

A brief review of the Afrotropical fauna of the subfamily Medeterinae (Diptera: Dolichopodidae) with descriptions of a new genus and new species

by Igor Ya. GRICHANOV

Abstract

Descriptions of *Grootaertia* GRICHANOV, gen. nov. and 11 new species, new records for known African species are given. Holotypes of 19 species have been examined from the collections of the Royal Institute for Natural Sciences (Brussels) and the Royal Museum for Central Africa (Tervuren). The genus *Paramedetera* GROOTAERT et MEUFFELS is recorded from Africa for the first time. The following pairs of species are synonymized: *Medetera luteoscutata* PARENT (= *M. lachaisei* Couturier), *M. mainei* CURRAN (= *M. beckeri* PARENT, *M. rutilans* PARENT), *Saccopherronta hirsuticosta* PARENT (= *S. subquinta* NEGROBOV et al.), *S. nigra* VANSCHUYTBROECK (= *S. altimontana* NEGROBOV et al.), *S. pulchra* VANSCHUYTBROECK (= *S. ulrichi* NEGROBOV et al.). A revised catalogue and keys to 7 genera and 66 Afrotropical species of Medeterinae are also presented.

Key words: Diptera, Dolichopodidae, Medeterinae, *Corindia*, *Craterophorus*, *Grootaertia* gen. nov., *Medetera*, *Paramedetera*, *Saccopherronta*, *Thrypticus*, new species, new synonymy, Tropical Africa.

Introduction

The last catalogue of Afrotropical Medeterinae (DYTE and SMITH, 1980) included 35 species belonging to 2 genera, *Medetera* FISCHER VON WALDHEIM and *Thrypticus* GERSTAECKER. GRICHANOV (1997a) proved *Saccopherronta* BECKER to be a genus; GRICHANOV (1998a, 1998b) transferred *Craterophorus* LAMB into the subfamily and found representatives of the Australian genus *Corindia* BICKEL in the Afrotropics. The genus *Paramedetera* GROOTAERT et MEUFFELS is recorded from Africa for the first time, and *Grootaertia* GRICHANOV, gen. nov. is described in this paper. The author (GRICHANOV, 1997-1998) recently described many new species from the Afrotropical Region. Several names have been placed in synonymy, some others are waiting to be synonymized. Records of two Palearctic species of *Medetera* from St. Helena and Ethiopia need confirmation. Now 7 genera and 66 Afrotropical species of Medeterinae are known from the Region. *Medetera* and *Thrypticus* are cosmopolitan genera, *Saccopherronta* is a Pantropical genus with two species occurring in the Nearctic Region, *Corindia* has been earlier known from Australia (BICKEL, 1986), *Paramedetera* has been recently described from Sumatra and New Guinea (GROOTAERT and MEUFFELS, 1997). *Craterophorus* is endemic for western Indian Ocean

islands, and *Grootaertia* is confined to South Africa. The numbers of Afrotropical species belonging to medeterine genera are as follows: *Medetera* (31), *Saccopherronta* (15), *Thrypticus* (6), *Craterophorus* (5), *Grootaertia* (5), *Corindia* (3) and *Paramedetera* (1). The major fraction of valid Afrotropical species was described by C.H. CURRAN (10), O. PARENT (11) and I.Ya. GRICHANOV (36 species including 4 described with O.P. NEGROBOV).

The well-known fauna of Congo (Kinshasa) comprises 32 species; South Africa numbers 16, Kenya 14, Tanzania and Gabon 9 species each, Namibia 8 and Uganda 7 species. Only 4 species were recorded from the Seychelles, 2 from Madagascar and 2 from Mauritius. The most interesting distribution patterns of species are as follows: *Medetera grisescens* DE MEIJERE – Tanzania, Madagascar, Seychelles, Mauritius, Burma, India, Nepal, Bangladesh, Ceylon, Taiwan, Indonesia, Thailand, Vietnam, Malaysia, Samoa, New Caledonia, Hawaii and Australia; *Thrypticus bellus* LOEW – Congo (Kinshasa), Tanzania, Kenya, Ethiopia, Senegal, St. Helena, Egypt, Europe, Palearctic Asia including the Far East. *Medetera mainei* CURRAN and *Medetera normalis* CURRAN inhabit the whole continental Afrotropics.

Treating material from the collections of the Royal Institute for Natural Sciences (Brussels) and the Royal Museum for Central Africa (Tervuren), I found a lot of additional material on the subfamily Medeterinae. Holotypes of 19 species were examined. Descriptions of 11 new species, new records for known African species are given and 6 species are synonymized in this paper. A revised catalogue and keys to all Afrotropical medeterine species are also presented.

Holotypes and paratypes of the new species are deposited in the Royal Institute for Natural Sciences [RINS] (Brussels), the Royal Museum for Central Africa, Tervuren [RMCA], the Natural History Museum in London [NHML], the Zoological Museum in Copenhagen [ZMUC] and Lund University, Sweden [Lund]. Other material examined is also kept in the Zoological Institute of Russian Academy of Sciences [ZIN], Natal Museum, Pietermaritzburg, South Africa [NMP], and Tel Aviv University, Israel [TAU]. Hypopygia removed from 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 Gabon, Botswana and Madagascar is kept in 70% alcohol inside glass tubes and cans. In addition, some specimens are also placed after alkalisation into glycerol and mounted on pin. Listing material examined, I use here slashes (/) 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 MEDETERINAE

Genus *Corindia* BICKEL

Corindia BICKEL, 1986:137. Type species: *Corindia major* BICKEL, 1986, by original designation.

verschureni GRICHANOV, 1998a:191 - Congo (Kinshasa).
danielsoni GRICHANOV, 1998a:193 - Gambia, Congo (Kinshasa), Gabon.

saegeri GRICHANOV, 1998a:193 - Congo (Kinshasa), Gabon.

Genus *Craterophorus* LAMB

Craterophorus LAMB, 1922:380. Type species: *Craterophorus mirus* LAMB, 1922, by original designation.

mirabilis LAMB, 1922:383 - Seychelles.

mirus LAMB, 1922:381 - Seychelles.

currani GRICHANOV, 1998b:[207] - Mauritius.

permirus LAMB, 1922:384 - Seychelles.

parenti GRICHANOV, 1998b:[207] - Madagascar.

Genus *Grootaertia* GRICHANOV, gen. nov.

Grootaertia GRICHANOV, gen. nov. Type species: *Grootaertia kuznetsovi* GRICHANOV, sp. n., by original designation.

anomalipennis GRICHANOV, sp. n. - South Africa.

anomalopyga GRICHANOV, sp. n. - South Africa.

asymmetrica GRICHANOV, sp. n. - South Africa.

bistylata GRICHANOV, sp. n. - South Africa.

kuznetsovi GRICHANOV, sp. n. - South Africa.

Genus *Medetera* FISCHER VON WALDHEIM

Medetera FISCHER VON WALDHEIM, 1819:7. Type species:

Medetera carnivora FISCHER VON WALDHEIM, 1819 (= *Musca diadema* LINNAEUS, 1767), by monotypy.

= *Medeterus* MEIGEN, 1824 (unjustified emendation).

= *Medeterium* BERTHOLD in LATREILLE, 1827 (unjustified emendation).

= *Taechobates* HALIDAY, 1832:356. Type species *Hydrophorus jaculus* FALLÉN, 1823, designated by COQUILLETT, 1910:611.

= *Orthobates* WAHLBERG, 1844:109. Type species *Hydrophorus jaculus* FALLÉN, 1823, designated by COQUILLETT, 1910:581.

= *Anorthus* LOEW, 1850:117. Type species *Hydrophorus jaculus* FALLÉN, 1823, by monotypy.

= *Oligochaetus* MIK, 1878:7. Type species *Medeterus plumbellus* MEIGEN, 1824, by original designation.

= *Elongomedetera* HOLLIS, 1964:260. Type species *Elongomedetera thoracica* HOLLIS, 1964, by original designation.

= *Asioligochaetus* NEGROBOV, 1966:877 (as subgenus). Type species *Oligochaetus vlasovi* STACKELBERG, 1937, by original designation.

= *Lorea* NEGROBOV, 1966:878 (as subgenus). Type species *Medetera spiniger* STACKELBERG, 1937, by original designation.

afra CURRAN, 1927:15 - South Africa, Kenya.

= *longitarsis* CURRAN, 1924:227.

ambigua ZETTERSTEDT, 1843:456 (*Hydrophorus*) - ?St. Helena; Europe, Siberia, Far East.

araneipes PARENT, 1929:43 - Sudan.

capensis CURRAN, 1926:13 - South Africa.

cederholmi GRICHANOV, 1997a:185 - Sierra Leone, Ghana, Gabon.

chumakovi GRICHANOV, 1997:183 - Namibia.

ealensis PARENT, 1936:10 - Congo (Kinshasa).

edwardsi GRICHANOV, 1997a:176 - Uganda, Gabon.

ghesquierei GRICHANOV, sp. n. - Congo (Kinshasa).

grisescens DE MEIJERE, 1916:259 - Tanzania, Madagascar, Seychelles, Mauritius; Burma, India, Nepal, Bangladesh, Ceylon, Taiwan, Indonesia, Thailand, Vietnam, Malaysia, Samoa, New Caledonia, Hawaii, Australia.

= *hawaiiensis* VAN DUZEE, 1933:343.

= *atrata* VAN DUZEE, 1933:344.

= *cilifemorata* VAN DUZEE, 1933:344.

= *palmae* HARDY, 1939:351.

hamata PARENT, 1936:11 - Congo (Kinshasa).

luteoscutata PARENT, 1936:12 - Congo (Kinshasa), Tanzania, Ivory Coast, Sierra Leone.

= *lachaisei* COUTURIER, 1985:287, n. syn.

= *luteoscutata lachaisei* (COUTURIER) GRICHANOV, 1997a:183, n. syn.

lvovskii GRICHANOV, sp. n. - Congo (Kinshasa).

mainei CURRAN, 1925:117 - Tanzania, Kenya, Burundi, Congo (Kinshasa), Congo (Brazzaville), Cameroon, Gabon, Nigeria, Ghana, Togo, Gambia, Angola, Zambia.

= *beckeri* PARENT, 1929:44 [new name for *Oligochaetus* sp. n. unnamed, BECKER, 1923:12], n. syn.

= *currani* PARENT, 1931:46 (female).
 = *rutilans* PARENT, 1935:126 (female), **n. syn.**
 = *viridipalpa* NEGROBOV et SCHUMANN, 1990:229.
munroi CURRAN, 1925:176 - South Africa.
nocturna CURRAN, 1927:15 (female) - Sierra Leone, Congo (Kinshasa).
norlingi GRICHANOV, 1997a:176 - Namibia, Botswana, Angola, South Africa.
normalis CURRAN, 1924:226 - South Africa, Namibia, Botswana, Burundi, Tanzania, Congo (Kinshasa), Congo (Brazzaville), Ghana, Sierra Leone, Gambia.
otiosa PARENT, 1934:135 - South Africa.
penura CURRAN, 1926:401 - South Africa.
plumbella MEIGEN, 1843:456 - ?Ethiopia; Europe, Siberia, China.
 = *minutulus* VON ROSER, 1840:56.
polita PARENT, 1936:12 - Congo (Kinshasa).
polleti GRICHANOV, 1997a:179 - Namibia, Botswana.
pospelovi GRICHANOV, 1997a:182 - Ghana.
praedator CURRAN, 1926:401 - South Africa.
pseudotiosa GRICHANOV, **sp. n.** - Namibia, Congo (Kinshasa).
rikhterae GRICHANOV, 1997a:180 - Namibia.
seksyaevae GRICHANOV, **sp. n.** - Congo (Kinshasa), Gabon.
simplicis CURRAN, 1924:227 - South Africa, Namibia, Congo (Kinshasa).
stoltzei GRICHANOV, **sp. n.** - Tanzania.
subchevi GRICHANOV, 1997a:177 - Namibia, South Africa, Botswana.
subviridis PARENT, 1939:278 (female) - Kenya.
varitibia PARENT, 1935:127 (female) - Congo (Kinshasa), Tanzania.

Genus *Paramedetera* GROOTAERT et MEUFFELS

Paramedetera GROOTAERT et MEUFFELS, 1997:309. Type species *Paramedetera papuensis* GROOTAERT et MEUFFELS, 1997:309.

sierraleonensis GRICHANOV, **sp. n.** - Sierra Leone.

Genus *Saccopheronta* BECKER

Saccopheronta, BECKER, 1914:125 (as genus); 1923:12 (as subgenus of *Medetera*). Type species *Saccopheronta nudipes* BECKER, 1914, by monotypy.

aperta NEGROBOV, VANSCHUYTBROECK, GRICHANOV, 1981:7 - Congo (Kinshasa), Uganda.

arnaudi NEGROBOV, VANSCHUYTBROECK, GRICHANOV, 1981:7 - Congo (Kinshasa), Kenya, Uganda, Burundi.

= *vanschuytbroeckii* GOSSERIES, 1988:306 (*Medetera*).

caffa CURRAN, 1927:183 (*Medetera*) - South Africa, Congo (Kinshasa), Kenya.

= *turneri* PARENT, 1934:136 (*Medetera*).

= *bicolor* PARENT, 1935:127.

= *zairensis* DYTE, SMITH, 1980:454 (*Medetera*).

demeteri GRICHANOV, 1997b:126 - Ethiopia.

fletcheri GRICHANOV, 1997b:132 - Uganda, Congo (Kinshasa).

glabra NEGROBOV, VANSCHUYTBROECK, GRICHANOV, 1981:6 - Congo (Kinshasa).

hirsuticosta PARENT, 1935:128 - Congo (Kinshasa), Kenya.

= *subquinta* NEGROBOV, VANSCHUYTBROECK, GRICHANOV, 1981:4, **n. syn.**

= *quinta* NEGROBOV, VANSCHUYTBROECK, GRICHANOV, 1981:figs. 15-19 *nec* PARENT (misidentification).

= *pulchra* VANSCHUYTBROECK, 1951:87 (part of paratypes).

nigra VANSCHUYTBROECK, 1960:10 - Congo (Kinshasa), Uganda.

= *altimontana* NEGROBOV, VANSCHUYTBROECK, GRICHANOV, 1981:8, **n. syn.**

= *pulchra* VANSCHUYTBROECK, 1951:87 (part of paratypes).

nigritibia NEGROBOV, VANSCHUYTBROECK, GRICHANOV, 1981:9 - Congo (Kinshasa), Sierra Leone.

nudipes BECKER, 1914:126 - Kenya.

parvilamellata PARENT, 1938:412 - Kenya, Congo (Kinshasa).

pulchra VANSCHUYTBROECK, 1951:87 - Congo (Kinshasa), Uganda, Tanzania, Burundi, Gabon.

= *ulrichi* NEGROBOV, VANSCHUYTBROECK, GRICHANOV, 1981:3, **n. syn.**

quinta PARENT, 1936:16 - Congo (Kinshasa), Uganda, Gabon.

shatalkini GRICHANOV, 1997b:130 - Kenya, Congo (Kinshasa).

= *ulrichi* NEGROBOV, VANSCHUYTBROECK, GRICHANOV, 1981:3 (part of paratypes).

= *pulchra* VANSCHUYTBROECK, 1951:87 (part of paratypes).

zicsiana GRICHANOV, 1997b:126 - Tanzania, Kenya.

Genus *Thrypticus* GERSTAECKER

Thrypticus GERSTAECKER, 1864:43. Type species *Thrypticus smaragdinus* GERSTAECKER, 1864, by monotypy.

= *Aphantotimus* WHEELER, 1890:375. Type species *Thrypticus willistoni* WHEELER, 1890, designated by COQUILLET, 1910:508.

= *Xanthotricha* ALDRICH, 1896:339. Type species *Thrypticus cupulifera* ALDRICH, 1896, designated by ROBINSON, 1970:40.21.

= *Submedeterus* BECKER, 1916:360. Type species *Submedeterus cuneatus* BECKER, 1916, by monotypy.

afer VANSCHUYTBROECK, 1951:94 - Congo (Kinshasa).

bellus LOEW, 1869:303 - Congo (Kinshasa), Tanzania, Kenya, Ethiopia, Senegal, South Africa, St. Helena; Egypt, Europe, Palearctic Asia.

= *minus* VANSCHUYTBROECK, 1951:96; 1952:38.

= *fennicus* VANSCHUYTBROECK, 1951:95 *nec* BECKER.

kataevi GRICHANOV, 1998c:[213] - Congo (Kinshasa), Cameroon, Kenya, Swaziland, South Africa.
mironovi GRICHANOV, 1998c:[213] - Ghana.
sinevi GRICHANOV, 1998c:[213] - Kenya.
zagulyaevi GRICHANOV, 1998c:[213] - Kenya.

REVIEW OF TYPE MATERIAL EXAMINED, DESCRIPTIONS AND NEW RECORDS

Grootaertia GRICHANOV, gen. nov.

Type-species: *Grootaertia kuznetsovi* sp. n., here designated.

Description. Small species, 1.4-1.8 mm; body more or less brown or greenish-black with admixture of yellow on pleura and abdomen. Ocellar tubercle prominent, with a pair of strong black setae. One strong but short black vertical seta laterally on frons present, a strong postvertical one is positioned as a linear continuation of the postocular setal row. Ventral postcranium with sparse cilia. Face widest under antennae, gradually narrowed towards palpi. Clypeal suture marked laterally. Antenna approximately as long as head height; pedicel with a ring of short apical setulae; 1st flagellomere with acute apex and very short hairs. Arista apical, glabrous. Palpus short, with 1 black seta; proboscis stout, prominent. Mesonotum concave in posterior third. Four pairs of strong dorsocentral setae with an additional small seta in front of the 1st one. Acrostichal setae absent. One long and one very short humeral, one posthumeral, 1 or 2 notopleural, 2 short presutural and 2 strong postsutural (supraalar) setae present. One or two propleural setae. Scutellum with a pair of strong setae. Legs simple. Fore coxa with short hairs and several dark apical setae; mid and hind coxae with one external seta. Femora without setae, slightly longer than corresponding tibia. Mid tibia with 1 anterior and 0-1 posterodorsal setae at basal 1/5 or 1/4, 1 strong apicoventral seta. Hind basitarsus equal to or slightly longer than next tarsomere. Wing elongate-oval, simple; third sector of costa 2-2.5 times longer than fourth. R_{4+5} and M_{1+2} parallel in apical part. Apical part of M_{1+2} 2.5-3 times longer than basal part. Cross-vein *m-cu* equal to or slightly longer than maximal distance between R_{4+5} and M_{1+2} . Apical part of CuA_1 3-4 times longer than *m-cu*. Anal vein fold-like; anal lobe developed; anal angle obtuse. Alula undeveloped. Lower calypter with greatly reduced cilia. Abdomen with short black setae. Terga 1-6 simple. Sterna weakly sclerotized. 7th tergum semicircular, narrow, lying conformably with 6th tergum. 8th tergum large, covering left basolateral foramen. No epandrial seta. No epandrial lobe. Hypandrium greatly reduced or absent. Aedeagus prominent, with long pointed apically lateral lobes. Surstyli usually long and thin, from one to three pairs; unpaired surstylus sometimes present, usually asymmetrically positioned and shaped. Cercus usually rounded, bearing several dorsal setae. Female similar to male except lacking male secondary sexual

characters. Abdomen has 8 visible terga and sterna; 9th hemitergites usually exposed, broad, medially fused, with simple setae.

