sexes; clypeus adjacent to margin of eyes *Mesorhaga*
 - Vein M_2 present, even if as fold or indication on membrane; other features various 4
4. Both pairs of scutellar setae long; wing often with dark brown band; arista dorsal or dorsoapical; pedicel with long dorsal and ventral setae; frons of both sexes with raised mound bearing strong vertical seta and sometimes numerous hairs *Condylostylus*
 - Scutellum usually with one pair of strong setae, lateral setae short, hairlike or absent; frons with vertical seta present or absent, but without vertical seta arising on setose mound; other features various 5
5. Arista usually apical on triangular first flagellomere; *m-cu* often sinuous; arista usually long, and more than half body length in females; male arista sometimes with apical flag; fore tibia often with long setae 6
 - Arista usually distinctly dorsal on subrectangular first flagellomere and rarely longer than head width, or if apical or dorsoapical, then always with following characters: male arista rarely with apical flag, tibial chaetotaxy often weak, especially on males; *m-cu* usually straight 10
6. Vertical setae or hairs absent in both sexes, *m-cu* straight or slightly convex, pleura usually yellow, first flagellomere very long, frons and face narrow, acrostichal setae weak and short, all tibiae and first tarsomeres with strong bristles in both sexes; cercus simple *Gigantosciapus*
 - Strong (at least in female) or hairlike vertical setae present, *m-cu* often sinuous, first flagellomere usually short, frons and face usually broad, acrostichal setae often long 7
7. Crossvein *m-cu* usually straight, 2 or 3 long acrostichal setae present, legs elongate, with a few major setae, male fore tibia sometimes with strong curved posterior subapical seta; cercus simple *Amblypsilopus* (part)
 - Crossvein *m-cu* usually sinuouse; tibiae often with major setae; cercus usually deeply forked 8
8. Frons highly polished metallic blue-green; male frons bare or with single weak vertical seta only; male scape often swollen and vaselike; fore coxa with either 3 to 7 strong lateral spine-like setae (stronger in females than males), or fore coxa with 3 strong black distolateral setae *Plagiozopelma*
 - Vertex and frons usually with pruinosity; male frons often with hairs on lateral slope; male scape rarely swollen and vaselike; fore coxa without strong lateral spine-like setae; pedicel often with long ventral and dorsal setae 9
9. Male and female arista strongly flattened and strap-like with hairlike apical part *Chrysosoma* (*Kalocheta*)
 - Arista usually simple, sometimes with apical flag *Chrysosoma* (*Chrysosoma* s.s.)
10. Male cercus with distinctive sclerotized basal hook; male fore basitarsus flattened and forming ventral cushion with dense pale pile; lateral scutellar absent 11
 - Male cercus without sclerotized basal hook; other features various 12
11. Male with strong vertical seta; femora usually bare; cercus usually with apical brush of long hairs; acrostichals short or absent; alula usually reduced *Bickeliolus*
 - Male with group of hairs laterally on frons; femora usually with long black ventral hairs; cercus usually with short or long hairs, but without apical brush; 3 long acrostichal setae; alula well developed *Ethiosciapus*
12. Hypopygium globular, with basal foramen; face wide; 3 strong dorsocentral setae; male fore basitarsus slightly broadened, with ventral pile ... *Dytomyia*
 - Hypopygium various, usually with lateral foramen; face narrow; fore basitarsus usually simple 13
13. Male usually with some anterior dorsocentrals weak and hairlike; vertical setae in males usually strongly reduced, or lateral frons with dense hairs; female fore femora rarely with strong basoventral setae; cercus usually simple *Amblypsilopus* (part)

- 4 to 5 dorsocentrals, all strong in both sexes; strong vertical setae present either in both sexes or in females only; proclinate vertical setae sometimes absent in males; cercus usually with two strong ventral projections; female fore femora often with stout basoventral setae *Mascaromyia*

KEYS TO AFROTROPICAL SPECIES OF SCIAPODINAE

Genus *Mesorhaga* SCHIENER

1. M_{1+2} with gentle curvation; *m-cu* distinctly shorter than apical part of CuA_1 2
 - M_{1+2} with two nearly right-angular bends; hind basitarsus brown or black 3
2. Apical part of CuA_1 1.5 times longer than *m-cu*; hind femora brown, hind tibia and basitarsus yellow *M. mahunkai*
 - Apical part of CuA_1 1.3 times longer than *m-cu*; femora mostly yellow, hind femora with brownish apices, fore and middle femora brown in basal third; hind tibia black at extreme apex; hind basitarsus black-brown *M. tsurikovi*
3. Hind femora brownish except yellow apex, hind tibia dark-yellow except brownish apex, hind basitarsus brownish; body 2.25 mm *M. africana*
 - Hind leg entirely black; *m-cu* shorter than M_{1+2} from *m-cu* to curvation; body 3.3–3.8 mm 4
4. Legs black with fore tibia brown; *m-cu* 2/3 as long as apical part of CuA_1 *M. pauliani*
 - Anterior four tibiae and basitarsi yellow; *m-cu* as long as apical part of CuA_1 *M. demeyeri*

Genus *Sciapus* ZELLER

1. Thorax yellow and slightly pollinose; wing hyaline, M_2 fold-like; hind tibia a little longer than femora; hind basitarsus 2/3 as long as 2nd tarsomere; middle tarsus ornamented with short but strong ventral erect setulae; smaller species (body 2.2 mm) (Ghana) *S. endrodyi*
 - Thorax thickly pollinose; dark spot at wing apex, M_2 distinct; hind tibia twice longer than femora, hind basitarsus slightly shorter than 2nd tarsomere; larger species (Egypt) *S. adumbratus*

Genus *Dytomyia* BICKEL

1. Male fore femora with 3 or 4 long posteroventral setae in the middle, the longest seta half as long as femora *D. deconinckae*
 - Fore femora without long setae 2
2. Male fore tibia with long posteroventral seta at basal third; male cercus with numerous long setae *D. paulyi*
 - Fore tibia with long posteroventral seta just before

the middle of tibia; cercus with several short setae *D. elenae*

Genus *Bickelia* GRICHANOV

1. Fore femora without strong bristles 2
 - Fore femora with four strong black anteroventral bristles (females) 3
2. Distinct acrostichal setae in two rows (male) *B. subparallela*
 - Acrostichals absent (female) *B. guerini*
3. Anal vein present, two scutellar bristles only *B. parallela*
 - Anal vein reduced, two strong scutellars and two lateral hairs from the outside *B. subparallela*

