New Afrotropical Sciapodinae and Medeterinae with a review of Namibian Dolichopodidae (Diptera)

[Neue afrotropische Sciapodinae und Medeterinae nebst einer Übersicht der Langbeinfliegen Namibias (Diptera: Dolichopodidae]

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Abstract Abundant new material has been examined mainly from the collections of the National Museum of Namibia (Windhoek) and Natal Museum (Pietermaritzburg). Descriptions of **15 new species** and **2 new subspecies**, new records for known African species are given. The genus *Teuchophorus* LOEW is recorded for Tropical Africa for the first time. The Namibian fauna of the family is also briefly reviewed. A key to Namibian genera of the family is presented. Now 25 genera and 41 species of Dolichopodidae are known from Namibia.

Key words Diptera, Dolichopodidae, Sciapodinae, Medeterinae, new species, new records, keys, Tropical Africa, Namibia

Zusammenfassung Zahlreiche neu aufgesammelte Doilichopodiden aus den Beständen des National-Museums von Namibia (Windhoek) und des Natal Museums (Pietermaritzburg) sind Gegenstand vorliegender Arbeit. Beschreibungen von **15 neuen Arten, 2 neuer Unterarten** und neue Nachweise bereits bekannter afrikanischer Arten resultieren aus der Bearbeitung des Materials. Die Gattung *Teuchophorus* LOEW wird erstmals für das tropische Afrika vermeldet. Die Fauna der Dolichopodiden Namibias wird kurz analysiert und ein Schlüssel der hier vorkommenden Gattungen von Dolichopodiden gegeben. Nunmehr sind 25 Gattungen mit 41 Arten der Dolichopodiden aus Namibia bekannt.

Stichwörter Diptera, Dolichopodidae, Sciapodinae, Medeterinae, neue Arten, neue Meldungen, Bestimmungsschlüssel, tropisches Afrika, Namibia

Introduction

The Afrotropical fauna of Sciapodinae and Medeterinae was recently reviewed by GRICHANOV (1998c, 1999a, 1999b). Treating material from the collections of National Museum of Namibia, Windhoek [NMN], Natal Museum, Pietermaritzburg, South Africa [NMP], the Royal Institute for Natural Sciences, Brussels [RINS] and the Royal Museum for Central Africa, Tervuren [RMCA], I have found abundant new material on the subfamilies Sciapodinae and Medeterinae. Descriptions of 15 new species and 2 new subspecies, new records for known African species are given here. *Mesorhaga kirkspriggsi* spec. nov., *Condylostylus sinclairi* spec. nov., *Parentia asymmetrica* spec. nov., *Medetera cimbebasia* spec. nov. are described from Namibia, *Grootaertia irwini* spec. nov., *Grootaertia brevipennis* spec. nov., *Medetera africana africana* spec. nov., *Medetera calvinia* spec. nov., *Medetera londti* spec. nov., *Medetera pallidotiosa* spec. nov., *Medetera vaalensis* spec. nov., *Thrypticus parabellus* spec. nov. from South Africa, *Medetera bweza* spec. nov., *Corindia demoulini* spec. nov. from Congo (Kinshasa), *Condylostylus ulrichi* spec. nov. from Kenya, *Medetera africana senegalensis* subspec. nov. from Senegal, *Medetera praedator aequatorialis* subspec. nov. from Tanzania, Burundi and Congo (Kinshasa). The Genus *Teuchophorus* LOEW, 1857 is recorded for Tropical Africa for the first time. Now 13 genera and 218 Afrotropical species of Sciapodinae are known. It is the largest subfamily in the Region. Seven genera and 79 Afrotropical

species and subspecies of Medeterinae are known from the Region. The subfamily Medeterinae is the most diverse in southern Africa, in contrast to the Sciapodinae with its great number of species in central Africa. The two subfamilies include more than a half of the known dolichopodid species. The Namibian fauna of the family is also briefly reviewed. A first key to Namibian genera of the family is presented. Now 25 genera and 41 species of Dolichopodidae are known from Namibia. Species of the subfamily Medeterinae (13) and genus *Medetera* FISCHER VON WALDHEIM (10) dominate in the dolichopodid fauna of the country.