Etymology. The genus is named after the Belgian entomologist, Dr. Patrick GROOTAERT.

Diagnosis. The new genus is most close to *Paramedetera*, differing in apical arista; distal sectors of R_{4+5} and M_{1+2} weakly arched anteriorly; 7th abdominal segment semicircular, narrow, not forming pedicel; hypopygium sessile, asymmetrical; hypandrial lobes absent; aedeagus with large lateral lobes; female oviscapt with simple fused 9th hemitergites bearing simple setae. The morphology of male and female genitalia in *Grootaertia* species is rather primitive and variable. Therefore, the genus is likely to be the most ancestral group of the subfamily, and the subfamily Medeterinae as a whole is possibly a more ancestral group in the family Dolichopodidae than Dolichopodinae and Sciapodinae (see also discussion in Grootaert et al., 1998).

1. *Grootaertia kuznetsovi* sp. n. (Figs. 1-5)

Holotype. ♂, RSA: Cape Prov. 25 km SSW Malmesbury, 150 m, 33°38'S, 18°34'E, 4.X.1994, loc. 2, leg. R. DANIELSSON [Lund].

Paratypes. 18 ♂♂ and 7 ♀♀ with the same label as holotype; 24 ♂♂ and 15 ♀♀, RSA: Cape Prov., Koomplanskloof, 10 km S Citrusdal, 200-270 m, 32°40'S, 19°01'E, 04-08.X.1994, loc. 6, leg. R. DANIELSSON; 5 ♂♂, RSA: Cape Prov. Patrisberg, N of Citrusdal, 32°27'S, 18°58'E, 06.X.1994, loc. 7, leg. R. DANIELSSON; 1 ♂, RSA: Cape Prov., 9 km NW Worcester, 33°37'S, 18°22'E, 09.X.1994, loc. 11, leg. R. DANIELSSON; 11 ♂♂ and 3 ♀♀, RSA: Cape Prov., Malgas, 40 m, 34°20'S, 20°30'E, 11-13.X.1994, loc. 14, leg. R. DANIELSSON;

Additional material. 1 ♀, South Africa, W Cape, Strandfontein, 3418Ba, Groot-Sandleegte, 10-12.10.1977, RM MILLER; 1 ♀, Otterboro Forestry Reserve, Hankey area, 110.XII.1967, 3325CC, B. & P. STUCKENBERG; 1 ♂, Brandkop Area, Calvinia district, Southwest Cape, 14 October 1964, B. & P. STUCKENBERG [NMP].

Description. Male. Frons and face black, grey-whitish pollinose. Ocellar tubercle prominent, with a pair of strong black setae. One strong but short black vertical seta laterally on frons present, a strong postvertical one is positioned as a linear continuation of the postocular setal row; postocular setae black above, white laterally and below. Ventral postcranium with several long cilia. Face widest under antennae, gradually narrowed towards palpi. Clypeal suture marked laterally. Ratio of height of face to its maximal width, 20: 11. Antenna as long as head

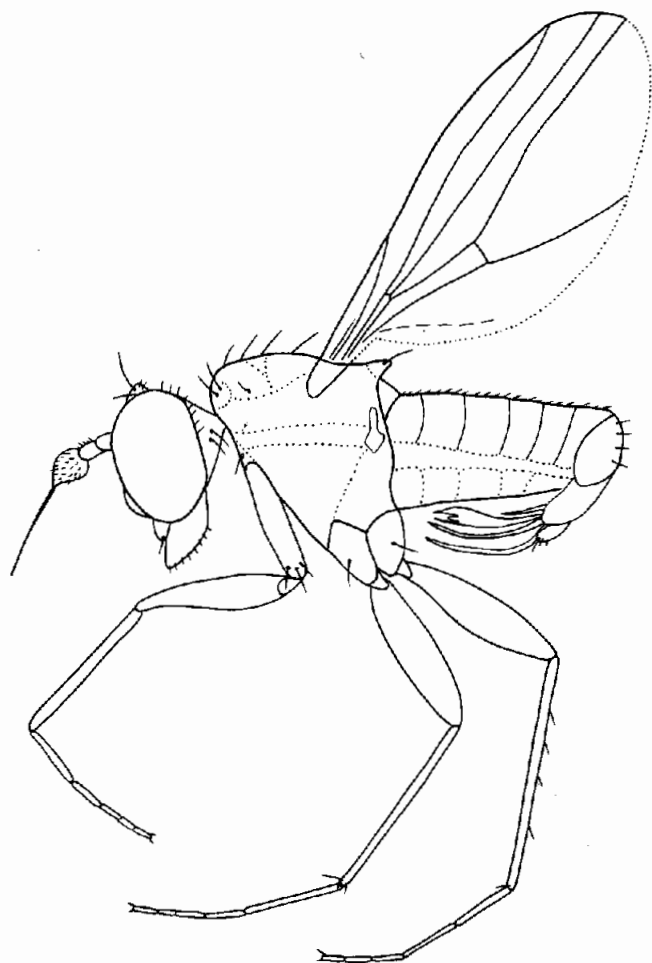


Fig. 1 — Habitus. *Grootaertia kuznetsovi* sp. n.

height; scape and pedicel reddish-brown or black; pedicel with a ring of short apical setulae; 1st flagellomere black, elongate-oval, 1.5 times longer than high, with acute apex and very short hairs. Arista apical, glabrous, 1.7 times longer than antennomeres combined. Length ratio of scape to pedicel to first flagellomere to arista, 5: 5: 10: 27. Palpus and proboscis dark-brown, with sparse hairs; palpus short, with 1 black seta; proboscis stout, prominent.

Mesonotum concave in posterior third, greenish-black, grey pollinose, with black setae. Pleurae mostly black, grey pollinose; humeri and sutures partly yellow brownish. Four pairs of strong dorsocentral setae with an additional small seta in front of the 1st one. Acrostichal setae absent. One long and one very short humeral, one post-humeral, 1 strong notopleural, 2 short presutural and 2 strong postsutural (supraalar) setae present. Two dark propleural setae. Scutellum with a pair of strong setae.

Legs including coxae reddish-yellow; tarsi black from tip of basitarsus. Fore coxa with short hairs and several dark apical setae; mid and hind coxae with one external seta. Femora without setae and long hairs. Fore tibia with 2–3 short apicoventral setae. Mid tibia with 1 anterior and 1 posterodorsal setae at basal 1/5, 2–3 short apical setae in

addition to 1 strong apicoventral seta. Hind tibia with several short dorsal setae; hind basitarsus with 1 short basoventral seta. Length ratio of fore coxa to femur to tibia to tarsus (segments from first to fifth), 32: 36: 39: 17: 8: 5: 4: 4. Same ratio for middle leg, 15: 40: 49: 25: 10: 7: 4: 5. Same ratio for hind leg, 13: 42: 57: 15: 15: 7: 6: 5.

Wing elongate-oval, simple, hyaline; veins brown; posterior wing margin evenly convex, nearly straight in middle 1/3; maximum wing-width at the end of CuA₁. Costa without long hairs. Ratio of part of costa between R₂₊₃ and R₄₊₅ to this between R₄₊₅ and M₁₊₂, 15: 6. R₁ reaching 2/5 of wing length. R₂₊₃, R₄₊₅ and M₁₊₂ slightly convex anteriorly. R₄₊₅ and M₁₊₂ parallel in apical part. Ratio of apical to basal part of M₁₊₂ (from *r-m*), 68: 23. Crossvein *m-cu* slightly convex. Apical part of CuA₁ slightly convex posteriorly. Ratio of cross-vein *m-cu* to maximal distance between R₄₊₅ and M₁₊₂ to apical part of CuA₁, 8: 7: 38. Anal vein fold-like; anal lobe developed; anal angle obtuse. Alula undeveloped. Lower calypter yellow-brownish with greatly reduced cilia. Halter yellow.

Abdomen mostly brown-black, weakly pollinose, with short black setae. Terga 1–6 with a narrow yellow stripe along lateral margin on both sides. Sterna usually yellow, weakly sclerotized. 7th tergum semicircular, narrow, lying conformably with 6th tergum. 8th tergum large, covering left basolateral foramen. Epandrium shining black, elongate-oval (lateral view). No epandrial seta. No epandrial lobe. No hypandrium. Aedeagus long and thin; lateral lobes of aedeagus long, thin, pointed apically. Surstyli yellow, two pairs dorsally and one unpaired, long and thin surstylus positioned left apicoventrally; ventral pair of surstyli long and thin, narrowed apically, with

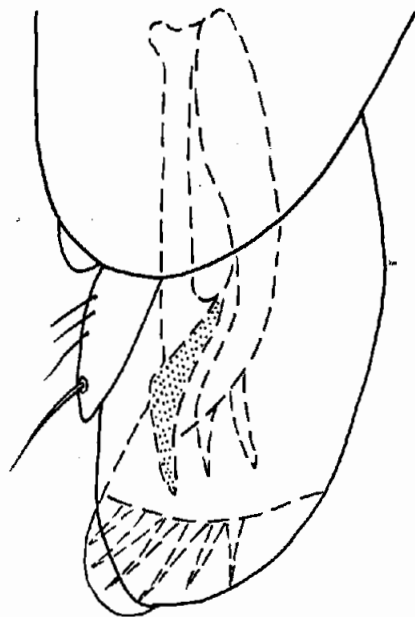


Fig. 2 — Mouth parts laterally. *Grootaertia kuznetsovi* sp. n.

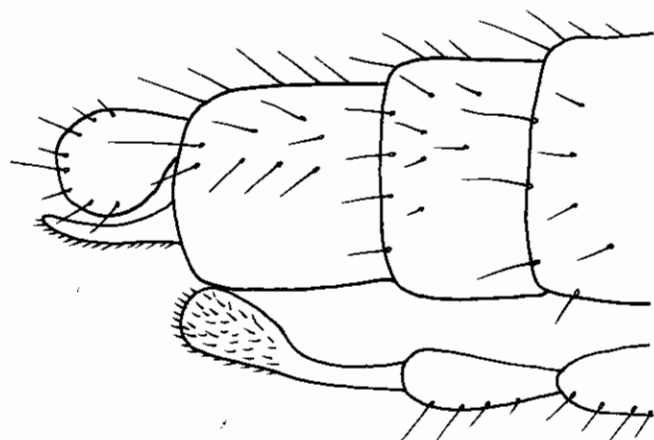


Fig. 3 — Oviscapt laterally. *Grootaertia kuznetsovi* sp. n.

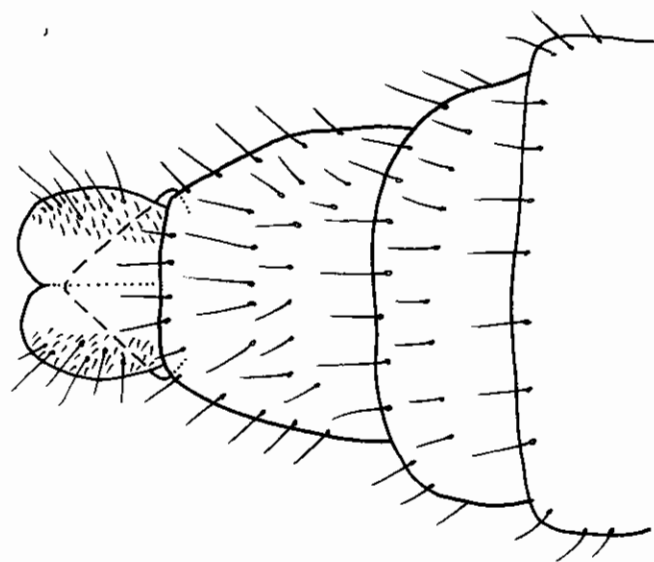


Fig. 4 — Oviscapt dorsally. *Grootaertia kuznetsovi* sp. n.

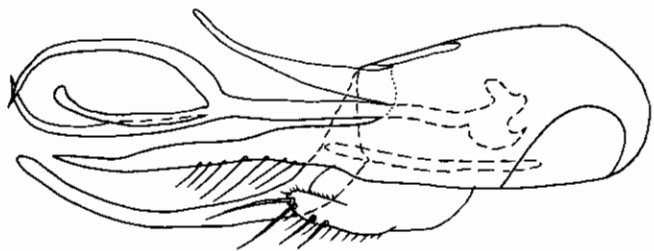


Fig. 5 — Hypopygium, left lateral view. *Grootaertia kuznetsovi* sp. n.

long dorsal setae in basal half; dorsal lobe as long as epandrium, thin and glabrous. Cercus yellow, large, with distinct fingerlike distolateral lobe bearing several long dorsal setae.

Female similar to male except lacking male secondary

sexual characters. Abdomen has 8 visible terga and ster-na; 9th hemitergites usually exposed, broad, medially fused, laterally sclerotized, setosed. Anal lobe flat, sub-triangular (ventral view), with microscopic hairs.

Length (mm): body without antennae 1.6, antenna 0.6, wing-length 1.9, wing-width 0.7, hypopygium 0.8.

Distribution: South Africa.

Etymology. The species is named after the Russian entomologist, Dr. V.I. KUZNETSOV.

Diagnosis and variability. The new species differs from other species of the genus in mostly black pleura and abdominal terga, one unpaired surstylus in addition to two pairs, long dorsal setae on ventral pair of surstyli, large cercus with distinct fingerlike distolateral lobe etc. Long series of paratypes demonstrates variability in colour of scape and pedicel (from yellow to brown-black) and pleura (almost entirely black or with yellow longitudinal stripes), in length, width and position of hypopygial surstyli and shape of aedeagus. However, the general plan of the hypopygium is rather stable in 11 paratypes studied, although one of them has half-reduced ventral (unpaired) surstylus. Many paratypes have 1st flagellomere as long as high, i.e., shorter than that in holotype.

2. *Grootaertia anomalipennis* sp. n. (Figs. 6-7)

Holotype. ♂, RSA: Cape Prov., De Hoop Nature Reserve, 0-200 m, 34°27'S, 20°25'E, 10-13.X.1994, loc. 12, leg. R. DANIELSSON [Lund].

Description. Male. Frons black, grey pollinose; face light-brown, white pollinose. Ocellar tubercle prominent, with a pair of strong black setae. One strong black vertical seta laterally on frons present, a strong postvertical one is positioned as a linear continuation of the postocular setal row; postocular setae black above, white laterally and below. Ventral postcranium with several long cilia. Face widest under antennae, gradually narrowed towards palpi. Clypeal suture marked laterally. Ratio of height of face to its maximal width, 16: 10. Antenna shorter than head height; scape and pedicel yellowish-brown; pedicel with a ring of short apical setulae; 1st flagellomere black, rounded, as long as or slightly longer than high, with acute apex and very short hairs. Arista apical, glabrous, twice longer than antennomeres combined. Length ratio of scape to pedicel to first flagellomere to arista, 4: 4: 8: 20. Palpus and proboscis light-brown, with sparse hairs; palpus short, with 1 black seta; proboscis stout, prominent.

Mesonotum concave in posterior third, mostly yellowish-brown, grey pollinose, with black setae. Mesonotal depression and scutellum black dorsally; mesonotum anteriorly with medial and two lateral (along rows of dorsocentral setae) dark narrow longitudinal stripes.

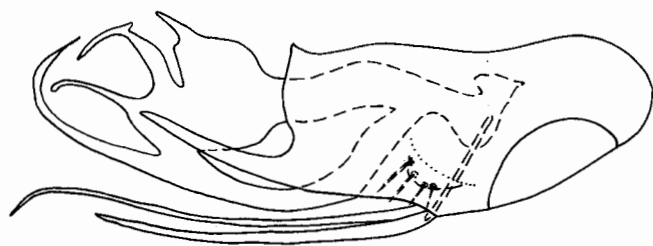


Fig. 6 — Hypopygium, left lateral view. *Grootaertia anomalipennis* sp. n.

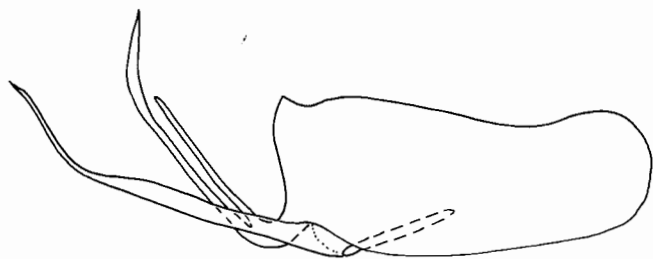


Fig. 7 — Hypopygium, right lateral view. *Grootaertia anomalipennis* sp. n.

Pleurae reddish-yellow. Four pairs of strong but short dorsocentral setae with 1-2 additional small setae in front of the 1st one. Acrostichal setae absent. One long and one very short humeral, one posthumeral, 1 long and 1 short strong notopleural, 2 short presutural and 2 strong post-sutural (supraalar) setae present. One light propleural seta. Scutellum with a pair of strong setae.

Legs including coxae yellow; 5th segment of all tarsi black. Fore coxa with short hairs and several dark apical setae; mid and hind coxae with one external seta. Femora without setae and long hairs. Fore tibia with 2-3 short apical setae. Mid tibia with 1 anterior seta at basal 1/4, 2-3 short apical setae in addition to 1 strong apicoventral seta. Hind tibia and basitarsus without strong setae. Length ratio of fore coxa to femur to tibia to tarsus (segments from first to fifth), 18: 32: 35: 16: 7: 5: 4: 5. Same ratio for middle leg, 13: 34: 41: 20: 10: 6: 5: 5. Same ratio for hind leg, 10: 38: 48: 13: 10: 7: 5: 5.