Genus *Mascaromyia* BICKEL

1. Males 2
 - Females 18
2. Fore femora with 2–5 thorns or spines beneath ... 3
 - Fore femora without long bristles 6
3. Fore femora with 2 fine ventral thorns at base, middle femora bare 4
 - Fore femora with a row of 5 conspicuous sloping black bristles beneath in basal two thirds 5
4. Last tarsomere of fore legs dilated and twisted, and carries a small side process like a thumb *M. pollicifer*
 - Last tarsomere absolutely simple and undifferentiated *M. indistincta*
5. Scape and pedicel dark; femora with regular bristles below; hypopygium less pedicellate *M. magnicaudata*
 - Scape and pedicel orange; fore femora with very irregular rows of variously sized bristly hairs; middle femora is devoid of the row of bristles; hypopygium more pedicellate *M. grandicaudata*
6. Thorax including mesonotum and abdomen mostly yellow 7
 - At most pleura partly orange 11
7. Middle femora with 5 strong anterior bristles *M. amplicaudata*
 - Middle femora bare 8
8. Vein M_2 and apical part of CuA_1 absent without fold or indication on membrane *M. bickeli*
 - Wing venation undistorted 9
9. Fore basitarsus shorter than fore tibia *M. babichae*
 - Fore basitarsus 1 and 1/3 times as long as fore tibia 10
10. Legs yellow; fore basitarsus as long as second and third tarsomeres combined *M. vagabunda*
 - Hind legs mostly brown, hind tibia white in basal third; fore basitarsus thrice as long as rest *M. makhotkini*
11. Legs yellow, simple, middle coxa black *M. duplicata*
 - All coxae yellow; if middle and hind coxae brownish, then femora or tibiae partly brown or some tarsome-

- res modified (enlarged, shortened, thin and long, or white) 12
12. Fore basitarsus nearly as long as rest tarsomeres; posterior margin of wing in apical half often foggy *M. librativertex*
- Fore basitarsus long and thin, more than twice as long as rest tarsomeres 13
13. Face nearly as wide as first flagellomere 14
- Eyes touching in the middle of face 15
14. Last tarsomere of fore tarsus strongly enlarged, black *M. shabuninae*
- Last tarsomere simple, short *M. hutsoni*
15. Hind tarsus white *M. albitarsis*
- Hind tarsus dark-brown 16
16. Antenna yellow, legs yellow, tarsi brownish *M. dytei*
- Antenna black, hind femora progressively brown towards apex, hind tibia brown 17
17. Fore tarsus white, basitarsus thrice as long as rest *M. kalinkini*
- Fore tarsus dark, basitarsus twice as long as rest tarsomeres *M. frolovi*
18. At least middle coxa black-brown *M. desjardsi*, *M. mauritiensis*, *M. duplicata*, (?) *M. frolovi*
- All coxa yellow 19
19. Thorax including mesonotum and abdomen mostly yellow *M. amplicaudata*, *M. vagabunda*, *M. babichae*, *M. bickeli*, *M. makhotkini*
- At most pleura orange 20
20. Fore femora bare or with 1-3 fine ventral setae only *M. albitarsis*, *M. rufiventris*, (?) *M. kalinkini*
- Fore femora with 4-5 strong ventral spines *M. librativertex*, *M. pollicifer*, *M. indistincta*, *M. magnicaudata*, *M. grandicaudata*.

Genus *Condylostylus* BIGOT

1. Males 2
- Females 16
2. Fore tibia with two long apicoventral setae, half as long as fore basitarsus *C. paricoxa*
- Fore tibia without such setae, at most with a long apicoventral hair 3
3. Cercus bifurcated, with long narrow branches *C. selectus*
- Cercus not bifurcated, usually long, sometimes short, with or without basoventral lobe 4
4. Middle tibia with a row of long dorsal setae, femora bare 5
- Middle tibia with several usual anterodorsal and posterodorsal bristles, or femora with long hairs ... 6
5. Cercus nearly twice as long as 7th tergite and epandrium combined *C. burgeoni*
- Cercus nearly thrice as long as 7th tergite and epandrium combined *C. galinae*
6. Hind tibia with black ventral cicatrix (callus-like swelling) in basal third, covered with light hairs ... *C. stenurus*
- Hind tibia without such cicatrix 7
7. Pedicel with long ventral and dorsal setae, as long as

- three antennal segments combined; costa with curvature in front of R₁; posterior wing edge sinuous ... *C. angustipennis*
- Pedicel with usual setae, at most as long as scape and pedicel combined; costa without curvature 8
8. Wing with normal female-type venation 9
- Venation abnormal: M₁₊₂ strongly curved towards posterior wing margin, M₁ continued nearly in the same line as M₂ 11
9. Cercus short, semicircular, slightly longer than wide *C. skuffini*
- Cercus long, filiform 10
10. Cercus swollen at base *C. chainey*
- Cercus not swollen, gradually narrowed apicad *C. basovi*
11. Fore tibia enlarged, fore tarsus simple ... *C. beckeri*
- Fore tibia simple, fore basitarsus enlarged 12
12. M₁₊₂ and M₁ form acute angle ... *C. pateraeformis*
- M₁₊₂ and M₁ form right angle 13
13. Legs entirely black-brown, with only fore trochanter and knee yellowish; fore basitarsus longer than 2nd to 5th tarsomeres combined; cercus 4 times longer than epandrium *C. kivuensis*
- At least fore tibia mostly yellow; fore basitarsus shorter than 2nd to 5th tarsomeres combined 14
14. Fore coxa and femora yellow; basoventral lobe of cercus large, with pointed apex *C. imitator*
- Fore coxa black at least in basal half; fore femora mostly brown or black 15
15. Middle tibia without erect ventral setulae; basoventral lobe of cercus large, egg-shaped *C. congensis*
- Middle tibia with short erect ventral setulae in apical half; basoventral lobe of cercus poorly developed ... *C. selitskayae*
16. Middle coxa mostly yellow *C. paricoxa*
- At least middle coxa mostly brown or black 17
17. Lower calypter with black cilia *C. stenurus*
- Lower calypter with yellow cilia 18
18. Wing anal lobe and angle absent *C. burgeoni*, *C. galinae*
- Wing anal lobe present, anal angle obtuse or acute 19
19. Hind femora yellow, at most with black spot on apex *C. imitator*
- Hind femora partly black 20
20. Frons blue-violet *C. pateraeformis*
- Frons green *C. congensis*