Deposition of types of the new species is mentioned under the new names. Bibliography includes works published after the "Catalogue of the Diptera of the Afrotropical Region" (DYTE & SMITH 1980). Namibian material examined is deposited in the National Museum of Namibia, Windhoek.

Descriptions

SUBFAMILY SCIAPODINAE

Mesorhaga SCHINER, 1868

Mesorhaga kirkspriggsi spec. nov.

(Fig. 1)

Holotype ♂: Namibia, Rundu dist., Simanya Okawango River, 17°33'17"S, 18°32'30"E, 23-24.I.1998, KIRK-SPRIGGS & MARAIS, Malaise traps, riverine forest / *Mesorhaga* spec., det. B. J. SINCLAIR, 1999 [NMN]. **Paratype**. ♂ with the same 1st label.

Male

Head: vertex deeply excavated. Frons and face metallic dark-green, whitish pollinose. A fine front vertical seta bends forward on each side; ocellar tubercle with 1 pair of strong bristles and pair of weaker posterior setae; 2 long postvertical setae positioned as a linear continuation of the postocular setal row. Upper postocular setae black, lateral postoculars white. Ventral postcranium covered with irregular white hairs. Face narrowed, approximately 1.3 times as high as wide under antennae. Proboscis and palpus brown, with short light hairs; palpus with 1 strong black seta in addition. Antennae black. Pedicel with ring of short setae; 1 or 2 ventral setae longer than pedicel. First flagellomere rounded, as long as high, with short hairs. Arista microscopically haired, with 1st segment slightly thickened. Length ratio of scape to pedicel to first flagellomere to segments of arista, 5 : 4 : 6 : 5 : 37. **Thorax**: Mesonotum and scutellum metallic bluish-green. Pleura bronze-black, whitish pollinose. 5 strong dorsocentral setae, 1-2 pairs of weak acrostichals anteriorly, a pair of strong and pair of fine lateral scutellars, half as long as medial setae. **Legs**: mostly yellow; fore coxa yellow, middle coxa mostly dark-brown, hind coxa brown in basal half, hind tibia with narrow brown stripe on posterodorsal surface in the 2nd quarter, apical segments of fore tarsus brown, mid tarsus black from tip of basitarsus, hind tarsus black from 2nd half of basitarsus. Fore and middle coxae with numerous yellow cilia anteriorly; hind coxa with yellow external seta and several hairs. All femora with light ventral hairs, shorter than diameter of femora. Fore tibia bare; last tarsomere of fore tarsus slightly flattened. Length ratio of fore coxa to femur to tibia to tarsus (segments from first to fifth), 30 : 57 : 57 : 30 : 13 : 9 : 6 : 7. Middle tibia and basitarsus with several apical setae, tarsus simple. Length ratio of middle coxa to femur to tibia to tarsus (segments from first to fifth), 25 : 65 : 74 : 44 : 18 : 12 : 10 : 7. Hind tibia without strong setae. Last tarsomere of hind tarsus slightly flattened. Length ratio of hind coxa to femur to tibia to tarsus (segments from first to fifth), 20 : 70 : 85 : 30 : 28 : 18 : 12 : 8. **Wings**: yellowish; veins pale brown. R_1 reaching mid-wing. R_{2+3} straight. R_{4+5} gently curved to M_1 at apex. M_1 with two 135° bends; the basal bend positioned at 1st third of distal part of the vein. Ratio of parts of costa between R_{2+3} and R_{4+5} to those between R_{4+5} and M_1, 33 : 7. M_2 absent. Crossvein *m-cu* straight. Ratio of crossvein *m-cu* to apical part of M_{1+2} (up to curvation) to apical part of CuA_1, 18 : 28 : 40. Alula weakly developed. Fold-like anal vein and broad anal lobe present. Anal angle acute or right. Lower calypter yellow with brownish rim and fan of dark cilia. Halter pale yellow.