Wing elongate-oval, simple, hyaline; veins yellow-brown; posterior wing margin evenly convex; maximum wing-width just before the end of CuA₁. Costa without long hairs. Ratio of part of costa between R₂₊₃ and R₄₊₅ to this between R₄₊₅ and M₁₊₂, 16: 7. R₁ reaching 2/5 of wing length. R₂₊₃, R₄₊₅ and M₁₊₂ almost straight, slightly convex anteriorly. R₄₊₅ and M₁₊₂ parallel in apical part. Ratio of apical to basal part of M₁₊₂ (from *r-m*), 64: 26. Crossvein *m-cu* slightly convex. Apical part of CuA₁ straight. Ratio of cross-vein *m-cu* to maximal distance between R₄₊₅ and M₁₊₂ to apical part of CuA₁, 8: 7: 31. Anal vein fold-like; anal lobe developed; anal angle obtuse. Alula undeveloped. Lower calypter yellow, with greatly reduced cilia. Halter yellow.

Abdomen mostly yellow-brownish, weakly pollinose, with short black setae. Terga 1-5 widely blackish-brown dorsally. Sterna yellow, weakly sclerotized. 7th tergum semicircular, narrow, lying conformably with 6th tergum. 8th tergum yellow, large, covering left basolateral foramen. Epandrium shining brown, elongate-oval (lateral view), nearly twice longer than wide, acute apicoventrally. No epandrial seta. No epandrial lobe. No hypandrium. Aedeagus broad, flat, with large medial foramen and thin apical part; lateral lobes of aedeagus asymmetric; left (dorsal) lobe long, thin, pointed apically; two right (ventral) lobes of different shape. Surstyli yellow, long and thin, glabrous, three pairs of different length, asymmetric, attached to epandrium dorsoapically. Cercus small, concealed, with several dorsal setae.

Female unknown.

Length (mm): body without antennae 1.4, antenna 0.4, wing-length 1.8, wing-width 0.7, hypopygium 0.8.

Distribution: South Africa.

Etymology. The name of the new species reflects the unusual shape of the aedeagus.

Diagnosis. The new species differs from other species of the genus in having an elongate epandrium, three pairs of long thin glabrous surstyli, concealed cerci, broad asymmetric aedeagus with large medial foramen.

3. *Grootaertia anomalopyga* sp. n. (Fig. 8)

Holotype. ♂, RSA: Cape Prov., Wildemess, N. Park, 17 km SE George, 33°58'S, 22°39'E, 14.X.1994, loc. 18, leg. R. DANIELSSON [Lund].

Paratypes. 2 ♂♂ with the same label as holotype.

Description. Male. Similar to *G. anomalipennis* sp. n. in almost all respects except as noted. Face with yellow

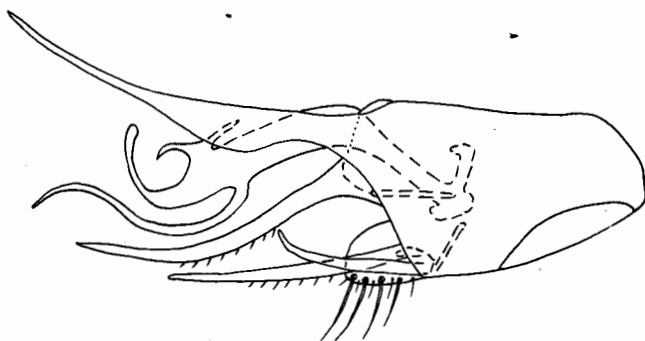


Fig. 8 — Hypopygium, left lateral view. *Grootaertia anomalopyga* sp. n. (left ventral, right and left dorsal surstyli are figured).

ground colour, white pollinose. Length ratio of fore coxa to femur to tibia to tarsus (segments from first to fifth), 24: 34: 35: 16: 6: 5: 4: 5. Same ratio for middle leg, 14: 40: 42: 21: 9: 6: 4: 5. Same ratio for hind leg, 12: 40: 45: 15: 11: 7: 5: 5. Ratio of part of costa between R_{2+3} and R_{4+5} to this between R_{4+5} and M_{1+2} , 18: 7. Ratio of apical to basal part of M_{1+2} (from $r-m$), 69: 26. Ratio of cross-vein $m-cu$ to maximal distance between R_{4+5} and M_{1+2} to apical part of CuA_1 , 10: 7: 25.

Hypopygial foramen left basodorsolateral. Epandrium elongate-oval, slightly widened apically (lateral view), 1.5 times longer than high. Aedeagus broad, with thin apical part; lateral lobes of aedeagus asymmetric; left (dorsal) lobe long, thin, pointed apically; right (ventral) lobe short, bifurcated, sometimes longer than figured. Surstyli long and thin, of different length, asymmetric; ventral pair the longest, glabrous, attached to epandrium apicoventrally; right dorsal lobe arising apicoventrally, with short hairs in middle half; left dorsal lobe arising apicodorsally, with short hairs in middle half; unpaired short glabrous surstylus positioned left apicodorsally. Cercus small, rounded, exposed, with several strong dorsal setae.

Female unknown.

Length (mm): body without antennae 1.8, antenna 0.8, wing-length 1.9, wing-width 0.7, hypopygium 0.7.

Distribution: South Africa.

Etymology. The name of the new species reflects the unusual shape of the hypopygium with asymmetric surstyli.

Diagnosis. The new species is closely related to *G. anomalipennis*, differing in having a shorter epandrium, five thin surstyli, short hairs on dorsal surstyli, exposed cerci, broad asymmetric aedeagus.

4. *Grootaertia asymmetrica* sp. n. (Fig. 9)

Holotype. ♂, RSA: Cape Prov., De Hoop Nature Reserve, 0-200 m, 34°27'S, 20°25'E, 10-13.X.1994, loc. 12, leg. R. DANIELSSON [Lund].

Paratypes. 5 ♂♂ with the same label as holotype.

Additional material. 1 ♂, South Africa, W Cape, 32 km NE Clanwilliam, Brandewyn R., 3219AA, 2-3.X.1977, RM MILLER [NMP].

Description. Male. Similar to *G. anomalipennis* sp. n. in almost all respects except as noted. Length ratio of fore coxa to femur to tibia to tarsus (segments from first to fifth), 20: 30: 30: 15: 7: 5: 4: 4. Same ratio for middle leg, 12: 30: 36: 17: 9: 6: 4: 4. Same ratio for hind leg, 10: 32: 35: 14: 10: 7: 5: 5. Ratio of part of costa between R_{2+3} and R_{4+5} to this between R_{4+5} and M_{1+2} , 16: 7. Ratio of apical to basal part of M_{1+2} (from $r-m$), 60: 25. Ratio of cross-

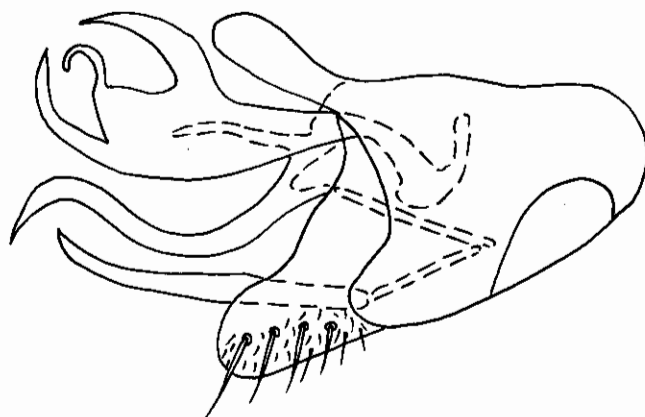


Fig. 9 — Hypopygium, left lateral view. *Grootaertia asymmetrica* sp. n. (right and left surstyli are figured).

vein $m-cu$ to maximal distance between R_{4+5} and M_{1+2} to apical part of CuA_1 , 7: 7: 25.

Abdominal 7th tergum weakly sclerotized, reduced; 8th tergum large, covering left basolateral foramen. Epandrium slightly longer than high, widened distad, asymmetrical. Hypandrium fused to epandrium, short, spade-like, slightly widened distally, with widely rounded distal margin (ventral view), apicoventral in position. Aedeagus broad, narrowed basally, with short pointed lateral lobes and short narrow apicomedial part arising from large subtriangular prominence. One pair of long narrow glabrous pointed surstyli, approximately as long as epandrium: left surstylus simple, dorsolateral in position, arising at base of cercus; right surstylus ventrolateral in position, arising at base of hypandrium, with narrow basal process 1/3 as long as surstylus. Cercus large, without distinct fingerlike lobe, with 4-6 dorsal setae.

Female unknown.

Length (mm): body without antennae 1.6, antenna 0.5, wing-length 1.7, wing-width 0.6, hypopygium 0.5.

Distribution: South Africa.

Etymology. The name of the new species refers to the asymmetrical hypopygium.

Diagnosis. The new species is closely related to *G. anomalipennis*, differing in having a short asymmetric epandrium, developed hypandrium, one pair of glabrous surstyli, exposed cerci, symmetric aedeagus.

5. *Grootaertia bistylata* sp. n. (Fig. 10)

Holotype. ♂, RSA: Cape Prov., De Hoop Nature Reserve, 0-200 m, 34°27'S, 20°25'E, 10-13.X.1994, loc. 12, leg. R. DANIELSSON [Lund].

Description. Male (head, fore legs, middle tibia and tarsus absent). Similar to *G. anomalipennis* sp. n. in

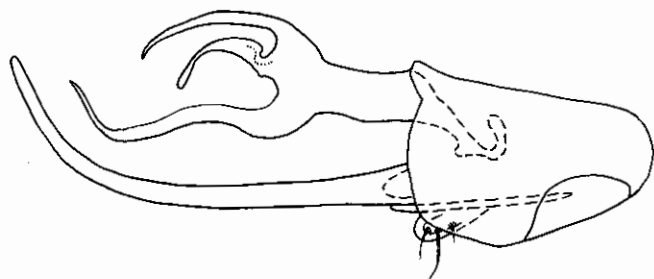


Fig. 10 — Hypopygium, left lateral view. *Grootaertia bistylata* sp. n.

almost all respects except as noted. Length ratio of hind coxa to femur to tibia to tarsus (segments from first to fifth), 12: 38: 45: 14: 10: 7: 4: 5. Ratio of part of costa between R_{2+3} and R_{4+5} to this between R_{4+5} and M_{1+2} , 15: 6. Ratio of cross-vein *m-cu* to maximal distance between R_{4+5} and M_{1+2} to apical part of CuA_1 , 8: 7: 25.

Abdominal 7th tergum weakly sclerotized, reduced; 8th tergum large, covering left basodorsolateral foramen. Epandrium 1.5 times longer than high, widened distad, symmetrical. Hypandrium fused to epandrium, very short, apicoventral in position. Aedeagus broad, with two long pointed lateral lobes of unequal length arising at middle of aedeagus and narrow apicomedial part. One pair of long thin glabrous surstyli, twice longer than epandrium, apicodorsolateral in position. Cercus very small, with fingerlike lateral lobe bearing 3 dorsal setae.

Female unknown.

Length (mm): wing 1.6, wing-width 0.6, hypopygium 1.0.

Distribution: South Africa.

Etymology. The name of the new species refers to the presence of one pair of surstyli.

Diagnosis. The new species is closely related to *G. anomalipennis*, differing in having a shorter epandrium, developed hypandrium, one pair of glabrous symmetrical surstyli, very small cerci, bilobate aedeagus.

6. *Corindia danielssoni* GRICHANOV

Material examined. 1 ♂, Gabon: Ntoun, IX.1984, A. PAULY rec., Piège Malaise, verger d'agrumes, Coll. R.I.Sc.N.B. [RINS]; 7 ♂♂, Congo Belge: P.N.G. Miss H. DE SAEGER, 19.XI.1951, 18.XII.1951, 13.II.1952, 11.III.1952, 16.IX.1952, H. DE SAEGER [RMCA].

Diagnosis. The species is similar to *C. verschureni* GRICHANOV, differing from it by lighter legs, longer distance between apices of R_{2+3} and R_{4+5} , simple surstylus and other characters of hypopygium.

Distribution: Gambia, Congo (Kinshasa), Gabon (!).

7. *Corindia saegeri* GRICHANOV

Material examined. 12 ♂♂, Congo Belge: P.N.G. Miss H. DE SAEGER, 12.VII.1951, 5.VIII.1952, 14.VIII.1951, 16.VIII.1952, 9.IX.1952, 16.IX.1952, H. DE SAEGER [RMCA].

Diagnosis. The species is similar to *C. verschureni*, differing by having cercus not longer than surstylus; dorsal lobe of surstylus shorter than ventral lobe; ventral lobe having short flat spoonlike apical seta.

Distribution. Congo (Kinshasa), Gabon.

8. *Corindia verschureni* GRICHANOV

Material examined. 1 ♂, Congo Belge: P.N.G. Miss H. DE SAEGER, II/gc/8, 9.IX.1952, H. DE SAEGER, 4042 [NMP]; 1 ♂, 1 ♀, Congo Belge: P.N.G. Miss H. DE SAEGER, II/gd/10 [II/gc/7], 28.XII.1951 [16.IX.1952], H. DE SAEGER, 2954, 4057 [RMCA]; 12 ♂♂, Congo Belge: P.N.G. Miss H. DE SAEGER [5.X.1951, 24.VII.1952, 4.VIII.1952, 2.IX.1952, 16.IX.1952], H. DE SAEGER [RMCA]; 118 ♂♂, Congo Belge: P.N.G. Miss H. DE SAEGER, 23.VIII.1950, 26.V.1951, 23.VI.1951, 25.VI.1951, 12.VII.1951, 14.VIII.1951, 17.VIII.1951, 21.VIII.1951, 23.VIII.1951, 25.VIII.1951, 7.IX.1951, 21.IX.1951, 22.IX.1951, 28.IX.1951, 5.X.1951, 6.X.1951, 11.X.1951, 16.X.1951, 20.X.1951, 31.X.1951, 11.XI.1951, 12.XI.1951, 13.XI.1951, 19.XI.1951, 8.XII.1951, 12.XII.1951, 13.XII.1951, 17.XII.1951, 28.XII.1951, 2.I.1952, 16.I.1952, 11.III.1952, 29.IV.1952, 10.IV.1952, 5.V.1952, 25.VI.1952, 26.VI.1952, 10.VII.1952, 4.VIII.1952, 5.VIII.1952, 8.VIII.1952, 18.VIII.1952, 1.IX.1952, 2.IX.1952, 4.IX.1952, 9.IX.1952, 16.IX.1952, 26.IX.1952, H. DE SAEGER [RMCA].

Diagnosis. The species is keyed to Australian *C. cooloola* BICKEL (1986), differing in longer apical part of CuA_1 wing vein, longer and thinner branches of surstylus and other characters of hypopygium.

Distribution. Congo (Kinshasa).

9. *Medetera cederholmi* GRICHANOV

Material examined. 12 ♂♂, 31 ♀♀, Gabon: VIII.1984, P.M.; 1 ♂, 2 ♀♀, Gabon: Ntoun, VIII.1984, A. PAULY col., Piège Malaise dans verger de collection, n° 003, Coll. R.I.Sc.N.B.; 1 ♂, 2 ♀♀, Gabon: Ntoun, VIII.1984, A. PAULY col., Piège Malaise dans verger de collection, n° 003, Coll. R.I.Sc.N.B.; 4 ♂♂, 2 ♀♀, Gabon: Ntoun, VIII.1984, A. PAULY col., pâturage, Coll. R.I.Sc.N.B.; 1 ♂, 3 ♀♀, Gabon: Ntoun, X.1984, A. PAULY col., pâturage, Coll. R.I.Sc.N.B.; 1 ♂, 6 ♀♀, Gabon: Ntoun, IX.1984, A. PAULY rec., Piège Malaise, verger

d'agrumes, Coll. R.I.Sc.N.B.; 1 ♂, Gabon: Woleu-ntem, Assok-Ngum, 21.II.1986, A. PAULY rec., bac jaune, coupe forestière, Coll. R.I.Sc.N.B. [RINS].

Diagnosis. *M. cederholmi* is most closely related to Oriental *M. longa* NEGROBOV & THUNEBOG (BICKEL, 1987, redescription), differing in having yellow coxae, 2 dorso-centrals only, and by hypopygium morphology. It keys out to Afrotropical *M. afra* and *M. simplicis*, though strongly differing in very long legs, long 7th tergum and many other characters. See Fig. 11 in GRICHANOV, 1997a.

Distribution: Sierra Leone, Ghana, Gabon (!).

10. *Medetera ealensis* PARENT

Type material examined. Holotype, ♂, Congo Belge: Eala, VIII.1935, J. GHESQUIÈRE / R. Mus. Hist. Nat. Belg. I.G. 10.482 / *Medetera ealensis* n.sp. ♂ Type. O. PARENT det., 1935 / Type [red label]; paratypes, 4 ♂♂ and 14 ♀♀, same labels, with additional red label "paratype".

Diagnosis. The species keys out to *M. rikhterae*, differing by its smaller size; wing-vein *m-cu* 2/3 length of apical part of *CuA*₁; posterior basitarsus simple, 2/5 as long as second tarsomere; posterior tibia simple, with at most several inconspicuous black thick posterior apical setae. Legs black, knees and tarsi light-brown. Anterior coxa with pale cilia. Antenna black, arista apical. Frons and face entirely pollinose, faintly brilliant; lower calypter with pale cilia.

Distribution: Congo (Kinshasa)

11. *Medetera edwardsi* GRICHANOV

Material examined. 1 ♂, 5 ♀♀, Gabon: Ntoun, VIII.1984, A. PAULY rec., Coll. R.I.Sc.N.B. [RINS]

Diagnosis. *M. edwardsi* is a sister species to *M. norlingi*, having only a slight difference in coloration and ratios of podomeres mainly. Study of hypopygium morphology of these two species demonstrates distinct specific characters (GRICHANOV, 1997, Figs. 2, 3): median lobe of surstylus expanded rather than narrowed and rounded apically. See also diagnosis of *M. norlingi*.

Distribution: Uganda, Gabon (!).

12. *Medetera ghesquierei* sp. n. (Fig. 11)

Holotype. ♂, Congo Belge: Eala, 29.VIII.1935, J. GHESQUIÈRE, 665 / R. Mus. Hist. Nat. Belg. I.G. 10.482.

Paratype. ♂, Congo Belge: Eala, VI.1935, J. GHESQUIÈRE, 646 / R. Mus. Hist. Nat. Belg. I.G. 10.482.