Genus *Ethiosciapus* BICKEL

1. Legs entirely black; body 3.5 mm *E. degener*
- At least anterior four tibiae yellow; usually larger species 2
2. Femora mostly black, all coxae black; male fore tibia with 1 to 3 long posteroventral setae *E. dilectus*, *E. inflexus*
- Femora mostly yellow 3
3. All coxae black, at most fore coxa yellow at apex 4

- Fore coxa yellow, at most with small black basal spot on outer surface 7
- 4. Male cercus with short dorsal and apical hairs ... 5
- Male cercus with long dorsal and apical setae, usually half as long as cercus 6
- 5. Femora with black ventral cilia slightly longer than femora diameter *E. latipes*
- Femora with black ventral cilia 1.5-2 times as long as femora diameter *E. finitimus*
- 6. Femora entirely yellow; male cercus with several long apical bristles, and a group of comparatively long dorsal hairs in apical fourth *E. bilobatus*
- Fore femora black ventrally in basal half, hind femora black on apex; cercus with setae gradually increasing towards apex, without distinct group of dorsal hairs *E. exarmatus*
- 7. Male middle femora with a row of shorter black ventral hairs, usually half as long as femora diameter; male cercus with apical hairs nearly as long as cercus *E. flavirostris*, *E. integer* *
- Middle femora with a row of longer black ventral hairs, usually 1.5 times longer than femora diameter; male cercus with apical hairs approximately half as long as cercus *E. bicalcaratus*

* Parent (1929) noted that the two species "sans doute synonymes".

Genus *Bickeliolus* GRICHANOV

- 1. Male middle trochanter with fringe of long hairs, male cercus narrowed in the middle 2
- Middle trochanter without fringe, cercus usually tapering 3
- 2. Basoventral process of cercus subtriangular (South Africa) *B. trochanteralis*
- Basoventral process of cercus suboval (Madagascar) *B. alluaudi*
- 3. Antenna black, cercus wide 4
- At least scape yellow-orange, cercus usually thin and simple 6
- 4. Cercus widest at base, very thin in apical half, slightly widened at apex *B. haemorhoidalis*
- Cercus with gently curved distoventral margin and apical hairs half as long as cercus 5
- 5. Basoventral process of cercus subtriangular *B. lamellatus*
- Basoventral process of cercus club-shaped *B. maslovae*
- 6. Scape yellow, other articles dark brown dorsally, first flagellomere triangular, with rounded apex; cercus 5 times longer than wide at base, at base twice wider than in middle; basoventral process thick, 1/5 as long as cercus *B. lutescens*
- Antenna dusky orange, first flagellomere short, egg-shaped, pointed; cercus tapering ... *B. lasiophthalmus*

Genus *Chrysosoma* GUERIN-MENEVILLE

(Some pairs of species cannot be distinguished by using

published descriptions. Females usually cannot be identified without males of the same series. ?*C. laeve* known only from female is not included)

- 1. Male and female arista strongly flattened and strap-like with hairlike apical part (*Kalocheta*) 2
- Arista usually simple, sometimes with apical flag (*Chrysosoma* s.s.) 6
- 2. Wings transparent, slightly darkened along veins *C.(K.) cucana*
- Wings with brown spots 3
- 3. Lower calypter with white hairs *C.(K.) villiersi*
- Lower calypter with black hairs or bristles 4
- 4. Face thinly whitish pollinose, propleural hairs black, fore coxa with white hairs and black bristles *C.(K.) liberia*
- Only epistome greyish pollinose, clypeus metallic green 5
- 5. Fore coxa without hairs, with black bristles only; apical and median brown spots have crosspiece along R₄₊₅ and M₁₊₂ wing veins *C.(K.) passiva*
- Fore coxa with white hairs and black bristles; apical and median brown spots have crosspiece near junction of CuA₁ and *m-cu* wing veins ... *C.(K.) collarti*
- 6. Male middle basitarsus dorsally ornamented with long fine setae or cilia, which at least thrice as long as tarsomere diameter 7
- Middle basitarsus without long setae, sometimes with short erect ciliation (some species are known only from females) 30
- 7. Middle basitarsus with a row of cilia, 3 or 4 times as long as tarsomere diameter 8
- Middle basitarsus with setae much longer 9
- 8. Second tarsomere of fore tarsus 2/3 to 3/4 as long as basitarsus, the latter swollen and ventrally ciliated in apical half *C.(C.) albocrinatum*
- Second tarsomere of fore tarsus 2/5 to 2/7 as long as basitarsus; first and second tarsomeres of fore tarsus with ventral pile of short fine cilia *C.(C.) tarsiciliatum*; *C.(C.) vividum*
- 9. Middle basitarsus with white preapical ring, covered usually with very short yellow pectination on dorsal side 10
- Middle basitarsus dark or yellow, without white preapical ring covered with yellow pectination 12
- 10. Middle basitarsus with five long setae; middle tibia with five to seven long setae; hind femora entirely or almost entirely black *C.(C.) gemmeum*; *C.(C.) hargreavesi*
- Middle basitarsus with only three long setae; middle tibia with one or two long setae 11
- 11. Middle tibia with one long seta; hind femora black in basal sixth, with long ventral and posterior hairs ... *C.(C.) tricrinatum*
- Middle tibia with two long setae; hind femora black except apical quarter and almost bare *C.(C.) bacchi*
- 12. Middle basitarsus with no more than three long setae; middle tibia usually without long setae 13