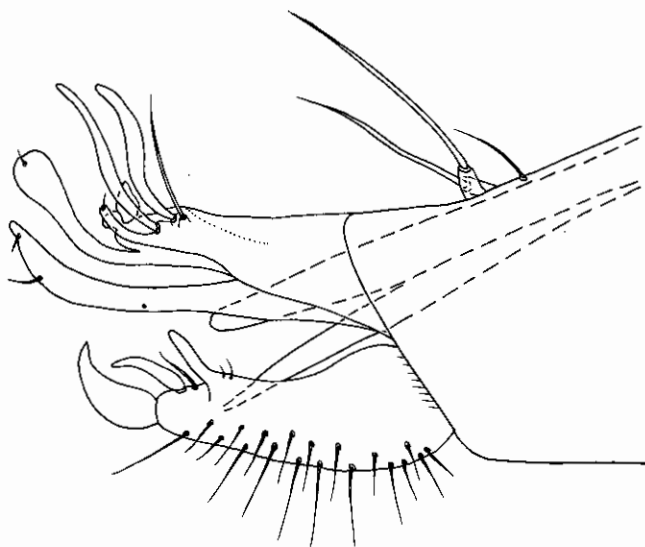


Fig. 11 — Apex of hypopygium, left lateral view. *Medetera ghesquierei* sp. n.

Description. Male. Frons and face black, brownish pollinose; clypeus weakly shining green in middle. A row of several fine black postocular setae at the top of eye and a row of brown-black postoculars below present. One strong vertical seta laterally on frons. Ocellar tubercle with one pair of strong setae. Ventral postcranium covered with sparse dark irregular setae. Face widest under antennae. Antenna short, black, slightly longer than head height; pedicel slightly swollen, with a ring of short apical setulae; first flagellomere small, rounded, with short terminal hairs. Arista apical, pubescent, six times longer than antennomeres combined. Palpus and proboscis short, greenish-black, weakly pollinose, with dark hairs; palpus with one black seta.

Thorax bronze-black, with bluish reflection, grey pollinose, with black setae. Five pairs of strong dorsocentral setae with several hairs anteriorly; first 3 setae half as long as 4th; 4th seta 2/3 as long as 5th. Two rows of short acrostichals extending to mesonotal flattening. Propleura with 1 black seta and 1 short black hair above fore coxa. Scutellum with a pair of strong medial setae and two lateral setae, half as long as medial.

Legs mostly brown, all coxae black, femora dark-brown. Coxae with black setae and hairs; fore coxa with short hairs and several apical setae; mid and hind coxae each with one external seta. Fore legs without setae. Fore tarsus simple. Length ratio of fore coxa to femur to tibia to tarsus (segments from first to fifth), 40: 50: 45: 23: 18: 11: 8: 7. Mid tibia with one anterodorsal, one posterodorsal at basal 1/4 and two apical setae. Length ratio of mid coxa to femur to tibia to tarsus (segments from first to fifth), 30: 50: 47: 32: 22: 15: 9: 7. Hind legs without long setae. Hind tarsus simple. Length ratio of hind coxa to femur to tibia to tarsus (segments from first to fifth), 22: 58: 62: 15: 32: 18: 9: 8.

Wings hyaline, veins brown. Costa without long hairs.

Ratio of part of costa between R_{2+3} and R_{4+5} to this between R_{4+5} and M_{1+2} , 16: 4. R_{4+5} and M_{1+2} distinctly convergent in apical part. Ratio of apical to basal part of M_{1+2} (from *r-m*), 85: 53. Ratio of cross-vein *m-cu* to maximal distance between R_{4+5} and M_{1+2} to apical part of CuA_1 , 11: 18: 17. Lower calypter brownish-yellow, with dark cilia. Halteres brownish-yellow.

Abdomen bronze-black, with short black setae; 7th segment short. Epandrium slightly longer than high. Foramen basolateral. Hypandrium midventral, elongate, narrow. Aedeagus slim, simple. Epandrial lobi reduced to 2 long pedunculate setae positioned closely to one another. Short epandrial seta present. Surstylus bilobate; ventral lobe with one short and one long apical processes, 2 long flattened and 1 simple apicoventral setae; dorsal lobe long, narrow, with short setae. Cercus shorter than surstylus, elongate, dorsally setosed, with 2 apical flattened setae and short subapical ventral process directed ventrad.

Female unknown.

Length (mm): body without antennae 2.2, antenna 0.9, wing-length 2.4, wing-width 0.8, hypopygium 0.7.

Distribution: Congo (Kinshasa).

Etymology. The species is named after the collector, Dr. J. GHESQUIÈRE.

Diagnosis and variability. *M. ghesquierei* sp. n. keys out to *M. otiosa* and *M. pospelovi*, differing from these species in having 2 apical flattened setae and a short subapical ventral process on cercus and long flattened apicodorsal setae on surstylus. The new species could not be associated with *M. nocturna* because of its metallic green thorax, yellow tibiae and apically parallel wing veins R_{4+5} and M_{1+2} in the latter species.

13. *Medetera grisescens* DE MEIJERE

Material examined. ♂, Tanzania, East Usambara, Amani 1000 m, 25.I.1977 / Zool. Mus., Copenhagen, H. ENGHOFF, O. LOMHOLDT; 3 ♂♂, Madagascar: Foulpointe, forêt, lagune, X.1993, A. PAULY col. P.M. [RINS].

Diagnosis. BICKEL (1987, redescription and figure) connects this species to the “*diadema-veles*” Group, which is characterised by the following characters: 4 strong dorsocentrals decreasing in size anteriorly; male posterior basitarsus with anteroventral basal tooth; hypopygium inflated basally; epandrial seta lost; surstylus fused almost to tip. *M. grisescens* has lateral scutellars about 2/3 length of medians; epandrial lobe bristles branched distally; cercus with apical toothed blade-like seta and mid-ventral clavate projection.

Distribution: Tanzania (!), Madagascar (!), Seychelles, Mauritius; Burma, India, Nepal, Bangladesh, Ceylon, Taiwan, Indonesia, Thailand, Vietnam, Malaysia, Samoa, New Caledonia, Hawaii, Australia.

14. *Medetera hamata* PARENT

Type material examined. Holotype, ♂, Congo Belge: Eala, VIII.1935, J. GHESQUIÈRE / R. Mus. Hist. Nat. Belg. I.G. 10.482 / *Medetera hamata* n.sp. Type. O. PARENT det., 1935 / Type [red label]; paratypes, 3 ♂♂ and 1 ♀, same labels, with additional red label “paratype” or “cotype” [RINS].

Additional material. ♂, Col. Mus. Congo, Elisabethville (Á la lumière), IX.1959, Ch. Seydel [RMCA]; ♂, Col. Mus. Congo, Kivu: Sanghe, Pl. Ruzizi (á la lumière), XII.1951, H. Bomans [RMCA]; ♂, Mus. Roy. Afr. Centr., Yangambi (Stan.), 1958, R. Dessart / Récolté dans inflorescences près Cacaoyers [RMCA].

Diagnosis. Face entirely pollinose. Fore coxa with short, sometimes shining light hairs and long, wide, pointed, black apical hook of glued setae (sometimes weakly developed); hind femur with several anterior cilia in apical half and several stiff dorsal cilia in basal half. Length ratio of hind basitarsus to 2nd segment, 2.2: 4.5. Vein *m-cu* half (holotype) or 2/3 (paratypes) as long as apical part of CuA_1 . Halteres from dark-brown to light-brown. Surstylus long, slightly curved ventrad, with rounded apex and thin dorsal subapical process, reaching apex of surstylus. Cercus having two apical flattened setae and subapical process.

Distribution: Congo (Kinshasa).

15. *Medetera luteoscutata* PARENT

Type material examined. Holotype, ♂, Congo Belge: Eala, 10.VI.1935, J. GHESQUIÈRE, 532 / R. Mus. Hist. Nat. Belg. I.G. 10.482 / *Medetera luteoscutata* n.sp. Type. O. PARENT det., 1935 / Type [red label]; paratypes, 4 ♂♂ and 3 ♀♀, same labels, with additional red label “paratype” or “cotype” (1 female differing in collecting date: VII.1935).

Additional material. 3 ♂♂, 9 ♀♀, Congo Belge: Eala, 21.IX.1935, XI.1935, XII.1935, 22-29.II.1936, 31.III.1936, III.1936, 16.IV.1936, IV.1936, VII.1936, X.1936, J. GHESQUIÈRE / R. Mus. Hist. Nat. Belg. I.G. 10.482 / *Medetera luteoscutata*, O. PARENT det. [RINS]; 6 ♂♂, 5 ♀♀, Congo Belge: P.N.G. Miss H. DE SAEGER, 2.XI.1950, 13.VIII.1951, 31.X.1951, 2.XI.1951, 5.XI.1951, 14.XI.1951, 14.V.1952, 22.V.1952, 30.VIII.1952, H. DE SAEGER, 3997; 1 ♂, Congo Belge: P.N.G., Miss. H. DE SAEGER, II/fc/4, 31.VII.1951, Réc. J. VERSCHUREN, 2182 [RMCA]; 1 ♂, Congo belge, Batama, 23.III.1946, F. FRANÇOIS / Près mare en forêt / R.I.Sc.N.B. I.G. 24452 [RINS]; 1 ♂, Congo Belge: Yangambi, 17.VI.1952, Dr. Schedl / K. Schedl, s. 14-S / Coll. Mus. Congo, Don. R. Mainé [RMCA]; 1 ♀, Coquilbatville, 1946 (cb. Seops) [RMCA]; 1 ♀, Malawi, Kasungu Nat Park, Lifupa Camp, 1333Aa,

9-10.XII.1980, 1000 m, STUCKENBERG & LONDT, *Brachystegia* [NMP].

Diagnosis and variability. *M. luteoscutata* differs from major part of known species of the genus by black body, 3 pairs of strong dorsocentrals decreasing in size anteriorly, and more densely haired anterior half of mesonotum; male fore basitarsus with anteroventral apical process, half as long as next tarsomere; 3rd tarsomere of the same tarsus with posterodorsal apical process almost reaching apex of the next article. Antenna black; arista apical, pubescent; 4 strong scutellars; anterior coxa often with apical hook of glued hairs; mid tibia with 2 dorsal setae at base; *m-cu* half as long as apical section of CuA_1 ; halter knob yellow-brown. Scutellum entirely dark-brown, somewhat paler at margin, or entirely yellow; all coxae yellow; mid femur in apical half and hind femur in apical 4/5 brown; mid femur sometimes entirely yellow or mostly brown; hind tibia dark except apices or yellow. Anterior tarsus looks like the one figured by Couturier (1985).

Distribution: Congo (Kinshasa), Malawi (!), Tanzania, Ivory Coast, Sierra Leone.

16. *Medetera lvoyskii* sp. n. (Fig. 12)

Holotype. ♂, Congo Belge: P.N.G., Miss. H. DE SAEGER, II/f. 22.XII.1950, Réc. J. VERSCHUREN, 1000.

Paratypes. ♂, Congo Belge: P.N.G., Miss. H. DE SAEGER, II/fd/17, 25.IX.1952, H. DE SAEGER, 4083; ♀, Congo Belge: P.N.G., Miss. H. DE SAEGER, II/gd/4, 26.VI.1952, H. DE SAEGER, 3706; ♂, Congo Belge: P.N.G., Miss. H. DE SAEGER, II/e, 4.I.1951, J. VERSCHUREN, 1041.

Additional material. 3 ♂♂, 4 ♀♀, Congo Belge: P.N.G. Miss H. DE SAEGER, II/gd/4, II/gd/6, II/gc/8, II/fd/18, PpK15, 27.XII.1951, 24.XII.1951, 2.IX.1952, 6.IX.1952, 9.IX.1952, 12. IX.1952, H. DE SAEGER [RMCA].

Description. Male. Frons and face entirely grey pollinose, with green ground colour. A row of several fine short black postocular setae at the top of eye and a row of white postoculars below present. One strong vertical seta laterally on frons. Ocellar tubercle with one pair of strong setae. Ventral postcranium covered with sparse white irregular setae. Face widest under antennae. Antenna short, black, as long as head height; pedicel slightly swollen, with a ring of short apical setulae; first flagellomere smaller than pedicel, rounded, with short terminal hairs. Arista apical, 5 times longer than antennomeres combined. Palpus and proboscis short, dark-brown, grey pollinose, with light hairs.

Thorax bronze-black, grey pollinose, with black setae. Two pairs of strong dorsocentral setae with a row of

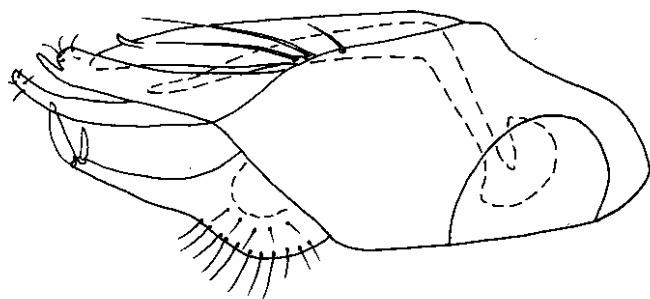


Fig. 12 — Hypopygium, left lateral view. *Medetera lvoyskii* sp. n.

hairlike setae anteriorly. Two rows of short acrostichals extending to mesonotal flattening. Propleural seta invisible. Scutellum with a pair of strong medial setae and two microscopic lateral hairs.

Legs mostly dirty yellow, anterior coxa brownish-yellow, mid and hind coxa and last tarsomeres of all tarsi brown. Coxae with light setae and hairs; fore and mid coxae with numerous hairs; mid and hind coxae each with one fine external seta. Fore legs without setae. Fore tarsus simple. Length ratio of fore coxa to femur to tibia to tarsus (segments from first to fifth), 20: 31: 30: 11: 8: 6: 4: 4. Mid tibia with one anterodorsal, one posterodorsal at basal 1/4 and two apical setae. 1st to 4th tarsomeres each with 1 or 2 short apicoventral setulae. Length ratio of mid coxa to femur to tibia to tarsus (segments from first to fifth), 15: 36: 40: 20: 13: 10: 5: 5. Hind femur without long setae. Hind tibia with 1-2 short subapical dorsal setae, with yellow apical posteroventral scale. Hind tarsus simple. Length ratio of hind coxa to femur to tibia to tarsus (segments from first to fifth), 12: 38: 45: 10: 20: 10: 7: 7.

Wings hyaline, veins brown. Costa without long hairs. Ratio of part of costa between R_{2+3} and R_{4+5} to this between R_{4+5} and M_{1+2} , 16: 7. R_{4+5} and M_{1+2} inconspicuously convergent, almost straight in apical part. Ratio of cross-vein *m-cu* to maximal distance between R_{4+5} and M_{1+2} to apical part of CuA_1 , 5: 7: 12. Lower calypter yellow, with dirty-yellow cilia. Halteres yellow.

Abdomen bronze-black, with short setae; 7th segment short. Epandrium elongate, widest at middle. Foramen basolateral. Hypandrium midventral, elongate, narrow, with short narrow subapical lateral lobes; Aedeagus slim, simple. Epandrial lobi reduced to 2 long setae positioned closely to one another. Short epandrial seta present. Surstylus bilobate; ventral lobe long and narrow, with several short setae at apex and short dorsoapical process; dorsal lobe slightly longer than ventral, thin, with several microscopic setae at apex. Cercus as long as surstylus, swollen at base, dorsally setosed, with long thin apex bearing 2 flattened setae directed ventrad.

Female similar to male except lacking male secondary sexual characters, with legs and fore coxa lighter than in male.

Length (mm): body without antennae 0.95, antenna 0.6, wing 1.3, hypopygium 0.3.

Distribution: Congo (Kinshasa).

Etymology. The species is named after the Russian entomologist, Dr. A.L. LVOVSKII.

Diagnosis. *M. lvoyskii* sp. n. keys out to *M. edwardsi* and *M. norlingi*, differing in smaller size, almost parallel wing veins R_{4+5} and M_{1+2} , cercus with long thin apex bearing 2 flattened setae, epandrial setae positioned closely to one another, etc.

17. *Medetera mainei* CURRAN

Type material examined. Holotypus, ♂ [red label] / Musée du Congo, Benza Mazola, 13/15-IV-1911, R. MAYNE / R. Det. R. 1160 / Holotype, *Medetera mainei* CURRAN; Holotypus, ♀ [red label] / Musée du Congo, Rutshuru, I-1934, Dr. DE WULF / R. Det. U. 2962 / *Medetera rutilans* n.sp., Type, O. PARENT.

Additional material. 8 ♂♂, 17 ♀♀, Congo belge, Eala [&] Rivers Buisira, XI.1934; III.1935; IV.1935; VI.1935; VII.1935; VIII.1935; VI.1936; XI.1936; 21.XI.1936, J. GHESQUIÈRE / R. Mus. Hist. Nat. Belg. I.G. 10.482 / O. PARENT det., 1935, 1936 [&] 1937, *Medetera currani* PAR.[RINS]; 1 ♂, 7 ♀♀, Nigeria: Ogoja County, on wall of house, 1 June 1961 / R.W. MEYER, A 6756 / Mus. Roy. Afr. Centr., don P. VANSCHUYTBROECK / P. VANSCHUYTBROECK det. *Medetera turneri* PARENT [RMCA]; 4 ♂♂, Congo Belge: P.N.G., Miss. H. DE SAEGER, II/fc/4 (II/fd/4), 30.VIII.1952 (6.XII.1951), H. DE SAEGER, 3997, 2861; 1 ♂, Congo Belge: P.N.G., Miss. H. DE SAEGER, I/o/1, 19.VIII.1950, Réc. G. DEMOULIN, 763 [RMCA]; 7 ♂♂, 4 ♀♀, Congo Belge: Kivu, Goma (base), 26.IV.1953, J. VERBEKE, KEA: U.V., 2056 [RINS]; 1 ♂, Congo-belge, Rivers Busira, VI.1936, J. GHESQUIÈRE / R. Mus. Hist. Nat. Belg. 10.482; 1 ♂, Coll. R.I.Sc.N.B., Urundi: Kitega, 26.I.1952, F. FRANÇOIS; 3 ♂♂, 1 ♀, Gabon: Ntoun, VIII-X.1984, A. PAULY réc., Piège Malaise, verger d'avocats, Coll. R.I.Sc.N.B.; 2 ♂♂, Gabon: Ntoun, VIII.1984, A. PAULY col., Piège Malaise dans verger de collection, n° 003, Coll. R.I.Sc.N.B.; 3 ♀♀, Gabon: Ntoun, VIII.1984, A. PAULY col., pâturage, Coll. R.I.Sc.N.B.; 1 ♂, 1 ♀, Gabon: Ntoun, X.1984, A. PAULY col., pâturage, Coll. R.I.Sc.N.B. [RINS]; 2 ♂♂, Tanzania, Uzungwa Mts., Chita Forest Reserve, 750 m, 28.X-I.XI.1984, M. STOLTZE & G. PETERSEN, Zool. Museum, Copenhagen [ZMUC]; 1 ♂, Luabo lower Zambesi River, Port. East Africa, P.J. Usher / IX.1957 [NMP]; 2 ♀♀, Congo belge, Rutshuru, 4-6.XII.1937, J. GHESQUIÈRE / R. Mus. Hist. Nat. Belg. I.G. 10.482 [RINS]; 1 ♀, Urundi, Terr. De Kitega, 3.II.1952, F. François / R. I. Sc. N. B. I.G. 24.452 / Colline: Kitega, alt. 1750 m [RINS]; 6 ♂♂, 10 ♀♀, Congo Belge: P.N.G. Miss. H. DE SAEGER, 3.VIII.1951, 27.VIII.1951, 19.X.1951, 7.XI.1951,

23.XI.1951, 6.XII.1951, 24.XII.1951, 8.V.1952, 22.VIII.1952, 23.VIII.1952, 30.VIII.1952, 22.IX.1952, 23.IX.1952, H. DE SAEGER [RMCA]; 7 ♂♂, 3 ♀♀, Coll. Mus. Congo, Elisabethville (à la lumière), I-1960, Ch. Seydel; [RMCA]; 2 ♀♀, Coll. Mus. Congo, Tshuapa: Ikengo, 7.XII.1952, P. Basilewsky; 1 ♀, Coll. Mus. Congo, Elisabethville, II-1940, H.J. Brédo [RMCA].

Diagnosis. *M. mainei* differs from other species by the following characters. Two strong scutellars with a pair of greatly reduced lateral hairs; 4 strong dorsocentrals; 2 black propleural setae; legs mostly reddish-yellow, coxae entirely and femora in basal half brown to black; 1st to 4th tarsomeres of mid tarsus with distinct apical setulae. See drawings of hypopygium in NEGROBOV and SCHUMANN, 1990, Figs. 1, 2.

Distribution: Tanzania (!), Kenya, Burundi (!), Congo (Kinshasa), Congo (Brazzaville), Cameroon, Gabon (!), Nigeria, Ghana, Togo, Gambia, Angola, Zambia, Mozambique (!).

18. *Medetera nocturna* CURRAN

Material examined. 1 ♂, Congo-belge, Flandria, IV.1935, J. GHESQUIÈRE, 475 / S. fleurs mâles d'Elaeis / R. Mus. Hist. Nat. Belg. 10482 / *Medetera nocturna* CURR. ♂, O. PARENT det., 1935; 1 ♂, Congo-belge, Flandria, IV.1935, J. GHESQUIÈRE, 475 / S. fleurs mâles d'Elaeis / R. Mus. Hist. Nat. Belg. 10482 / *Medetera turneri* PAR. ♂, O. PARENT det., 1935 [RINS].

Diagnosis. Published description of female *M. nocturna* comprises the following diagnostic characters. Antenna black; femora black in basal half; tibiae yellow; thorax metallic green; two strong scutellar setae; two strong dorsocentrals with several short hair-like setae anteriorly; R_{4+5} and M_{1+2} parallel in apical part. Males determined by O. PARENT may represent different species, with R_{4+5} and M_{1+2} distinctly convergent, being parallel at wing end.

Distribution: Sierra Leone; Congo (Kinshasa).

19. *Medetera norlingi* GRICHANOV

Material examined. 1 ♂, Tzaneen, northern South Africa, 28.01.1996, O. KOVALEV [ZIN]; 8 ♂♂, Botswana: Serowe, XI.1986, M. DE MEYER [RINS]; 7 ♂♂, 2 ♀♀, South Africa, Natal, Zululand, Ndumu Game Reserve, 26.X.1972, M.E. IRWIN, 2632Cc [NMP].

Diagnosis. *M. norlingi* and *M. edwardsi* are included into the "petulca" Group (BICKEL, 1985), differing from other species by mostly yellow legs, two strong dorsocentrals with the 1st one half as long as the 2nd, yellow-brownish antenna, and a long narrow dorsal

process on surstylus. See also diagnosis of *M. edwardsi*.

Distribution: Namibia, Botswana, Angola, South Africa (!).

20. *Medetera normalis* CURRAN

Material examined. 1 ♂, Musée du Congo, S. Afr.: Badford, 9/2/25 (MUNRO) Ex coll. CURRAN / R. Det. R. 1284 / *Medetera normalis* CURRAN, det. C.H. CURRAN; 1 ♀, Botswana: Serowe, X.1987, M. DE MEYER [RINS]; 1 ♂, Tanzania, West Usambara Mts., Mazumbai, 1600 m, 01.VIII.1980, M. STOLTZE & N. SCHARFF leg., Zool. Museum, København; 1 ♂, Congo belge: Rutshuru, I.1937, J. GHESQUIÈRE, 3583 / R. Mus. Nat. Hist. Belg. 10482; 5 ♂♂, 10 ♀♀, Scottburgh, Natal, S. Africa, B. & P. STUCKENBERG, 15.XI.1963; Pietermaritzburg, South Africa, 30.X.1960, B. STUCKENBERG; Oribi Gorge Reserve, Umzimkulwana Valley, Natal, South Africa, B. & P. STUCKENBERG, 21-28 November 1960; South Africa: Natal, Richards Bay, 2832Cc, 21-24 January 1980, R. MILLER & P. STABBINS, at light; South Africa: Natal, Kosi Bay Lkeside, 2632DD, 16-19.III.1982, Coll.: D.A. Baraclough, Papyrus Swamp, Malaise; South Africa: Natal Prov., Cape Vidal, 20 mi. N St. Lucia, ME & BJ IRWIN, 0 to 20 m, coastal dune forest, Nov. 24, 1971 (2832Ba); 3 ♀♀, South Africa: Natal, Umlalazi Nature Res., ca. 28°57' S, 31°40' E, 20 m, 28-29.I.1988, Dune forest, J. LONDT; 4 ♀♀, Malawi: Ntchisi forest reserve, 1334Ac, 1500m, LONDT & STUCKENBERG, 3-4.XII.1980, Montane forest & woodland; 1 ♂, Malawi, Kasungu Nat Park, Lifupa Camp, 1333Aa, 9-10.XII.1980, 1000 m, STUCKENBERG & LONDT, *Brachystegia*; 1 ♂, South Africa: Natal, Mkuzi Game Res., ca. 140 m, 8-15.X.1990, 27°38'20" S, 32°09'30" E, Coll. JGH LONDT, MV Light & Malaise; 1 ♂, S. Africa: N. Cape, #13, Kuruman, nr. Die Oog, 27°29' S, 23°26' E, 1300 m, Date: 13.III.1991, LONDT & WHITTINGTON, Mercury Vapour Light; 4 ♂♂, 2 ♀♀, Hlilhuwe, 19 January 1979, B. DOUBE; 2 ♂♂, Roma Mission, Maseru District, Basutoland, B. & P. STUCKENBERG, 4-13 Jan. 1963 / Valley floor, Old Lands, 5500 ft; 1 ♂, South Africa, Natal, Zululand, Ndumu Game Reserve, 26.X.1972, M.E. IRWIN, 2632Cc [NMP]; 10 ♂♂, Urundi: Terr. Bururi, Matana [Mugamba; Rumonge, Nyanza], alt. 1900 [2000, 1950 à 2050] m, VIII.1948 [VII-VIII.1948; V.1948; 12.IX.1948], F. FRANÇOIS / R.I.Sc.N.B. I.G. 24.452 [RINS]; 2 ♂♂, Congo Belge: P.N.G. Miss H. DE SAEGER, 10.IX.1951, 12.XII.1951, H. DE SAEGER [RMCA].

Diagnosis. *M. normalis* differs from other species by the following complex of characters. Face entirely pollinose; first flagellomere ovate, arista dorsal; two strong dorsocentrals with a row of small setae anteriorly; four strong scutellars with lateral ones half as long as medials; one long and one short black propleural setae; femora blackish except apices, tibiae reddish-yellow; coxae

with light, sometimes brown, setae; posterior basitarsus 1/3 as long as next tarsomere; *m-cu* equal to or somewhat shorter than apical part of CuA₁; *m-cu* 1.5 to 2 times shorter than maximum distance between R₄₊₅ and M₁₊₂. See drawing of hypopygium in GRICHANOV, 1997a, Fig. 6.

Distribution: South Africa, Namibia, Botswana (!), Malawi (!), Burundi (!), Tanzania, Congo (Kinshasa) (!), Congo (Brazzaville), Ghana, Sierra Leone, Gambia.

21. *Medetera otiosa* PARENT

Material examined. 1 ♂, Arniston coastal dunes, Bredasdorp District, Cape Province, 22-23 October 1964, B. & P. STUCKENBERG [NMP].

Diagnosis. *M. otiosa* differs from other species by the following characters. Two strong scutellars with a pair of greatly reduced lateral hairs; 2 strong dorsocentrals with a row of hairs anteriorly; antenna black; legs black, knees reddish; posterior basitarsus 2/5 as long as next tarsomere; *m-cu* slightly shorter than apical part of CuA₁.

Distribution: South Africa.

22. *Medetera polita* PARENT

Type material examined. Holotype, ♂, Congo Belge: Eala, 12.VII.1935, J. GHESQUIÈRE, 586 / Sur tronc *Scyphocephalum* abattu en marais / R. Mus. Hist. Nat. Belg. I.G. 10.482 / *Medetera polita* n.sp. Type. O. PARENT det., 1935 / Type [red label]; paratypes, 10 ♂♂, 34 ♀♀, same locality, with additional red labels "paratype" and "co-type" [RINS].

Diagnosis. Frons purple-brilliant; face polished, entirely brilliant violet. Anterior coxa with pale cilia. Hind femora without anterior setae, with several dorsal cilia in basal half, half as long as diameter of femora; hind tibia with anteroapical scale of short hairs covering several very short black thick setae; hind basitarsus with small apical scale and short simple apical seta; length ratio of hind basitarsus to 2nd segment, 32: 71. Lower calypter with dark brown, though shining light, cilia. Surstylus straight, long, thin, split at apex, with long and thin subapical dorsal process. Cercus with apical seta longer than cercus.

Distribution: Congo (Kinshasa).

23. *Medetera polleti* GRICHANOV

Material examined. 3 ♂♂, 9 ♀♀, Botswana: Serowe, 1986 pas date, DE MEYER [RINS]; 1 ♂, South Africa, Cape Mountain, Zebra Natl. Park, 1400 m, March 12, 1972, M.E. & B.J. IRWIN, 3225Ab [NMP].

Diagnosis. *M. polleti* can be associated with the "diadema-velles" Group of species (BICKEL, 1985, 1987), though having epandrial seta and only 3 strong dorsocentrals, and lacking lateral scutellars. Wing vein *m-cu* twice longer than apical part of CuA_1 , scape and pedicel yellow-brownish, legs mostly yellow. Hypopygium strongly differs from that in other Afrotropical species of the genus. See drawing of hypopygium in GRICHANOV, 1997a, Fig. 5.

Distribution: Namibia, Botswana (!), South Africa (!).

24. *Medetera praedator* CURRAN

Type material examined. 1 ♂, 1 ♀, paratypes [red label] / Musée du Congo, S. Afr.: East London, 19/2/24 (MUNRO) Ex coll. CURRAN / R. Det. S. 1284 / Paratype, *Medetera praedator* CURRAN [RINS].

Material examined. 2 ♂, 1 ♀, South Africa: Cape prov., Boesmansriviermond, 3326Ad, 26-31.XII.1985, J. LONDT, Hill above caravan park [NMP].

Diagnosis. The species keys out to *M. pseudotiosa*, differing in ratio of *m-cu* to apical part of CuA_1 (7: 13). Scutellum with lateral setae slightly shorter than half-length of medial setae.

Distribution: South Africa.

25. *Medetera pseudotiosa* sp. n. (Fig. 13)

Holotype. ♂, S.W. Africa (W. 30), Ameib Farm, 31.I-2.II.1972, on vegetation around pools / Southern African Exp. B.M. 1972-1.

Paratypes. 10 ♂♂, 5 ♀♀, Congo Belge: P.N.G., Miss. H. DE SAEGER, II/hd/4, II/gd/6, Ndelele/4, II/gc/8, PpK.1/6, Mabanga/4, PpK.15, 6.XII.1951, 24.XII.1951, 30.VIII.1952, 2.IX.1952, 9.IX.1952, 22.IX.1952,

23.IX.1952, Réc. H. DE SAEGER, 2861, 2945, 3992, 4023, 4042, 4068.

Description. Male. Similar to *M. lvoovskii* sp. n. in almost all respects except as noted. Propleura with 1 strong seta and 2 hairs above fore coxa. Legs mostly dirty yellow, femora mostly brown, anterior coxa brown-yellow, mid and hind coxa and last tarsomeres of all tarsi brown. Length ratio of fore coxa to femur to tibia to tarsus (segments from first to fifth), 21: 35: 32: 13: 9: 6: 5: 5. Length ratio of mid coxa to femur to tibia to tarsus (segments first to second), 16: 37: 40: 21: 12. Length ratio of hind coxa to femur to tibia to tarsus (segments from first to third), 12: 39: 49: 10: 19: 10.

Ratio of part of costa between R_{2+3} and R_{4+5} to this between R_{4+5} and M_{1+2} , 16: 5. R_{4+5} and M_{1+2} weakly convergent, almost straight in apical part. Ratio of cross-vein *m-cu* to maximal distance between R_{4+5} and M_{1+2} to apical part of CuA_1 , 6: 10: 10.

Abdomen bronze-black, with short setae; Epandrium swollen in basal half, narrowed distally. Foramen basolateral. Hypandrium midventral, elongate, narrow, with small apicoventral tooth. Aedeagus simple. Epandrial lobe as short digitiform tubercle with 2 long setae. Short epandrial seta present. Surstylus shorter than epandrium, bilobate; ventral lobe broad, truncate and slightly widened at apex, with one strong apicoventral and several simple setae at apex; dorsal lobe longer than ventral, very thin, with 1 strong subapical dorsal seta and 2 microscopic setae at apex. Cercus shorter than surstylus, concave ventrally, dorsally setose, with long apical process, nearly as long as cercus, very long thick subapical ventral seta half as long as cercus and 2 very small adjacent setae.

Female similar to male except lacking male secondary sexual characters.

Length (mm): body without antennae 1.5, antenna 0.6, wing-length 1.5, wing-width 0.5, hypopygium 0.4.

Distribution: Namibia, Congo (Kinshasa).

Diagnosis. *M. pseudotiosa* sp. n. is close to *M. otiosa* and probably *M. nocturna* and *M. praedator*, differing from them by black colour on basal half of femora; yellow tibiae, black body, convergent wing veins R_{4+5} and M_{1+2} , very long apical process and long subapical ventral seta on cercus.

26. *Medetera seksyaevae* sp. n. (Fig. 14)

Holotype. ♂, Congo Belge: P.N.G., Miss. H. DE SAEGER, II/gd/4, 30.X.1951, Réc. H. DE SAEGER, 2701.

Paratypes. 1 ♂, 2 ♀♀, Gabon: Ntoun, IX.1984, A. PAULY réc., Piège Malaise, verger d'avocats, Coll. R.I.Sc.N.B.

Additional material. 1 ♂, Congo Belge: P.N.G. Miss. H. DE SAEGER, II/gd/4, 19.X.1951, H. DE SAEGER [RMCA].

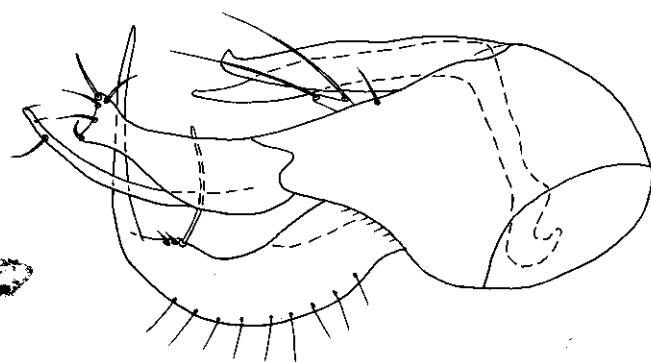


Fig. 13 — Hypopygium, left lateral view. *Medetera pseudotiosa* sp. n.

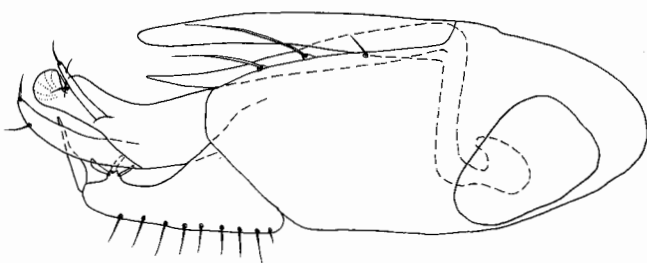


Fig. 14 — Hypopygium, left lateral view. *Medetera seksyaevae* sp. n.

Description. Male. A row of several fine short black postocular setae at the top of eye and a row of white postocular below present. One strong vertical seta laterally on frons. Ocellar tubercle with one pair of strong setae. Ventral postcranium covered with sparse white irregular setae. Face widest under antennae. Antenna short, brown, as long as head height; pedicel slightly swollen, with a ring of short apical setulae; first flagellomere smaller than pedicel, rounded, with distinct apex. Arista dorsoapical, twice longer than antennomeres combined. Length ratio of scape to pedicel to first flagellomere to arista, 3: 4: 5: 20. Palpus and proboscis short, dark-brown, with light hairs.

Thorax bronze-black. Two pairs of strong posterior and 3 pairs of weak anterior dorsocentral setae (broken off in holotype). Two rows of acrostichals. Scutellum with a pair of strong medial and two strong lateral setae (broken off in holotype).

Legs mostly yellow, all coxae and last tarsomeres of all tarsi brown (fore coxa yellow in paratypes). Fore coxa with hairs and several apical setae; mid and hind coxae each with one external seta. Fore legs without setae. Fore tarsus simple. Length ratio of fore coxa to femur to tibia to tarsus (segments from first to fifth), 25: 41: 45: 22: 14: 12: 8: 6. Mid tibia with one anterodorsal at basal 1/4 and two apical setae. 1st to 4th tarsomeres each with 1 or 2 short apicoventral setulae. Length ratio of mid coxa to femur to tibia to tarsus (segments from first to fifth), 16: 41: 48: 33: 19: 13: 7: 6. Hind femur without long setae. Hind tibia with 1-2 short subapical dorsal setae, with yellow apical posteroventral scale and several short thick black apical setulae. Hind basitarsus simple. Length ratio of hind coxa to femur to tibia to tarsus (segments first to second), 13: 43: 55: 15: 30.