- Middle basitarsus with at least four long setae; middle tibia usually with numerous long setae 16
- 13. Middle basitarsus with one long seta; cercus shallow bifurcated, with shorter dorsal lobe *C.(C.) zinovjevi*
 - Middle basitarsus with two long setae 14
 - Middle basitarsus with three long setae; cercus simple, with short dorsal apophysis 15
- 14. Cercus shallow bifurcated, with equal lobes; hind femora entirely black *C.(C.) aequilobatum*
 - Cercus simple, without apophysis; femora blackish in basal half *C.(C.) tractatum*
- 15. Middle tibia with 1-2 long setae at base; middle tibia without erect pectination, tarsus pectinate from the middle of basitarsus *C.(C.) bredoi*
 - Middle tibia with 3 long setae; middle tibia and tarsus with erect pectination *C.(C.) hirsutulum*
- 16. Cercus deeply bifurcated, with thin equal lobes; middle tibia with 5 to 8 long setae; middle basitarsus with 5 to 7 long setae; second to fourth tarsomeres with 1 or 2 apicodorsal setae; fifth tarsomere white haired *C.(C.) senegalense*
 - Cercus usually not bifurcated, with or without short dorsal apophysis 17
- 17. Antenna yellow, sometimes partly reddish-brown 18
 - Antenna black, sometimes partly brown 22
- 18. Cercus gradually thinned towards apex, without apophysis, with several longer hairs at apex; wing blackish, with whitish median transverse band; femora entirely reddish-yellow; second to fifth tarsomeres of middle tarsus without remarkable hairs *C.(C.) albilimbatus*, *C.(C.) liberia*
 - Cercus with one dorsal tooth; hind femora at least partly black-brown; apical tarsomeres of middle tarsus usually white haired 19
- 19. Wing vein *m-cu*, measured along sinuation, thrice as long as fork-handle M_{1+2} 20
 - Wing vein *m-cu*, measured along sinuation, no more than twice as long as fork-handle 21
- 20. Fore femora widely black at base; middle tibia with 7 or 8 long setae; middle basitarsus with 7 long setae; second to fifth tarsomeres with a row of white hairs, without black hairs *C.(C.) continuum*
 - Fore femora narrowly black at base; middle tibia with 6 long setae decreasing towards base; middle basitarsus with 6 long setae; second and third tarsomeres with black dorsal setation; third to fifth tarsomeres with white hairs *C.(C.) varivittatum*
- 21. Middle tibia with 4-6 long setae; middle basitarsus with 4-6 long setae; other tarsomeres simple; femora reddish, narrow base and apex of hind femora brown *C.(C.) pseudorepertum*
 - Middle tibia with 5-6 pairs of long antero- and posterodorsal setae; middle basitarsus with 5 long setae; 3rd to 5th tarsomeres with dorsal comb of white hairs; femora red-brown with blackish dorsal stripe *C.(C.) repertum*
 - At most 1 or 2 long setae at base of middle tibia; middle basitarsus with 3 to 5 long setae; middle tarsus with erect pectination from the middle of 1st joint; femora dark-brown except apices *C.(C.) bredoi*
- 22. Cercus long and thin, truncated and widest at apex, with apophysis at apical third; middle tibia with 5 to 7 long setae, decreasing in length towards base (with two very long subapical setae); middle basitarsus with 5 long setae; fifth and sometimes fourth tarsomeres white haired; femora almost entirely yellow *C.(C.) lavinia*
 - Cercus with apophysis in basal half or without apophysis; other features various 23
- 23. Cercus without distinct apophysis; middle tibia with 8 long setae; middle basitarsus with 6 long setae; femora black 24
 - Cercus usually thin and thinned towards apex, with apophysis in basal half; other features various .. 25
- 24. Cercus short and broad, subrectangular, 2nd to 5th tarsomeres of middle tarsus with short black hairs, brownish on fifth joint; fore tibia and tarsus with short setae *C.(C.) tanasijtshuki*
 - Cercus thin, slightly widened and excavated at apex; middle tibia and tarsus with additional row of black hairs, longer than podomere diameter; 2nd to 4th tarsomeres of same tarsus with 1 long apical seta, 5th tarsomere with white hairs; fore tibia and basitarsus each with at least 5 long dorsal seta *C.(C.) stolyarovi*
- 25. Cercus very thin in apical half, with pointed apex 26
 - Cercus with rounded apex 27
- 26. Cercus with short pointed apophysis at basal third; middle basitarsus with 8 long setae, middle tibia with 5 short anterodorsal and 8 or 9 long posterodorsal, 3 or 4 ventral and 2 apicoventral setae; both tibia and basitarsus with additional anterodorsal row of shorter setae, 3 or 4 times as long as tibia poomere diameter *C.(C.) triumphator*
 - Cercus with apophysis in front of the middle; middle tibia with 7 anterodorsal, 8 posterodorsal and 1 apicoventral long setae; middle basitarsus with 4 long setae *C.(C.) angolense*
- 27. Middle tibia with 4 long posterodorsal setae; second to fifth tarsomeres of middle tarsus without remarkable ciliation *C.(C.) katangense*
 - Middle tibia with 5 to 10 long posterodorsal setae, sometimes decreasing in length towards base; second to fifth tarsomeres of middle tarsus with elongated hairs 28
- 28. First and second tarsomeres of middle tarsus with additional row of short dorsal hairs, hardly longer than tarsomere diameter; middle tibia with 5 to 8 long setae; middle basitarsus with 6 to 8 long setae *C.(C.) mesotrichum*
 - First and second tarsomeres of middle tarsus with additional row of short dorsal hairs, more than twice as long as tarsomere diameter; middle tibia with 7 to 10 long posterodorsal setae; middle basitarsus with 6 to 10 long setae 29

29. Cercus with long thin dorsal apophysis, longer than width of cercus at apex *C.(C.) schoutedeni*
 – Cercus with short dorsal tooth, at most half as long as width of cercus at apex *C.(C.) consentium*
30. At least fore coxa yellow 31
 – All coxae black, sometimes fore coxa yellow at apex 47
31. All coxae yellow 32
 – Only fore coxa yellow 35
32. Abdomen entirely metallic; fore and middle legs without erect hairs 33
 – Abdomen partly yellow; fore and middle tibiae and tarsi with erect pubescence 34
33. Basitarsus of all tarsi yellow *C.(C.) aestimabile*
 – Tarsi entirely black (female) ... ?*C.(C.) micantifrons*
34. Antenna yellow; frons brilliant; fore coxa with yellow apical bristles; first to fourth abdominal segments at least partly yellow ... ?*C.(C.) trigemmans*
 – Antenna black; frons entirely pollinose; fore coxa with black apical bristles; only first abdominal segment yellow *C.(C.) asperum*
35. Antenna yellow-brownish 36
 – Antenna black 37
36. Wing brownish with round white spots in the middle and along posterior edge *C.(C.) marginatum*
 – Wing hyaline or monochrome; *m-cu* straight; fore basitarsus flattened; fore tibia without long bristles; last tarsomeres of fore and hind tarsi slightly enlarged ?*C.(C.) centrale* (?*Amblypsilopus*)
37. Wing distinctly maculated 38
 – Wing hyaline, monochrome or evenly darkened along costa 39
38. Wing with three separated spots (female) *C.(C.) flexum*
 – Wing brown, with two windows and hyaline posterior edge *C.(C.) alboguttatum*
39. Wing vein *m-cu* straight (female) ?*C.(C.) benignum*
 – Vein *m-cu* sinuate or distinctly convex 40
40. Middle tibia and tarsus with erect pubescence ... 41
 – Middle tibia and tarsus without erect pubescence 42
41. Apical part of CuA₁ nearly half as long as *m-cu* *C.(C.) singulare*
 – Apical part of CuA₁ approximately as long as *m-cu* *C.(C.) woodi*
42. Cercus short, with 3 or 4 lobes; 4 or 5 dorsocentral setae *C.(C.) praelatum*
 – Cercus simple or bifurcate; 2 or 3 dorsocentrals 43
43. Cercus bifurcated 44
 – Cercus not bifurcated 45
44. Cercal arms less than half as long as cercus *C.(C.) minusculum*
 – Cercal arms more than half as long as cercus *C.(C.) corruptor*
45. Cercus digitiform, with short dens in the middle *C.(C.) pauperculum*
 – Cercus subtriangular, widest at apex 46
46. Cercus with wide apical excavation; middle tibia with 1 basodorsal seta *C.(C.) unguatum*
 – Cercus evenly cut or convex at apex; middle tibia with 2 anterior and 1 dorsal setae in the middle *C.(C.) stubbsi*
47. Wing hyaline, but with a brown round spot at apex *C.(C.) tenuipenne*
 – Wing with another type of maculation 48
48. Lower calypter with pale cilia 49
 – Lower calypter with black cilia 58
49. Male hind tibia with basal ring-shaped callus; fourth tarsomere of middle tarsus white; female anterior four tibiae with a few long dorsal and ventral setae 50
 – Legs without such characters 51
50. Seventh tergite without distinct seta; cercus with 2 subequal arms and median projection *C.(C.) leucopogon*
 – Seventh tergite with long curved subapical seta; cercus with dorsal arm longer than ventral, without median projection *C.(C.) snelli*
51. Femora yellow, sometimes yellow-brownish 52
 – At least hind femora black 57
52. Females 53
 – Males 54
53. Vein *m-cu* as long as fork-handle M₁₊₂ *C.(C.) senegalense*
 – Vein *m-cu*, measured along situation, 1.5-2 times as long as fork-handle M₁₊₂ *C.(C.) schoutedeni*; *C.(C.) mesotrichum*
54. Middle tarsus with simple setulae; middle tibia with short posterodorsal erect setulae; cercus deeply bifurcated *C.(C.) kuznetzovi*
 – Middle tarsus with erect pectination and/or white hairs 55
55. Antenna brownish; second to fifth tarsomeres of middle tarsus with a squamous dorsal comb of white hairs; middle tibia and tarsus without erect pectination; cercus not bifurcated *C.(C.) pomeroi*
 – Antenna black; second to fifth tarsomeres of middle tarsus without white hairs; middle tibia and tarsus with erect pectination 56
56. Cercus deeply bifurcated; middle leg along entire length with short dorsal ciliation, becoming erect apicad *C.(C.) cilifemorum*
 – Cercus not bifurcated; middle leg without dorsal ciliation *C.(C.) ituriense*
57. Wing black-brown, whitish along posterior edge, with narrow white transverse band, falling down from R₁ (female) *C.(C.) praecipuum*
 – Wing hyaline; male middle tibia and tarsus with irregular erect setulae *C.(C.) gromieri*
 – Wing with brown bands and spots along costa and other veins; male fourth and fifth tarsomeres of middle tarsus with white dorsal hairs ... *C.(C.) zaitzevi*
58. Antenna at least partly yellow-red; cercus usually simple 59
 – Antenna black; cercus bifurcated 61
59. Cercus with long pointed dorsal apophysis at basal third, thin in the middle, slightly enlarged and se-

- tosed at apex, with very thin and sharp subapical dorsal hook. fore and middle femora black except apical quarter; first three tarsomeres of middle tarsus brownish *C.(C.) norma*, *C.(C.) arduus*
- Cercus not bifurcated; fore femora black in basal quarter, middle femora black in basal 3/5; middle tarsus whitish 60
60. Antenna pale-yellow; mesonotum with two bronze stripes; middle femora with exclusively yellow ventral setae; hind tibia yellow *C.(C.) zephyrum*
- Antenna red-brown; mesonotum without distinct stripes; middle femora with black ventral setae in the middle; hind tibia black.. 2nd to 4th tarsomeres of middle tarsus with posterodorsal fringe of white flat setae, as long as tarsomeres diameter. Cercus simple, tapering, without tooth *C.(C.) aequatoriale*
61. First abdominal segment with snow-white band; middle tarsus without remarkable hairs *C.(C.) minusculum*
- Abdomen metallic; third and fourth tarsomeres of middle tarsus ornamented with black and white setae *C.(C.) petersi*

Genus *Gigantosciapus* GRICHANOV

1. Fore basitarsus enlarged and flattened *G. tuberculatus*
- Fore basitarsus not enlarged 2
2. First flagellomere brown with yellow base, 7 times as long as high at base; coxae yellow, hind coxa partly brownish; fore femora and basal half of middle femora yellow, apical half of middle femora, fore tibia except base, fore basitarsus and middle tibia brown; fore tibia with three dorsal and three ventral setae; fore basitarsus with one strong posteroventral seta in apical fifth and two fine posteroventral setae in the middle *G. oldroydi*
- Other combination of characters 3
3. First flagellomere entirely dark-brown, 9-10 times as long as high at base; fore femora and basal half of middle femora yellow, apical half of middle femora, fore tibia except base, fore basitarsus and middle tibia brown; fore tibia with 2 fine dorsal, 1 apicodorsal, 3 fine ventral setae; fore basitarsus with 1 strong subapical posteroventral, 1 fine dorsal and 1 fine ventral setae in the middle; fore tibia and basitarsus also with fine ventralposteroventral hairs, as long as tibia diameter; 2nd to 4th tarsomeres of the same tarsus with ventral spiculi. Middle femora with posteroventral cilia, longer than femora diameter. Hind femora brown; hind tibia and basitarsus white. Cercus narrowed apicad, with sharp apex and short cilia; surstylus slightly widened apicad and truncated on apex, with short apical hairs *G. meyeri*
- Other combination of characters 4
4. Middle tarsus ornamented with teeth or long hairs, longer than tarsomeres diameter 5