Wings hyaline. Costa without long hairs. Ratio of part of costa between R_{2+3} and R_{4+5} to this between R_{4+5} and M_{1+2} , 15: 4. R_{4+5} and M_{1+2} distinctly convergent. Ratio of cross-vein *m-cu* to maximal distance between R_{4+5} and M_{1+2} to apical part of CuA_1 , 9: 12: 18.

Abdomen bronze-black, with short setae; 7th segment slightly longer than 6th, as long as epandrium. Epandrium elongate, highest at middle, widest at apex. Foramen basolateral. Hypandrium midventral, elongate, narrow, simple. Aedeagus slim, simple. Epandrial lobi reduced to 2 long setae positioned in apical third of epandrium. Short epandrial seta present. Surstylus bilobate; ventral

lobe broad, with 2 short setae at apex, large rounded and flattened dorsoapical projection, long and thin lateral process bearing 1 apical and 1 subapical short setae; dorsal lobe slightly longer than ventral, with 1 apical and 1 dorsal short setae. Cercus broad, dorsally setosed, with long flattened seta at apex and ventral subapical tubercle bearing 3 flattened setae.

Female similar to male except lacking male secondary sexual characters.

Length (mm): body without antennae 2.0, antenna 0.5, wing 2.0, hypopygium 0.6.

Distribution: Congo (Kinshasa), Gabon.

Etymology. The species is named after the Russian entomologist, Dr. S.V. SEKSYAEVA.

Diagnosis. *M. seksyaevae* sp. n. keys out to *M. subchevi* and *M. chumakovi*, differing by dorsal arista, non-thickened basal part of CuA_1 , wing vein *m-cu* half as long as apical part of CuA_1 , and morphology of hypopygium.

27. *Medetera stoltzei* sp. n. (Fig. 15)

Holotype. ♂, Tanzania, Uzungwa Mts., Chita Forest Reserve, 1500 m, 10.XI.1984, M. STOLTZE & G. PETERSEN, Zool. Museum, Copenhagen.

Description. Male. Frons and face black, entirely grey pollinose. A row of several fine short brown postocular setae at the top of eye and a row of white postocular below present. One strong vertical seta laterally on frons (broken off). Ocellar tubercle with one pair of strong setae (broken off). Ventral postcranium covered with sparse long white irregular setae. Face widest under antennae. Antenna short, black; pedicel slightly swollen, with a ring of short apical setulae; first flagellomere small, rounded, with short terminal hairs. Arista apical (broken off). Palpus and proboscis short, black, grey pollinose, with light hairs; palpus slightly shining, with 1 black seta.

Thorax black, grey pollinose, with black setae; scutellum brown. Five pairs of strong dorsocentral setae gradually decreasing in size anteriorly; each seta 1/3 shorter than preceding one; several hairs in front of the 1st dorsocentral seta. Two rows of short acrostichals extend-

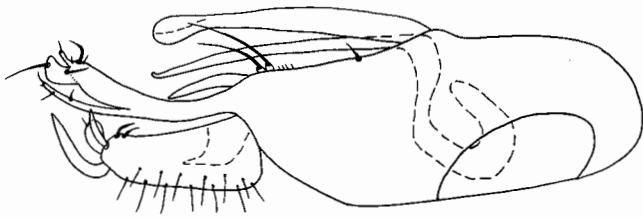


Fig. 15 — Hypopygium, left lateral view. *Medetera stoltzei* sp. n.

ing to mesonotal flattening. Propleura with 1 strong black seta and one short white hair above fore coxa. Scutellum with a pair of strong medial setae and two lateral setae, 2/3 as long as medial.

Legs mostly black-brown, coxae black, knees dirty yellow. Coxae with black setae; fore coxa with short, shining light hairs; mid and hind coxae each with one fine external seta. Fore legs without strong setae. Fore basitarsus nearly as wide as tibia. Length ratio of fore coxa to femur to tibia to tarsus (segments from first to fifth), 40: 50: 54: 27: 15: 12: 8: 8. Mid tibia with one anterodorsal, one posterodorsal at basal 1/4 and several very short apical setae. Length ratio of mid coxa to femur to tibia to tarsus (segments from first to fifth), 30: 60: 72: 39: 22: 16: 12: 8. Hind femur with row of several anterior black setae in apical half, nearly as long as femora diameter. Hind tibia with 1-2 short subapical dorsal setae. Hind tarsus simple. Length ratio of hind coxa to femur to tibia to tarsus (segments from first to fifth), 25: 66: 91: 21: 38: 16: 9: 8.

Wings greyish, almost hyaline, veins brown. Costa without long hairs. Ratio of part of costa between R_{2+3} and R_{4+5} to this between R_{4+5} and M_{1+2} , 28: 7. R_{4+5} and M_{1+2} distinctly convergent, slightly bowed anteriorly. Ratio of apical to basal part of M_{1+2} (from $r-m$), 107: 72. Ratio of cross-vein $m-cu$ to maximal distance between R_{4+5} and M_{1+2} to apical part of CuA_1 , 18: 20: 27. Anal vein distinct. Lower calypter brownish-yellow, with dirty-yellow cilia. Halteres yellow.

Abdomen black, grey pollinose, with short black setae. Epandrium elongate, twice as long as high. Foramen basolateral. Hypandrium midventral, elongate, narrow. Aedeagus slim, simple. Epandrial lobi reduced to 2 long pedunculate setae positioned closely to one another. Short epandrial seta present at base of hypandrium. Surstylus long and narrow, bifurcated at middle; ventral lobe with broad apical projection bearing 2 strong setae, thin short apical process bearing 1 short seta and 1 strong and 2 microscopic subapical ventral setae; dorsal lobe as long as ventral, thin, with several short setae in distal half. Cercus shorter than surstylus, dorsally setosed, with broad rounded apex bearing large flattened apicodorsal seta directed ventrad and 2 thick and 2 fine apicoventral setae.

Female unknown.

Length (mm): body without antennae 2.8, wing-length 3.1, wing-width 1.2, hypopygium 0.8.

Distribution: Tanzania.

Etymology. The species is named after one of the collectors, Dr. M. STOLTZE.

Diagnosis. *M. stoltzei* has only a slight difference from *M. capensis* as briefly described by CURRAN (1926). The latter species has clypeus and palpi shining, CuA_1 $\frac{1}{4}$ longer than $m-cu$, surstylus and cercus narrowed at apex. Investigation of *M. capensis* holotype is necessary for more reliable recognition of the two species.

28. *Medetera subchevi* GRICHANOV

Material examined. 1 ♂, Kruger Nat. Park, South Africa, 29.01.1996, O. KOVALEV [ZIN]; 4 ♂♂, Botswana: Serowe, XI.1986, M. DE MEYER [RINS]; 1 ♂, Kenya: West Pokot, #66, Marich Field Centre, 01°33' N, 35°28' E, 1000 m, Date: 22.XI.1992, J. LONDT & A. WHITTINGTON, closed *Acacia* woodland [NMP].

Diagnosis. *M. subchevi* has some relations to the North-American "petulca" Group of species (BICKEL, 1985). It keys out to Afrotropical *M. araneipes* and *M. seksyaevae*, differing in wing vein $m-cu$ equal to or slightly shorter than apical part of CuA_1 , apical arista, another ratio of podomeres and morphology of hypopygium.

Distribution: Namibia, South Africa (!), Botswana (!).

29. *Medetera varitibia* PARENT

Type material examined. Holotypus, ♀ [red label] / Musée du Congo, P.N.A. 1933, cratère Magunga, Dr. DE WULF / R. Det. R. 2966 / *Medetera varitibia* n.sp. Type. O. PARENT.

Material examined. 1 ♂, Musée du Congo, P.N.A., 1933, cratère Mugunga, Dr. DE WULF / R. Det. T. 2966 / *Medetera nocturna* CURR. ♂, O. PARENT det.; 6 ♂♂, Congo-belge, Rutshuru, XII.1936, J. GHESQUIÈRE, 3583 / R. Mus. Hist. Nat. Belg. 10482 / O. PARENT det., 1936 (1937) *Medetera* spec.?; 1 ♀, Musée du Congo, P.N.A. 1933, cratère Magunga, Dr. DE WULF / R. Det. R. 2966 / *Medetera otiosa* PARENT, O. PARENT det. [RMCA].

Diagnosis. Fore and hind tibiae dark yellow; mid tibia lighter; femora black except apices. Propleura with black setae. The species keys out to *M. normalis*, differing in black antenna with apical arista.

Distribution: Congo (Kinshasa), Tanzania.

30. *Paramedetera sierraleonensis* sp. n.

(Figs. 16-17)

Holotype. ♂, Sierra Leone: Freetown, Fourah Bay College, 13°14'W, 8°28'N, 24.XI.1993, loc. 7, swept in sec. forest / Lund University Sierra Leone Expedition 1993, leg. L. CEDERHOLM - R. DANIELSSON - R. HALL.

Paratype. ♀ with the same label as holotype.

Description. Male. Frons and face entirely black, grey pollinose. Ocellar tubercle prominent, with a pair of strong black setae. One strong black vertical seta laterally on frons present, postvertical seta undeveloped; postocular setae white, short above, becoming longer laterally and below. Face widest under antennae, narrowed in

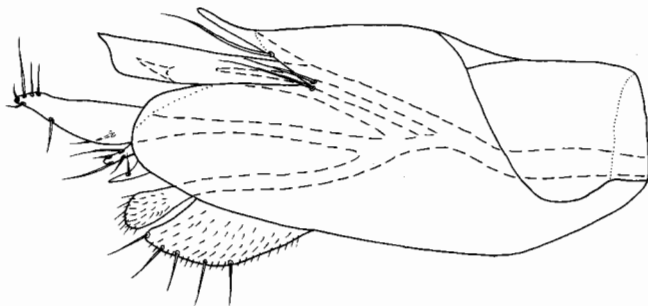


Fig. 16 — Hypopygium, left lateral view. *Paramedetera sierraleonensis* sp. n.

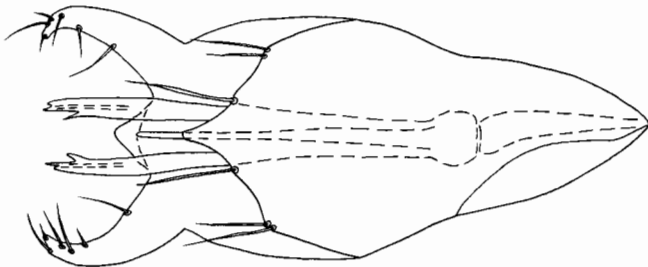


Fig. 17 — Hypopygium, ventral view. *Paramedetera sierraleonensis* sp. n.

middle, then parallel-sided. Epistome with longitudinal furrow. Clypeal suture distinct. Ratio of height of face to its maximal width to its minimal width, 19: 7: 4. Antenna black, 1/4 longer than head height; pedicel with a ring of short apical setulae; first flagellomere as long as high, with ovoid apex and short terminal hairs. Arista apicolateral, with short hairs, 6 times longer than antennomeres combined. Palpus and proboscis black-brown, with sparse hairs; palpus short, proboscis stout.

Mesonotum flattened in posterior third, greenish-black, brownish pollinose, with black setae. Pleurae black, grey pollinose. Four pairs of strong dorsocentral setae. Acrostichal setae absent. One light propleural seta. Scutellum with a pair of strong setae.

Legs light-brown; mid and hind coxae and last tarsomeres of all tarsi brown. Fore coxa with short hairs and several light apical setae; hind coxa with one external seta. Fore leg without setae. Mid femur with short posterior subapical seta. Length ratio of fore coxa to femur to tibia to tarsus (segments from first to fifth), 24: 30: 32: 17: 9: 6: 5: 5. Same ratio for middle leg, 17: 35: 41: 24: 12: 8: 6: 5. Same ratio for hind leg, 12: 39: 42: 13: 16: 9: 6: 5.

Wing elongate-oval, simple, hyaline; veins brown; posterior wing margin evenly convex; maximum wing-width at the end of CuA_1 . Costa without long hairs. R_1 reaching 1/3 of wing. R_{2+3} almost straight. R_{4+5} and M_{1+2} straight and parallel in apical part. Anal vein fold-like; anal lobe developed; anal angle obtuse. Alula undeveloped. Lower calypter brown with black cilia. Halter brown.

Abdomen brown-black, with short black setae. Epan-

drium irregularly elongate-oval (lateral view), with deep ventral excision at distal 2/3 directed basad and large basolateral foramen. One long epandrial seta at base of hypandrium. Epandrial lobe reduced to 2 long setae of unequal length. Hypandrium attached at distal 2/3 of epandrium, fused to epandrium, short, subtriangular (ventral view), with acute apex. Lateral lobes of hypandrium long, flat, broad and slightly widened distad (lateral view), pointed apicoventrally, with long pointed inner tooth at distal 3/4. Aedeagus thin and narrow to apex, simple. Surstylus with long and broad ventral lobe positioned apicoventrally and thin dorsal lobe; both lobes bearing strong setae as figured. Cercus short, simple, with long dorsal setae; unpaired, densely haired epandrial process positioned in front of cerci.

Female similar to male except in lacking male secondary sexual characters. Face somewhat wider than in male: ratio of height of face to its maximal width, 18: 10. Propleural seta brown. Ratio of part of costa between R_{2+3} and R_{4+5} to this between R_{4+5} and M_{1+2} , 19: 7. Ratio of apical to basal part of M_{1+2} , 61: 23. Ratio of cross-vein $m-cu$ to maximal distance between R_{4+5} and M_{1+2} to apical part of CuA_1 , 6: 7: 22. Abdomen mostly brown-black; 2nd tergum widely yellow laterally.

Length (mm): body without antennae 1.3-1.5, antenna 0.6, wing-length 1.6, wing-width 0.6, hypopygium 0.37.

Distribution: Sierra Leone.

Diagnosis. The new species is closely related to *P. sumatrensis* GROOTAERT et MEUFFELS (1997), differing in fine structures of hypopygium, e.g., simple aedeagus, subtriangular hypandrium, different setation of surstylus and shape of hypandrial lobes etc. Female differs from known species in coloration of abdomen.

31. *Saccopheronta aperta* NEGROBOV, VANSCHUYTBROECK et GRICHANOV

Material examined. 3 ♂♂, Coll. Mus. Congo, N. Lac Kivu: Rwankwi, 15.II.1952, J.V. LEROY [RMCA].

Distribution: Congo (Kinshasa), Uganda.

32. *Saccopheronta arnaudi* NEGROBOV, VANSCHUYTBROECK et GRICHANOV

Material examined. 2 ♂♂, 1 ♀, Urundi: Ntangura (Moso), 1350, 21.VI.1952, F. FRANÇOIS / R.I.Sc.N.B. I.G. 24.452 [RINS]; 1 ♀, Kenya, 30 km N Kakamega (forest), 23.XI.1986, I. SUSMAN [TAU]; 2 ♂♂, Congo Belge: P.N.G. Miss H. DE SAEGER, 20.IV.1952, 7.V.1952, H. DE SAEGER [RMCA].

Diagnosis. *S. arnaudi* together with *S. aperta* differs from other species by mostly blackish middle and posterior femora. The two species can be distinguished by ratio of

anterior tarsomeres and shape of surstylus (see Fig. 21 in NEGROBOV et al., 1981).

Distribution: Congo (Kinshasa), Kenya, Uganda, Burundi (!).

33. *Saccopheronta caffra* (CURRAN)

Type material examined. Holotypus, ♀ [red label] / Musée du Congo, Rutshuru, I-1934, Dr. DE WULF / R. Det. Q. 2966 / *Saccopheronta bicolor* n.sp. Type. O. PARENT.

Additional material. 15 ♂♂ and ♀♀, Congo Belge: Kivu, Rutshuru, 22.V au 4 VI. 1934, G. F. DE WITTE: 427 / P. VANSCHUYTBROECK det. 1951, *Saccopheronta bicolor* PARENT [RINS]; 11 ♂♂, 6 ♀♀, Congo belge: P.N.A., Kivu, Rutshuru (Riv.Fuku, riv. Rodahira, riv. Kanzarue, Lubirizi); 1200 m. (1250 m., 1285 m), 23.VI.1934 (3.VII.1935, 1.VII.1935, 13.VII.1935, 16.VII.1935, 16.X.1935). G.F. DE WITTE, 698 (1614, 1622, 1644, 1645, 1655, 1680); 1 ♂, Congo belge: env. de Rutshuru, 3.XII.1937, J. GHESQUIERE / R. mus. Hist. Nat. Belg. L.G. 10.482 [RINS]; 1 ♂, Kenya, Meru Park, Upper Imenti Forest, June 1973, Hans GØNGET leg. [ZMC]; 1 ♂, 1 ♀, N. Yumba, S. Rhodesia, 2.5.1964, D. Cookson; 1 ♂, 1 ♀, Port of Johns Dist., Coastal Forest, E. Cape Prov., 16-17 Oct. 1959, B. & P. STUCKENBERG; Dhlinda Forest, Eshowe Zululand, South Africa, B. & P. STUCKENBERG, 5-6 April 1960; 1 ♀, So. Africa: Natal, 20 km SE Nkandla, 2831Ca, Nkandla Forest Res., 26.I.1980, for. Margin, R. MILLER & P. STABBINS; 7 ♀♀, Gillits, Pinetown district, Natal, S. Africa, B. & P. STUCKENBERG; Enon Farm, Richmond, Natal, S. Africa, B. & P. STUCKENBERG, Jan. 1964; Town Bush, Pietermaritzburg, South Africa, B. & P. STUCKENBERG, 6.XII.1961; Dhlinda Forest, Eshowe Zululand, South Africa, B. & P. STUCKENBERG, 5-6 April 1960 [NMP]; 1 ♀, Congo Belge: P.N.A., 7-15.VII.1955, P. VANSCHUYTBROECK, 13274-309 / Mont Hoyo, 1280 m, sur plantes basses [RINS]; 3 ♂♂, 2 ♀♀, Coll. Mus. Congo, N. Lac Kivu: Rwankwi, XII.1951, 15.II.1952, J.V. LEROY [RMCA].

Diagnosis. *S. caffra* together with *S. parvilamellata* differs from other species of Afrotropical *Saccopheronta* in mostly black femora. The two species can be distinguished by shape of first flagellomere and position of arista. *S. caffra* is probably a unique African species in the genus, having surstylus split at apex (see Figs. 10-14 in NEGROBOV et al., 1981).

Remark. Three males of *S. caffra* from Madagascar determined by P. VANSCHUYTBROECK (examined, RINS) belong to undescribed species of *Cymatopus* KERTESZ and should be excluded from the fauna of the island. Several specimens determined by VANSCHUYTBROECK as *S. caffra* belong also to the genus *Thrypticus*.

Distribution: South Africa, Congo (Kinshasa), Kenya.

34. *Saccopheronta fletcheri* GRICHANOV

Type material examined. Holotype, ♂, Uganda: Ruwenzori Range, XII.1934-I.1935. B.M. E. Afr. Exp. B.M. 1935-203 / Namwamba Valley, 8300 ft., F.W. EDWARDS. Paratypes, 1 ♀, same labels; 1 ♂, 1 ♀, Uganda: Ruwenzori Range, Mahome River, 6700 ft., 13-16. VIII.1952, D.S. FLETCHER / Ruwenzori Exped. B.M. 1952-566 [NHML].

Additional material. 2 ♂♂, 2 ♀♀, Congo Belge: P.N.A., Mt. Sesero, pres Bitashimva (Bambous), 2000 m, 1 au 2.VII.1934, G.F. DE WITTE, 505 [RINS].

Diagnosis. *S. fletcheri* is closely related to *S. aperta*, differing by brown anterior coxa, ratio of anterior tarsomere, larger size, and details in hypopygium morphology (see Fig. 6 in GRICHANOV, 1997b). *S. fletcheri* is close in size to the type-species of the genus *Saccopheronta*, differing from *S. nudipes* by dark anterior coxa, yellow halteres, only one propleural seta etc.

Distribution: Uganda, Congo (Kinshasa) (!).

35. *Saccopheronta glabra* NEGROBOV, VANSCHUYTBROECK et GRICHANOV

Material examined. 1 ♂, Congo Belge: P.N.A., vers Rweru (Volc. Miken), 2400 m (Bambous), 26 au 27.VII.1934, G.F. DE WITTE, 501 [RINS]; 1 ♂, Malawi, 1500 m, Mulanje Mt., nr. Likabula, 26-27.X.1983, A. FREIDBERG [TAU].

Diagnosis. *S. glabra* is close to *S. nigra*, differing by absence of a row of strong ventral setae in apical half of surstylus. Body brown-black, femora and tibiae yellow. Cercus with well developed ventral process. Surstylus stick-shaped, with long apical setae. See Figs. 6-9 in NEGROBOV et al., 1981.

Distribution: Congo (Kinshasa), Malawi (!).

36. *Saccopheronta hirsuticosta* PARENT

Type material examined. Holotypus, ♂ [without abdomen; red label] / Musée du Congo, Kibati 1933 (200 m dessus gîte), Dr. DE WULF / R. Det. D. 2966 / *Saccopheronta hirsuticosta* n.sp. Type. O. PARENT; 1 ♂, Congo belge: P.N.A., Mubaliba, (volc. Nyamaragira), 2000 m, 14 au 26. VI.1935, G.F. DE WITTE: 1517 / Paratype [red label] / P. VANSCHUYTBROECK det. 1951, *Saccopheronta pulchra* n.sp. [RINS].

Additional material. 1 ♂, Congo belge: Kivu, Sake (Lac Kivu), 1460 m, 19 au 22.II.1934, G.F. DE WITTE, 251; 1 ♀, Congo belge: Kivu, Rutshuru, 1250 m, 4.VII.1935, G.F. DE WITTE, 1686 [RINS]; 1 ♂, Coll.

Mus. Congo, N. Lac Kivu: Rwankwi, 15.II.1952, J.V. LEROY [RMCA].

Diagnosis and variability. *S. hirsuticosta* differs from other species by yellow legs, brown-black body, and leaf-shaped surstylus. It differs also in the following features: fore tarsus usually entirely brown in both sexes; the second tarsomere of fore tarsus half as long as or nearly equal to the third; middle tibia with anteroventral row of short yellow or black spinules; surstylus with several very long setae varying in length and position. Costa with simple or somewhat elongated setulae in basal third, sometimes 3 times longer than diameter of costa. Male paratype of *S. pulchra* has 2 rows of unusually long costal setulae, and surstyli the same as figured by NEGROBOV et al. for *S. subquinta* (1981: Fig. 22).

Distribution: Congo (Kinshasa), Kenya.

37. *Saccopheronta nigra* VANSCHUYTBROECK

Type material examined. Holotype, ♂, Congo belge: Eala, 13.IX.1935, J. GHESQUIÈRE, 884 / ex fruits Klainedoxa / R. Mus. Nat. Hist. Belg. 10482 / type [red label] / P. VANSCHUYTBROECK det. 1951, *Saccopheronta nigra* n.sp. [RINS]; 1 ♂, Paratype [red label] / Congo belge: P.N.A., Mubuliba (volc. Nyamaragira), 2000 m, 14 au 26.VI.1935, G.F. DE WITTE: 1496 / P. VANSCHUYTBROECK det. 1951, *Saccopheronta pulchra* n.sp. [RINS].

Additional material. 1 ♂, Congo belge: P.N.A., Burunga (Mokoto), 2000 m, 17 au 19.III.1934, G.F. DE WITTE: 312 / P. VANSCHUYTBROECK det. 1951, *Saccopheronta hirsuticosta* PARENT [RINS]; 1 ♂, Congo Belge: P.N.A., Shamuheru (volc. Nyamaragira), 1843 m, 14 au 26.VI.1935, G.F. DE WITTE: 1477 / P. VANSCHUYTBROECK det. 1951, *Saccopheronta hirsuticosta* PARENT [RINS]; 1 ♂, Congo Belge: P.N.A., Mt. Sesero, pres Bitashimva (Bambous), 2000 m, 1 au 2.VII.1934, G.F. DE WITTE / P. VANSCHUYTBROECK det. 1951, *Saccopheronta hirsuticosta* PARENT [RINS]. 3 ♂ ♂, 1 ♀, Congo Belge: P.N.A., Mt. Sesero, pres Bitashimva (Bambous), 2000 m, 1 au 2.VII.1934, G.F. DE WITTE, 505; 4 ♂ ♂, Congo Belge: P.N.A., Tshamugussa (Bweza), 2250 m (Bambous), 9-10.VIII.1934, G.F. DE WITTE, 519 (527); 1 ♂, Congo Belge: P.N.A., Riv. Bishakishaki, Kamatembe (Plaine lave), 2100 m, 7 au 23.I.1935, G.F. DE WITTE, 1044; 1 ♂, Congo Belge: Ruanda, Lac n'Gando (pied Volc. Karisimbi), 2400 m, 6.III.1935, G.F. DE WITTE, 1243; 1 ♂, Congo Belge: Kivu, Rutshuru (Riv. Fuku), 1250 m, 5.VII.1935, G.F. DE WITTE, 1622 [RINS]; 1 ♂, 2 ♀ ♀, Coll. Mus. Congo, Ruanda: contref. Est Muhavura, 2100 m, P. BASILEWSKY, 28.I.1953 [RMCA].

Diagnosis. *S. nigra* differs from other species by yellow legs, brown-black body, and stick-shaped surstylus with a

row of strong ventral setae in apical half. Cercus with well developed ventral process. See description and drawings of *S. altimontana* in NEGROBOV et al., 1981 (Figs. 24-25).

Distribution: Congo (Kinshasa), Uganda, Rwanda (!).

38. *Saccopheronta pulchra* VANSCHUYTBROECK

Type material examined. Holotypus, ♂ [red label] / Congo belge: Kivu, Rutshuru (Envir. du poste) 1285 m, 18/23-VI-1934, G.F. DE WITTE: 447 / Coll. Mus. Congo (Ex coll. IPNCB) / P. VANSCHUYTBROECK det. 1949, *Saccopheronta pulchra* n.sp. Type [RMCA]; 24 ♂ ♂ paratypes, Paratype [red label] / Congo belge: Kivu, Rutshuru (Envir. du poste) 1285 m, 22.V au 4.VI.1934, 18/23-VI-1934, 29/31.V.1935, 1 au 6.VI.1935, 7.VI.1935, G.F. DE WITTE: 427, 447 1396, 1402, 1403, 1419, 1420 / P. VANSCHUYTBROECK det. 1951, *Saccopheronta pulchra* n.sp. [RINS].

Additional material. 4 ♂ ♂, 1 ♀, Congo belge: Kivu, Rutshuru, 1285 m, 7.VI.1935, G.F. DE WITTE: 1421 [&] 1423 / P. VANSCHUYTBROECK det. 1951, *Saccopheronta bicolor* PARENT [RINS]; 4 ♂ ♂, Congo belge: Kivu, Rutshuru, 1285 m, 22.V au 4.VI.1934, 7.VI.1935, G.F. DE WITTE: 427, 446, 1405 / P. VANSCHUYTBROECK det. 1951, *Saccopheronta hirsuticosta* PARENT [RINS]; 57 ♂ ♂, 38 ♀ ♀, Congo belge: P.N.A., Kivu, Rutshuru (Riv. Fuku, riv. Kanzarue, riv. Rodahira Lubirizi), 1000 m, (1200 m, 1250 m, 1285 m, 1500 m), 22.V-4.VI.1934 (18-23.VI.1934), 6.VI.1935 (1.VII.1935, 2.VII.1935, 3.VII.1935, 4.VII.1935, 5.VII.1935, 6.VII.1935, 13.VII.1935, 16.VII.1935), 427 (446, 448, 1409, 1415, 1612, 1614, 1622, 1626, 1644, 1645, 1655, 1677, 1680, 1685, 1686), G. F. DE WITTE [RINS]; 1 ♂, Musée du Congo, Kilimandcharo, Coll. Schouteden / Kolimandscharo, D.O.A. [RMCA]; 1 ♂, Musée du Congo, Stanleyville, 28.VI.1928, A. COLLART [RMCA]; 6 ♂ ♂, Congo Belge: P.N.G., Miss. H. DE SAEGER, Makpe (Nagero; PpK.12/d/9; PpK.60/d/8; II/hd/8), 3.VIII.1951 (5.XI.1951; 18.XII.1951; 2.I.1952; 10.V.1952), Réc. H. DE SAEGER, 2195 (2718, 2924, 2972, 3500); 9 ♂ ♂, 1 ♀, Congo Belge: P.N.G. Miss. H. DE SAEGER, 27.VII.1951, 18.XII.1951, 21.XII.1951, 2.I.1952, 3.I.1952, 22.V.1952, 15.VII.1952, 24.VII.1952, 9.IX.1952, H. DE SAEGER [RMCA]; 2 ♂, Coll. Mus. Congo, N. Lac Kivu: Rwankwi, XII.1951, J.V. LEROY [RMCA]; 1 ♂, Coll. R.I.Sc.N.B., Urundi: Plaine de la Ruzizi, 900 m, 23.VI.1953, F. FRANÇOIS [RINS]; 1 ♂, Gabon: Ntoun, VIII.1984, P.M., A. PAULY Réc. / Coll. R.I.Sc.N.B. [RINS]; 3 ♂ ♂, 2 ♀ ♀, Tanzania, East Usambara, Amani, 1000 m, 1.II.1977 / Zool. Mus. Copenhagen, H. ENGHOF, O. LOMHOLDT, O. MARTIN leg. [ZMUC].

Diagnosis. *S. pulchra* differs from other species in having yellow legs, metallic green body, bifurcated surstylus, and enlarged lateral lobi of hypandrium (see Fig. 5 in

GRICHANOV, 1997b, for *S. ulrichi*). See also remark under *S. shatalkini*.

Remark. The following species are also found among the paratypes of *S. pulchra* [RINS]: *Saccopheronta hirsuticosta* PARENT, *Saccopheronta shatalkini* GRICHANOV, *Saccopheronta nigra* VANSCHUYTBROECK, *Sympycnus munroi* CURRAN, *Thinophilus prudens* CURRAN. In addition, 28 mostly damaged female paratypes belong to *S. pulchra* mainly. Holotype of this species is identical to holotype of *S. ulrichi* (examined).

Distribution: Congo (Kinshasa), Uganda, Tanzania, Burundi (!), Gabon (!).

39. *Saccopheronta quinta* PARENT

Type material examined. Holotype, ♂, Congo Belge: Eala, 9.I.1935, J. GHESQUIÈRE / R. Mus. Hist. Nat. Belg. I.G. 10.482 / *Saccopheronta quinta* n.sp. Type. O. PARENT det., 1935 / Type [red label] [RINS].

Material examined. 1 ♂, 2 ♀♀, Gabon: VIII.1984, P.M. [RINS]; 1 ♂, Congo belge: P.N.U., Ganza pr. R. Kamau-dula, affl. Dr. Lukoko, 1860 m, 12-18. VI.1949, Mis. G. F. DE WITTE, 2684a / P. VANSCHUYTBROECK det. 1952, *Saccopheronta bicolor* PARENT [RINS]; 2 ♂♂, 4 ♀♀, Congo Belge: P.N.G., Miss. H. DE SAEGER, Makpe (Dedegwa; 2/gc/8; II/id/9), 5.XI.1951 (31.I.1952; 21.V.1952; 10.VII.1952; 9.IX.1952), H. DE SAEGER, 2718 (3081, 3499, 3765, 4042); 2 ♂♂, Congo Belge: P.N.G. Miss H. DE SAEGER, 27.VIII.1951, 2.I.1952, H. DE SAEGER [RMCA]; 4 ♂♂, 2 ♀♀, Congo Belge: P.N.G. Miss H. DE SAEGER, 20.X.1951, 2.I.1952, 17.V.1952, 22.V.1952, 15.VII.1952, 9.IX.1952, H. DE SAEGER [RMCA]; 1 ♂, Musée du Congo, Stanleyville, XI.1929, A. COLLART [RMCA]; 1 ♂, Musée du Congo, Stanleyville, 28.VI.1928, A. COLLART [RMCA].

Diagnosis. PARENT (1936) described a male without abdomen, but wing and legs including anterior tarsus allow to recognise the species. Despite the description, *S. quinta* has acrostichals in two rows, 2 strong medial and 2 lateral scutellar setae, 2/3 as long as medials. Only posterior femora are blackish in apical half, all tibiae are yellow; epandrial lobe is about 2/3 as long as surstylus, enlarged at apical third.

Distribution: Congo (Kinshasa), Uganda, Gabon (!)

40. *Saccopheronta shatalkini* GRICHANOV

Type material examined. ♂, Paratype [red label] / Congo belge: Kivu, Rutshuru, 1285 m, 1 au 6.VI.1935, G.F. DE WITTE: 1402 / P. VANSCHUYTBROECK det. 1951, *Saccopheronta pulchra* n.sp. [RINS]; 1 ♂, Congo Belge: P.N.A., 7-15.VII.1955, P. VANSCHUYT-

BROECK, 13274-309 / Paratype, *Saccopheronta ulrichi* NEGROBOV, VANSCHUYTBROECK, GRICHANOV [red label; RINS].

Additional material. 1 ♂, Coll. Mus. Congo, N. Lac Kivu: Rwankwi, 15.II.1952, J.V. LEROY [RMCA]

Diagnosis. *S. shatalkini* is closely related to *S. pulchra*, differing by blackish anterior tibia and tarsus, bluish reflection of body, dark anterior part of wing, weak but distinct differences in hypopygium morphology (see Fig. 4 in GRICHANOV, 1997b).

Distribution: Kenya, Congo (Kinshasa) (!).

41. *Saccopheronta zicsiana* GRICHANOV

Material examined. 1 ♂, Kenya, W Kakamega, #73, Kakamega Forest Reserve, 00°22' N, 34°53' E, 1620 m, Date: 24.XI.1992, A. WHITTINGTON & J. LONDT, Indigenous forest paths [NMP].

Distribution: Tanzania, Kenya.

42. *Thrypticus bellus* LOEW

Material examined. 1 ♂, S. Africa, Transvaal, 5 km W. Sabie, 2530Bb, Lone Creek River, XII, 5, 1976, RM MILLER [NMP]; 6 ♂♂, Gillits, Pinetown district, Natal, S. Africa, B. & P. STUCKENBERG [NMP]; 6 ♂♂, Congo Belge: P.N.G. Miss H. DE SAEGER, 11.X.1951, 20.X.1951, 19.XI.1951, 4.IX.1952, 10.IX.1952, 16.IX.1952, H. DE SAEGER [RMCA].

Diagnosis. Differs from *T. fennicus* BECKER by having smaller size, lighter legs, especially tibiae, and other characters. *T. fennicus* is characterised by much larger size (2.5-3.0 mm), thickened and densely pubescent arista, different ratio of m-cu to CuA₁ etc. *T. bellus* has hypandrium arising basoventrally, long and thin, nearly straight, parallel-sided in distal half, with short constriction in the middle and slight basal melanization beyond constriction; aedeagus thin, arising from base of epandrium, apically cleft.

Distribution: Congo (Kinshasa), Tanzania, Kenya, Ethiopia, Senegal, South Africa (!); St. Helena; Egypt, Europe, Palearctic Asia.

43. *Thrypticus kataevi* GRICHANOV

Material examined. 1 ♂, Wit River Valley, Cambria Area, Patensie Distr., 6.12.1967, 3324Da, B. & P. STUCKENBERG [NMP]; 5 ♂♂, Congo Belge: P.N.G. Miss H. DE SAEGER, 23.II.1951, 14.VIII.1951, 10.III.1952, 11.III.1952, 9.IX.1952, H. DE SAEGER [RMCA].

Diagnosis. The species is similar to *T. bellus*, differing by having smaller size, mostly yellow tarsi and different characters of hypopygium. Hind basitarsus is equal in length to the 2nd segment. Hypandrium parallel-sided (ventral view), with distinct flexion at distal 2/3 (lateral view). Surstylus half as long as epandrium, with acute apex. Cercus with strong setae and digitiform apical section.

Distribution: Congo (Kinshasa), Cameroon, Kenya, Swaziland, South Africa (!).