- At least 3rd and 4th tarsomeres of middle tarsus simple, at most with elongate setulae 9
5. Second tarsomere of fore tarsus swollen 6
- Second tarsomere of fore tarsus simple 7
6. Fore basitarsus with 2 posteroventral in apical half, 2 anteroventral in basal half, 1 fine dorsal, 1 basoventral setae; 1st tarsomere slightly swollen at apex, 2nd curved and swollen; middle tibia and basitarsus with numerous ventral hairs and fine cilia, 2-3 times longer than tibia diameter and 3-4 times longer than tarsomere diameter; hind tibia with posteroventral row of hairs, 2-3 times longer than tibia diameter .. *G. decellei*
- Fore basitarsus with one seta in the middle and one seta in apical fourth; second tarsomere of fore tarsus bulbar at base *G. pseudogemmarius*
7. Fore and hind femora with short hairs, at most with several subapical ventral cilia; fore tibia with row of ventral setulae, half as long as tibia diameter; middle tibia and basitarsus with antero- and posteroventral hairs, mostly twice longer than podomeres diameter; 3rd and 4th tarsomeres ventrally flattened, with ventral hairs longer than tarsomeres diameter; hind tibia with 3 or 4 long posterior setae in third quarter in addition to ordinary setae; hind basitarsus with posterodorsal and posterior hairs, twice longer than tarsomere diameter *G. nataliae*
- At least hind femora with ventral rows of hairs, as long as femora diameter; hind tibia without long posterior setae 8
8. Hind femora with a posteroventral row of cilia, as long as femora diameter, and group of 7-8 strong posteroventral setae at apical third; middle basitarsus with 2 posterior rows of long hairs; 3rd tarsomere with subapical ventral excavation, 4th tarsomere with basoventral tooth; hind basitarsus with erect posterior hairs *G. anomalipes*
- All femora with antero- and posteroventral cilia, longer than femora diameter; fore tibia with posteroventral row of hairs, longest at base, twice longer than tibia diameter; 2nd to 4th tarsomeres of middle tarsus with posteroventral hairs, longer than tarsomeres diameter; 3rd tarsomere ventrally flattened, with subapical ventral sicatrix; hind tibia with dorsal and posterodorsal hairs in basal half, slightly longer than tibia diameter *G. françoisi*
9. Fore tibia with row of six long and several short posteroventral setae; male cercus broad, with apical brush of black hairs, longer than cercus ... *G. saegeri*
- Fore tibia with short setae or fine cilia 10
10. Hind femora or tibia at least partly brown 11
- Hind and middle legs yellow except last tarsomeres 13
11. Posterior tibia entirely whitish or only somewhat yellowish at base; middle femora dorsally and hind femora entirely black-brown; first flagellomere entirely black *G. africanus*
- Posterior tibia brown at least in basal eighth, white beyond the middle 12

12. Hind femora brown (female) *G. inversus*
– Hind femora mostly yellow, black in apical fourth ...
..... *G. gemmarius*
13. Fore basitarsus with 1 short dorsal seta in the middle,
2 strong posteroventral setae at base and apex; 2nd to
4th tarsomeres of same tarsus with short strong black
setulae; 3rd to 5th tarsomeres of hind tarsus slightly
widened, ventrally bare; first flagellomere almost
entirely yellow, 2.5-3 times longer than wide at base
..... *G. kamerunensis*
– Fore basitarsus with smaller or greater number of
strong setae (females) 14
14. Fore basitarsus at most with two bristles on either
side 15
– Fore basitarsus at least with three bristles on either
side of lower surface 16
15. Fore basitarsus with one strong bristle on either side
..... *G. anomalipes*
– Fore basitarsus with 1 short dorsal and 2 strong
posteroventral bristles at base and apex
..... *G. kamerunensis*
16. Fore basitarsus with six or seven long bristles on
either side of lower surface *G. tuberculatus*
– Fore basitarsus with only three or four bristles on
either side of lower surface 17
17. First flagellomere at least as long as face height
..... *G. africanus*, *G. pseudogemmarius*
– First flagellomere at most 2/3 as long as face height
..... 18
18. Wing darkened along costa at apex; hind coxa partly
brownish; middle and hind femora yellow in basal
half, orange-brown in apical half; fore tibia, fore
basitarsus and middle tibia except apical third yel-
low-brownish; middle tibia in apical third, hind tibia,
middle and hind basitarsus whitish-yellow; apical
segments of tarsi brown; middle tibia with 3-4 ventral
setae *G. oldroydi*
– Wing hyaline; coxae and legs yellow except brown-
ish 2nd to 5th tarsomeres 19
19. Middle tibia with 2 ventral setae; first flagellomere
half as long as face height *G. saegeri*
– Middle tibia with 3 or 4 ventral setae; first flagello-
mere 2/3 as long as face height *G. nataliae*
- Vein *m-cu* sinuate; fore tibia with long apical setae ...
..... 6
6. Cercus with large midventral prominence, entirely
with dense hairs, approximately half as long as cer-
cus; fore tibia with 3-4 long apical setae
..... *P. vagator*; *P. ghesquieri*
– Cercus with narrow basoventral apophysis 7
7. Cercus with short apical cilia
..... *P. nalense*; *P. angulitarse*
– Cercus with long apical cilia, at least as long as
cercus 8
8. Cercus with short thin basoventral apophysis; fore
tibia with 1 long spine of fused apical setae
..... *P. capilliferum*
– Cercus with long basoventral apophysis, half as long
as cercus; fore tibia with 2 long anterior and ventral
spines of fused apical setae *P. piliseta*
9. Fore tibia without long apical setae; arista with 3
flattened nodes *P. tritiseta*
– Fore tibia with a few long apical setae 10
10. Fore coxa without lateral spines; second tarsomere of
fore tarsus strongly sinuate *P. conjectum*
– Fore coxa with a row of lateral spines 11
11. Arista simple but having small apical brush of hairs
..... *P. grahami*
– Arista distinctly flattened 12
12. Arista widely flattened at apex 13
– Arista narrow, lanceolate in apical half 14
13. Fore tibia with long fine anteroventral seta slightly
beyond the middle and two small seta preceding it
..... *P. bequaerti*
– Fore tibia with 2 ventral rows of fine cilia in middle
part *P. ramiseta*
14. Cercus having ventral prominence in basal half and
comparatively short hairs *P. vagator*; *P. ghesquieri*
– Cercus with distinct basoventral apophysis 15
15. Cercus with long apical hairs, which as long as cercus
..... *P. daveyi*
– Cercus with short hairs on apex 16
16. Arista with longest cilia in front of long flattened
lamella, where they 4 times longer than maximum
width of arista and twice longer than cilia in basal
half of flattened lamella; third tarsomere of fore
tarsus half as long as following one *P. collarti*
– Arista with longest cilia on the short flattened lamel-
la, where they 2 times longer than maximum width of
arista; third tarsomere of fore tarsus as long as fol-
lowing one *P. du*