KEY TO AFROTROPICAL GENERA OF MEDETERINAE

1. R_{4+5} and M_{1+2} parallel to apex 2
 - R_{4+5} and M_{1+2} convergent, at most subparallel at apex 5
2. Acrostichal setae present; hind coxa with 2 lateral setae; body coloration usually bright metallic green 3
 - Acrostichal setae absent; hind coxa with 1 lateral seta; body coloration usually dark 4
3. Female oviscapt blade-like, sclerotized, narrow in dorsal view; male surstylus strongly deflexed dorsad, usually lying conformably with similarly deflexed, oblong-shaped cerci *Thrypticus* GERSTAECKER
 - Female oviscapt soft, male surstylus and cercus usually not deflexed dorsad *Corindia* BICKEL
4. Arista apicolateral; distal sectors of R_{4+5} and M_{1+2} straight; male 7th abdominal segment forming pedicel; hypopygium symmetrical; hypandrial lobes present; aedeagus without lateral lobes *Paramedetera* GROOTAERT et MEUFFELS
 - Arista apical; distal sectors of R_{4+5} and M_{1+2} weakly arched anteriorly; 7th abdominal segment semicircular, narrow; hypopygium sessile, asymmetrical; hypandrial lobes absent; aedeagus with large lateral lobes *Grootaertia* GRICHANOV
5. Male 1st tergite with a pair of dorsal bulbs; female with several strong bristles at the same place; 5 dorsocentral setae of approximately equal length, no acrostichals *Craterophorus* LAMB
 - Male and female 1st tergite unmodified, at most with several long lateral hairs; no more than 4 dorsocentrals of equal length, if 5 or 6 setae, then setae gradually decreasing in size anteriorly; acrostichals usually present, biserial 6
6. R_{4+5} and M_{1+2} weakly convergent, almost subparallel; male anterior 3rd tarsomere usually flattened and enlarged or, if simple, then apical part of CuA_1 at least 2.5 times longer than $m-cu$, $m-cu$ equal to or longer than maximum distance between R_{4+5} and M_{1+2} , and 3rd section of costa at least 4 times longer than 4th *Saccopheronta* BECKER
 - R_{4+5} and M_{1+2} strongly convergent or, if subparallel at apex, then male anterior 3rd tarsomere simple,

apical part of CuA_1 no more than twice longer than $m-cu$, $m-cu$ shorter than maximum distance between R_{4+5} and M_{1+2} , and 3rd section of costa no more than 4 times longer than 4th *Medetera* FISCHER VON WALDHEIM

KEYS TO AFROTROPICAL SPECIES OF MEDETERINAE

Genus *Corindia* BICKEL

1. Part of costa between R_{2+3} and R_{4+5} about 5 times longer than this between R_{4+5} and M_{1+2} ; surstylus simple, knoblike *C. danielssoni*
 - Part of costa between R_{2+3} and R_{4+5} approximately 2.5–3 times longer than this between R_{4+5} and M_{1+2} ; surstylus branched 2
2. Cercus longer than surstylus; dorsal lobe of surstylus longer than ventral lobe; ventral lobe with simple setae *C. verschureni*
 - Cercus not longer than surstylus; dorsal lobe of surstylus shorter than ventral lobe; ventral lobe with broad spoonlike ventral seta *C. saegeri*

Genus *Craterophorus* LAMB

1. Face narrow, 2–3 times higher than wide in middle 2
 - Face approximately as wide as high 4
2. Antenna and legs entirely yellow *C. mirus*
 - Antenna black; femora mostly black 3
3. Posterior wing margin concave between anal lobe and CuA_1 ; $m-cu$ shorter than apical part of CuA_1 *C. currani* (paratype)
 - Posterior wing margin without emargination; $m-cu$ longer than apical part of CuA_1 *C. currani* (holotype)
4. Male fore and midfemora brown at base, brownish in middle; hind femur mostly dark-brown; 5th joint of fore tarsus with short hairs; alula simple and bare *C. parenti*
 - Fore and midfemora entirely yellow, at most fore femora darkened posteriorly; 5th joint of fore tarsus with strong apicodorsal setae; alula with a regular row of small stiff setae 5
5. Coxae entirely greyish silvery *C. mirabilis*
 - Coxae yellow, greyish silvery only at base *C. permirus*

Genus *Grootaertia* GRICHANOV

1. Pleurae and abdominal terga mostly black; aedeagus narrow in basal part; one unpaired surstylus in addition to two pairs; long dorsal setae on ventral pair of surstyli present; cercus large, with distinct fingerlike distolateral lobe *G. kuznetsovi*

- Pleurae and abdominal terga mostly yellow; aedeagus swollen in basal part; surstyli glabrous, rarely with short hairs; cercus usually small 2
- 2. Hypopygium with 1 pair of surstyli; aedeagus with simple lateral lobes 3
- Hypopygium with at least 2 pairs of surstyli; aedeagus with one of lateral lobes incised or bifurcated 4
- 3. Surstyli twice longer than epandrium, positioned symmetrically at distodorsal margin; cercus small *G. bistylata*
- Surstyli as long as epandrium, asymmetrical: left surstylus simple, dorsolateral in position, arising at base of cercus; right surstylus ventrolateral in position, arising at base of hypandrium, with narrow basal process 1/3 as long as surstylus; cercus large *G. asymmetrica*
- 4. Epandrium twice longer than high; 3 pairs of glabrous surstyli shifted to apicodorsal margin; cerci concealed; aedeagus with large medial foramen *G. anomalipennis*
- Epandrium 1.5 times longer than high; ventral pair of surstyli glabrous, attached to epandrium apicoventrally; right dorsal lobe arising apicoventrally, with short hairs in middle half; left dorsal lobe arising apicodorsally, with short hairs in middle half; unpaired short glabrous surstylus positioned left apicodorsally; cerci exposed; aedeagus without medial foramen *G. anomalopyga*

Genus *Medetera* FISCHER VON WALDHEIM

- 1. Two strong scutellar setae with greatly reduced lateral hairs 2
- Four strong scutellars, lateral ones at least half as long as medians 13
- 2. Four pairs of strong dorsocentrals with the 1st one at least half as long as the 4th; legs mostly reddish-yellow, coxae entirely and femora in basal half brown or black *M. mainei*
- Two or three strong dorsocentrals with 2 or more hair-like setulae in front of the first one 3
- 3. Two strong dorsocentrals with several short hair-like setae anteriorly 4
- Three strong dorsocentrals gradually decreasing in size anteriorly 10
- 4. Femora mostly black, antenna black 5
- Legs yellow, antenna brownish 8
- 5. Legs entirely black-brown 6
- Femora black in basal half; tibiae yellow 7
- 6. Cercus and surstylus with short simple apical setae *M. otiosa*
- Cercus and surstylus with long flattened apical setae *M. ghesquierei*
- Cercus with long pointed apical process and long ventral subapical seta, surstylus with simple setae *M. pseudotiosa*

- 7. Thorax metallic green; R_{4+5} and M_{1+2} parallel in apical part (female) *M. nocturna*
- Thorax bronze black; R_{4+5} and M_{1+2} convergent 7a
- 7a. Surstylus bilobate *M. pseudotiosa*
- Surstylus trilobate *M. praedator*
- 8. R_{4+5} and M_{1+2} almost parallel; wing 1.3 mm *M. lvovskii*
- R_{4+5} and M_{1+2} distinctly convergent; wing 1.9-2.0 mm 9
- 9. Median lobe of surstylus expanded apically *M. norlingi*
- Median lobe of surstylus narrowed and rounded apically *M. edwardsi*
- 10. Anterior coxa mostly yellow, greyish anteriorly; posterior basitarsus half as long as 2nd tarsomere; arista apical; *m-cu* slightly longer than apical part of CuA_1 ; Sudan *M. araneipes*
- Anterior coxa usually black except extreme apex; posterior basitarsus 1/3 length of 2nd tarsomere 11
- 11. Wing vein *m-cu* 1.5-2 times longer than apical part of CuA_1 ; arista dorsal; posterior basitarsus with basoventral tooth *M. polleti*
- Wing vein *m-cu* equal to or shorter than apical part of CuA_1 ; posterior tarsus simple 12
- 12. Arista apical; wing vein *m-cu* equal to or slightly shorter than apical part of CuA_1 *M. subchevi*
- Arista dorsal; wing vein *m-cu* half as long as apical part of CuA_1 *M. seksyaevae*
- 13. Legs mostly black-brown, sometimes knees reddish-yellow or tibiae brownish 14
- Legs mostly reddish-yellow, sometimes femora mostly dark 24
- 14. Anterior coxa with pale cilia 15
- Anterior coxa with black cilia 19
- 15. Frons purple brilliant; face polished, entirely brilliant violet; lower calypter with black cilia *M. polita*
- Frons and face entirely pollinose, faintly brilliant; lower calypter with pale cilia 16
- 16. Tibia reddish-yellow 17
- Legs entirely black or only knees and tarsi somewhat lighter 18
- 17. Antenna brown, arista dorsal; 3 mm *M. normalis*
- Antenna black, arista apical; 2 mm (female) *M. varitibia*
- 18. Wing-vein *m-cu* as long as apical part of CuA_1 ; posterior basitarsus 1/3 length of second tarsomere, with basal tooth; posterior tibia apically swollen, with two apicolateral hooks; size about 3 mm *M. rikhterae*
- Wing-vein *m-cu* 2/3 length of apical part of CuA_1 ; posterior basitarsus simple, 2/5 as long as second tarsomere; posterior tibia simple, with at most several inconspicuous black thick posterior apical setae; 2 mm *M. ealenensis*
- 19. Anterior coxa with apical hook of glued setae; postocular setae entirely black; lower calypter with

- black cilia; body without antenna 1.75-2.0 mm *M. hamata*
- Anterior coxa with simple ciliation; 2.5 to 3 mm 20
20. Hind femora without anterior setae 21
- Hind femora with several anterior setae in apical half, as long as femora diameter 22
21. Cercus articulated with large distal part; surstylus fine, greatly curved ventrad *M. pospelovi*
- Cercus with 2 apical flattened setae and short sub-apical ventral process; surstylus bilobate, slightly curved *M. ghesquierei*
22. Postocular setae entirely black; lower calypter with black cilia; halter brown *M. munroi*
- Postocular setae partly yellow; lower calypter with yellow cilia; halter yellow 23
23. Apical part of CuA_1 $\frac{1}{4}$ longer than *m-cu*; surstylus and cercus narrowed at apex *M. capensis*
- Apical part of CuA_1 1.5 times longer than *m-cu*; surstylus with broad apical lobe and long narrow middorsal process; cercus with broad rounded apex bearing large flattened apicodorsal seta directed ventrad and 2 thick and 2 fine apicoventral setae *M. stoltzei*
24. All coxae yellow; scutellum usually partly yellow; male fore basitarsus with anteroventral apical process, half as long as next tarsomere *M. luteoscutata*
- Middle and hind coxae usually dark; scutellum entirely dark; fore basitarsus simple 25
25. Clypeus wholly white or brown pollinose; face and frons similarly clothed, ground colour almost entirely hidden; two pairs of strong dorsocentrals and six or more short hair-like ones in a row in front of suture; antenna brown; arista dorsal; coxae black; femora blackish except apices *M. normalis*
- Clypeus not wholly pollinose, at least the middle shining, or if pollinose, then femora yellow; other features various 26
26. Basal half of anterior four femora black; thorax and abdomen black 27
- Anterior four femora wholly pale or but little darkened basally 28
27. Propleura with 2 or 3 black setae; coxae with blackish cilia; cercus black with black hairs; surstylus brownish-red; 2.0 to 2.5 mm *M. varitibia*
- Propleura with white setae; coxae with pale cilia; 3.75 mm (female) *M. subviridis*
28. First flagellomere subtriangular with dorsal arista; all coxae black-brown; femora yellow 29
- First flagellomere usually rounded, with apical arista 30
29. Basal part of CuA_1 thickened in male *M. chumakovi*
- Basal part of CuA_1 simple *M. seksyaevae*
30. Lateral scutellars about $\frac{2}{3}$ length of median ones; frons pollinose; hind femora black in basal half, or if yellow, then epandrium greatly inflated basally 31

- Lateral scutellars half as long as median ones; femora usually yellow, or if brown above, then frons mostly shining; epandrium gradually narrowed apicad 32
31. Clypeus shining black with sides pollinose; thorax and scutellum tawny brown pollinose, vittae of mesonotum not distinct; femora reddish, hind femora black in basal half, mid femora sometimes slightly darkened basally; cercus brown with black hairs; surstylus brown, bare *M. penura*
- Clypeus satiny metallic blue-green; thorax grey-brown pollinose, with 3 bronze vittae; 4 to 6 strong dorsocentrals, decreasing in size anteriorly; femora yellow, sometimes infuscated at base; male hind basitarsus with anteroventral basal tooth; epandrium greatly inflated basally; cercus yellow *M. griseascens*
32. Antenna mostly yellow with 1st flagellomere mostly brown; surstylus with long and narrow basodorsal process *M. norlingi*
- Antenna entirely black; surstylus without long basodorsal process 33
33. All coxae yellow, slightly pollinose; second tarsomere of hind tarsus 3.2 times longer than first; 7th abdominal segment approximately as long as epandrium *M. cederholmi*
- Middle and hind coxae distinctly dark-greenish, densely pollinose; second tarsomere of hind tarsus 2.5 times longer than first; 7th abdominal segment shorter than epandrium 34
34. Frons shining brownish black; epistome dark-green, pollen not dense; coxae appearing rather greenish; scutellum shining green basally, brownish pollinose on apical half and margin; cercus yellow, with fine yellow hairs; surstylus reddish-brown, slightly thickened towards apex, with considerable yellow hair at apex *M. afra*
- Frons only shining in the middle above; epistome densely brown pollinose; anterior coxa distinctly reddish-yellow; base of scutellum shining brownish with scarcely a greenish tinge; cercus brownish-red; surstylus without considerable apical hair *M. simplicis*

Genus *Saccopheronta* BECKER

1. Two pairs of strong dorsocentrals; legs yellow *S. nudipes*
- Three pairs of strong dorsocentrals 2
2. All coxae yellow, rarely midcoxa mostly dark, legs yellow 3
- At least mid and hind coxae mostly dark 4
3. Surstylus bifurcated; cercus simple; lower calypter brown with dark cilia *S. pulchra*
- Surstylus non-bifurcated, with pedunculate setae in basal half; cercus bifurcated, with strong apical setae; lower calypter yellow with light cilia *S. zicsiana*

4. Posterior femur at least half black or brown . . . 5
 - All femora yellow 11
5. All femora black-brown in basal half 6
 - Anterior femur yellow 8
6. Three dorsocentrals with the first one half as long as the second; at least the scape yellow-brownish; surstylus thick, blunt, with three long undulate apical setae *S. demeteri*
 - Three strong dorsocentrals of equal length; antenna black 7
7. Arista dorsal or subapical; first flagellomere triangular *S. parvilamellata*
 - Arista apical; first flagellomere rounded; surstylus split on apex *S. caffra*
8. Middle femora yellow; posterior femora black in apical 2/3 9
 - Middle and posterior femora brown-black except apical 1/3 10
9. All tibiae black except base; epandrial lobe very short, simple *S. nigriritibia*
 - All tibiae yellow; epandrial lobe about 2/3 as long as surstylus, enlarged at apical third *S. quinta*
10. Second tarsomere of fore tarsus nearly as long as the third; surstylus swollen at base, thin in apical half *S. arnaudi*
 - Second tarsomere of fore tarsus approximately half as long as the third; surstylus stick-shaped *S. aperta*
11. Anterior tibia mostly dark; anterior tarsus entirely black 12
 - All tibiae yellow; tarsi mostly yellow 13
12. All tibiae mostly black; wing hyaline; apex of lateral lobi of hypandrium with shallow dorsal excavation *S. nigriritibia*
 - Only anterior tibia mostly black; wing darkened along costa; apex of lateral lobi of hypandrium rounded *S. shatakini*
13. Body metallic green; surstylus bifurcated; epandrial lobe strongly enlarged *S. pulchra*
 - Body brown or black; surstylus and epandrial lobi simple 14
14. Surstylus plane, broad, leaf-shaped in dorsal view, with several long lateral setae; fore tarsus usually blackish-brown *S. hirsuticosta*
 - Surstylus stick-shaped rather than leaf-shaped; fore basitarsus mostly yellow 15
15. Cercus with well developed ventral process . . . 16
 - Cercus with small ventral prominence 17
16. Surstylus with a row of strong ventral setae in apical half *S. nigra*
 - Surstylus with long apical setae, without ventral row of strong setae *S. glabra*
17. Second tarsomere of fore tarsus nearly as long as third; fore coxa brown; surstylus with 4 long dorsal setae in basal 2/3 and 3 pedunculate setae in basal 1/3 *S. fletcheri*
 - Second tarsomere of fore tarsus half as long as the third; fore coxa yellow; surstylus without long or pedunculate setae in basal two thirds . . . *S. aperta*

Genus *Thrypticus* GERSTAECKER

1. Coxae and legs yellow, mid coxa brown externally; hypandrium thin and straight; larger species: about 2.6 mm *T. afer*
 - At least mid and hind coxae black-brown or dark-green, femora partly brown or black-green; smaller than 2 mm 2
2. Legs usually dark, sometimes knees and tibiae at base yellow; hypandrium straight, parallel-sided, thin, no more than twice wider than epandrial lobe, with indentation at the middle; surstylus with small excavation apically; cercal apical section angular at apex; 1.4-1.9 mm *T. bellus*
 - At least knees widely yellow; hypandrium at least 4 times wider than epandrial lobe, with flexion at 2/3 or 3/4 (if hypandrium with flexion before middle, then it very broad); surstylus without excavation apically; cercal apical section with rounded apex 3
3. Femora partly, all tibiae and bases of tarsi yellow; hypandrium approximately 4 times wider than epandrial lobe, with flexion at 2/3 or 3/4, parallel-sided (lateral view) or dilated at apex (ventral view) . . 4
 - Legs usually mostly dark; femora in apical 1/3 and tibiae in basal 1/3 yellow; hypandrium much wider than epandrial lobe, very broad in middle part (lateral view), with flexion at 2/3 or before middle . . . 5
4. Hind basitarsus distinctly shorter than 2nd segment; hypandrium gradually narrowed (ventral view) to flexion at distal 3/4 (lateral view); hypandrium beyond flexion strongly widened in the middle and slightly narrowed at apex (ventral view); surstylus with rounded apex; cercus with fine cilia and pyriform section having broad rounded apex and bearing about 6 short marginal setulae; 1.5 mm *T. mironovi*
 - Hind basitarsus equal or nearly equal in length to 2nd segment; hypandrium parallel-sided (ventral view), with flexion at distal 2/3 (lateral view); surstylus with narrow apex; cercus with strong setae and digitiform apical section having rounded apex and bearing 3 rather strong dorsal and apical setae; 1.1-1.3 mm *T. kataevi*
5. Epandrial lobe 1/5 as long as surstylus; hypandrium with indentation at distal 2/3; aedeagus with ventral row of four short denticles in middle third; surstylus acute-angular at apex, with strong ventral seta just beyond the middle; 1.2 mm *T. zagulyaevi*
 - Epandrial lobe 2/5 as long as surstylus; hypandrium with constriction before the middle; aedeagus with ventral row of short denticles in basal half; surstylus with strong ventral seta at 3/4 and rounded apex; 1.8-2.0 mm *T. sinevi*

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