Genus *Plagiozopelma* ENDERLEIN

1. Pleura yellow; all coxae yellow; *m-cu* straight
..... *P. njalense*
– Thorax entirely dark 2
2. Arista bare and simple 3
– Arista apically haired and/or flattened 9
3. All coxae yellow *P. flava*
– Posterior four coxae black or having broad black spot
..... 4
4. Cercus distinctly bilobate, with wide lobes and thin
basodorsal apophysis *P. pallidicorne*
– Cercus with ventral apophysis or simple 5
5. Vein *m-cu* straight; fore tibia without long setae
..... *P. inops*

Genus *Amblypsilopus* BIGOT

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

1. Males 2
– Females 36
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 infuscate; vein M_1 not recurved basad; apical sclerotized spot of wing tip not reaching posterior margin of wing *A. stuckenbergorum*
- Wing lightly infuscate; M_1 strongly recurved basad; apical sclerotized spot of wing tip reaching posterior margin of wing *A. retrovenus*
5. Wing with reduced apical sclerotized spot and a dense patch of thickened macrotrichia; wing with two rows of hook-like setae below M_1 ; cercus small with elongate base *A. fasciatus*
- Wing with well-developed apical sclerotized spot and no dense patch of thickened macrotrichia; wing without rows of hook-like 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 .. *A. bonniae*
- Arista horizontally spatulate at tip; upcurved portion of M_1 beyond fork M_{1+2} with slightly swollen, darkened area; *m-cu* with two definite, swollen spots *A. macularivenus*
7. M_2 absent; M_1 with strong V-shaped curvature *A. lenga*
- Venation normal 8
8. Fore coxa yellow; halteres usually yellow; lower calypter usually with light setae 9
- Fore coxa black at least in basal half; halteres usually black-brown; lower calypter usually with black setae 24
9. All coxae wholly yellow 10
- At least middle coxa with blackish-brown spot 14
10. Fore tibia with long curved posterior seta *A. pallidicornis*
- Fore tibia without such seta 11
11. Thorax metallic green, at most metapleura yellow 12
- Thorax mostly yellow 13
12. Fifth tarsomere of fore tarsus yellow, with lateral comb of yellow hairs; cercus bilobate *A. basilewskyi*
- Fifth tarsomere of fore tarsus simple; cercus simple *A. barkalovi*
13. Fore basitarsus as long as fore femora and tibia combined; 4th and 5th tarsomeres of all tarsi flattened; cercus with two long dorsal setae ... *A. stuckenbergi*
- Fore basitarsus not much longer than fore tibia; 5th tarsomere of all tarsi slightly flattened; cercus filiform, with short hairs, nearly thrice as long as hypopygium *A. rosaceus*
14. Antenna yellow; fore tarsus somewhat modified 15
- Antenna black; fore tarsus usually simple 18
15. Middle tibia except basal fifth with dorsal row of erect hairs, slightly longer than tibia diameter; fore tarsus simple but long, as long as tibia; cercus simple, narrow, not longer than surstylus, with long apical seta *A. grootaerti*
- Middle tibia without dorsal pectination 16
16. Fore basitarsus enlarged, with ventral pile; other tarsomeres simple; fore femora and tibia bare *A. steelei*
- Fore basitarsus not enlarged 17
17. Fore basitarsus twice longer than tibia, with ventral pectination; 5th tarsomere of fore tarsus simple; middle basitarsus equal to tibia; cercus bifurcated, with long thin lobes *A. flavus*
- Fore basitarsus approximately equal in length to tibia; 5th tarsomere of fore tarsus enlarged, with comb of yellow setae, longer than tarsomere diameter *A. basilewskyi*
18. Middle tibia and basitarsus with anterior and ventral ciliation of thickened setulae, as long as tibia diameter *A. bipectinatus*
- Middle tibia with simple setulae 19
19. Fore femora with ventral brush of long dense curved yellow-brown hairs; 5th tarsomere of middle tarsus white; cercus bifurcated *A. gorodkovi*
- Fore femora without such brush 20
20. Fore tibia with very long posterior seta at apical third or fourth; fore basitarsus slightly broadened, with ventral pile; cercus bifurcated, with long lobes of equal length 21
- Fore tibia without such seta 22
21. Anterior fore femora bare; hind femora with light ventral cilia; fore basitarsus thrice longer than 2nd tarsomere *A. bruneli*
- All femora with long dark ventral cilia; fore basitarsus twice longer than 2nd tarsomere *A. dallastai*
22. Wing with small dark apical spot; 4 dorsocentral setae *A. nanus*
- Wing hyaline 23
23. Five strong dorsocentrals, no acrostichal setae; cercus knife-shaped, with 2 long middorsal cilia, as long as cercus *A. cuthbertsoni*
- Two or three strong dorsocentral setae; fore and middle tarsi with erect ciliation; tibia simple; hypopygium and 7th segment small, cercus short, with small distodorsal apophysis *A. narchukae*
24. At least fore femora with long brown-black ventral bristles 25
- Fore femora with white ciliation below, sometimes with a few dorsal or preapical black hairs, or bare ... 28
25. Hind femora yellow, narrowly blackish at base; cercus short, trilobate; middle and dorsal lobes with long black undulate cilia *A. aenescens*
- Hind femora mostly black 26
26. Fore femora with two fine black ventral setae in basal fourth, other femora bare; fore and middle femora brown dorsally and yellow ventrally *A. tenuicauda*
- Legs entirely black; all femora with a row of brown or black setae; cercus simple, with small tubercle; fore basitarsus 1.5 times shorter than 2nd 27

27. Fore tarsus with ventral pile of short light hairs at apex of basitarsus and along 2nd tarsomere; cercus with long dark hairs *A. disjunctus*
 – Only 2nd tarsomere of fore tarsus with ventral pile; cercus with short pale dorsal and dark apical hairs *A. madagascarensis*
28. Cercus short, usually broad, not much longer than epandrium 29
 – Cercus filiform, at least twice as long as epandrium 33
29. Cercus very broad, triangular, with pointed apex; fore tibia with posterior seta at apical fourth; fore basitarsus slightly broadened, with ventral pile *A. kraussi*
 – Cercus digitiform; fore tibia without remarkable setae 30
30. All femora bare; fore tarsus (?) simple; last three tarsomeres of hind tarsus flattened; body 2.5 mm ... *A. pernigrus*
 – Femora with long white ventral hairs; first and second tarsomeres of fore tarsus with ventral pad of short fine cilia, at least half as long as width of tarsomeres; last two tarsomeres of hind tarsus flattened; body longer than 3.5 mm 31
31. Femora with white ventral cilia, not longer than femora diameter; fore tibia and basitarsus with fine erect ciliation on dorsal side *A. miserus*
 – Femora with white ventral cilia, longer than femora diameter; fore tibia and basitarsus without erect setulae 32
32. Fore basitarsus 3/4 to 7/5 as long as second tarsomere and 2/5 to 2/3 as long as rest tarsomeres from second to fifth *A. auratus*
 – Fore basitarsus 1.52 times as long as second tarsomere and 2/3 to 9/10 as long as tarsomeres from second to fifth *A. cilifrons*
33. Fore and middle femora, apical half of fore coxa reddish yellow; fore basitarsus with 5 strong dorsal setae; fore tibia with two ventral setae; cercus long and narrow, with slightly enlarged base and apex and stronger hairs on apex ?*A. flabellifer*
 – All femora mostly black; fore basitarsus without strong dorsal setae 34
34. Middle tibia and basitarsus with erect setulae; all femora with two rows of short white ventral hairs in basal half *A. parilis*
 – Middle tibia and basitarsus with simple setulae ... 35
35. All femora with white ventral hairs in basal half, longer than femora diameter; middle femora with white hairs turning into long black hairs in apical half on posteroventral surface; apical third of fore basitarsus with ventral pad of short hooked hairs; middle tibia with two short dorsal setae; cercus with long ventral cilia; surstylus strongly curved *A. longifilis*
 – Femora bare; fore tarsus with simple setulae; cercus with short hairs; surstylus long, almost straight *A. munroi*
36. Vertex shallowly excavated, ocellar tubercle not prominent; clypeus and mouth parts strongly projecting; body mostly yellow *A. flavicollis*
 – Vertex distinctly excavated 37
37. Fore coxa yellow 38
 – All coxae black 52
38. Lower calypter with black cilia; coxae yellow, middle coxa black from outside; middle tibia with one dorsal seta; body 2.5 mm *A. rectangularis*
 – Lower calypter mostly with pale cilia; body longer than 3 mm 39
39. Acrostichals long, more than half as long as dorso-central setae 40
 – Acrostichals short 44
40. Antenna yellow *A. basilewskyi*
 – Antenna black 41
41. Fore femora with a row of strong pale setae, which longer than femora diameter 42
 – Fore femora without strong setae; hind basitarsus partly yellow 43
42. Hind basitarsus black *A. sudanensis*
 – Hind basitarsus and apical 1/5 of hind tibia and hind femora on extreme apex dorsally brown *A. aenescens*
43. Scape red; hind tibia bare; hind tarsus longer than tibia *A. nubilis*
 – Antenna wholly black; hind tibia with one antero-dorsal seta; hind tarsus shorter than tibia *A. narchukae*
44. *m-cu* shorter than M_{1+2} distad of *m-cu* (if not, then ocellar hairs numerous, first flagellomere brown) .. 45
 – *m-cu* longer than M_{1+2} distad of *m-cu* (if not, then only one pair of ocellar hairs, first flagellomere yellowish) 48
45. Acrostichals absent; 5 dorsocentrals; fore basitarsus slightly longer than fore tibia; body 3 mm 46
 – Acrostichals present 47
46. Thorax almost entirely yellow *A. stuckenbergi*
 – Thorax metallic green, at most metapleura yellow *A. barkalovi*
47. First flagellomere dark-brown; 4 mm *A. stuckenbergorum*
 – First flagellomere yellow-orange; 9 mm *A. tropicalis*
48. Ratio of *m-cu* to M_{1+2} distad of *m-cu* greater than 1.5 49
 – Ratio of *m-cu* to M_{1+2} distad of *m-cu* less than 1.4 50
49. Thorax mostly yellow; acrostichals present *A. rosaceus*
 – Thorax metallic green; acrostichals absent *A. fasciatus*
50. Fascio-clypeal suture relatively shallow; first flagellomere with anterior bulge dorsal *A. bonniae*
 – Fascio-clypeal suture relatively deep, pointed; first flagellomere with anterior bulge ventral 51
51. Lack of setae on middle tibia in posteroventral position *A. macularivenus*
 – Middle tibia possesses a single posteroventral seta ...

- *A. bevisi*
52. *m-cu* strongly sinuate; all femora black; middle basitarsus with 6 or 7 short ventral setae; hind tibia with 6 or 7 long dorsal setae *A. subfascipennis*
 – *m-cu* straight 53
53. Fore and middle tibiae black or brown
 *A. auratus*, *A. pernigrus*, *A. munroi*
 – Fore and middle tibiae yellow or dirty-yellow .. 54
54. Hind tibia mostly yellow *A. flabellifer*, *A. parilis*
 – Hind tibia black-brown
 *A. munroi*, *A. longifilis*, *A. parilis*, *A. miserus*

Acknowledgements

I am sincerely grateful to Dr. Patrick GROOTAERT and Dr. Eliane DE CONINCK (Brussels) for their kindness in furnishing an opportunity to study the collections of the Royal Institute for Natural Sciences (Brussels), Royal Museum for Central Africa (Tervuren) and National Museum of Kenya (Nairobi). Dr. Daniel J. BICKEL reviewed a part of the manuscript and gave several important corrections.

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