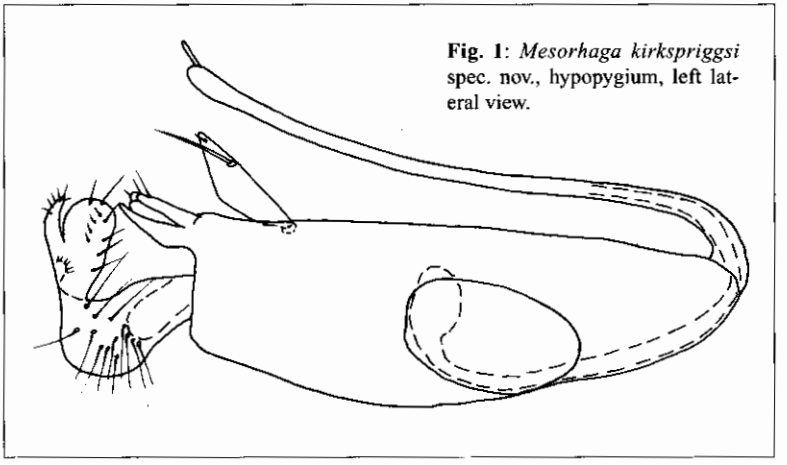


Fig. 1: *Mesorhaga kirkspriggsi* spec. nov., hypopygium, left lateral view.

Abdomen: bronze-black, with short black hairs. First tergite with several long black distolateral bristles. Ventrum with white hairs. Seventh segment shortened. Hypopygium entirely black-brown, epandrium elongate. Cercus hook-like, strongly curved ventrad, thick in basal half, with short dorsolateral setae, narrowed beyond middle, widened at apex; distal part with distinct dorsal process and several simple setae as figured. Surstylus bi- or trilobate, with several distal setae. Epandrial lobe long, flattened, bearing one strong seta beyond the middle and very small seta at apex.
Length: body 2.4-2.6 mm; antenna 0.7 mm; wing 2.5 mm/1.0 mm; hypopygium 0.8 mm.

Female
Unknown.

Distribution: Namibia.

Etymology: The species is named after one of the collectors, A. H. KIRK-SPRIGGS.

Diagnosis: The new species is related to *M. tsurikovi* GRICHANOV, 1998 (GRICHANOV 1998c: Fig. 3), differing in smaller size, entirely yellow femora, CuA_1 twice longer than crossvein *m-cu* and hypopygium morphology.

Condylostylus BIGOT, 1859

Condylostylus sinclairi spec. nov.

(Fig. 2)

Holotype ♂: Namibia, Rundu dist., Katara Okavango R., 17°48'56"S, 18°53'38"E, 20-23.I.1998, KIRK-SPRIGGS & MARAIS, Malaise traps / Namibian National Insect Collection, National Museum, P. O. Box 1203, Windhoek, Namibia. **Paratypes** [mostly on pins, two of them with additional label: *Condylostylus* spec., det. B. J. SINCLAIR, 1999]. 7♂♂, 3♀♀, same labels; 20♂♂, 3♀♀, Namibia: Rundu dist., Simanya Okawango River, 17°33'17"S, 18°32'30"E, 23-24.I.1998, KIRK-SPRIGGS & MARAIS, Malaise traps, riverine forest; 4♂♂, 1♀, Namibia: Rundu dist., 1 km S of Katara, 17°50'25"S, 18°54'26"E, 22-23.I.1998, KIRK-SPRIGGS & MARAIS, Malaise traps, primary forest; 1♂, 1♀, Namibia: Rundu dist., Matende River, 17°54'46"S, 19°35'16"E, 20-21.I.1998, MARAIS & KIRK-SPRIGGS, Malaise traps, primary forest; 1♀ [in alcohol], Leeupan, Kaudom Game reserve, 18°40'S, 20°52'E, 12-14.I.1991, E. MARAIS; 2♂♂, 1♀ [in alcohol], Mangetti, Quarantine Camp: Kavango, 18°40'S, 19°02'E, 11.I.1993, E. MARAIS [NMN].

Male
Head: Frons metallic blue-green, shining. A strong front vertical bristle bends forward, arising from small mound covered with 8-10 white hairs; fine postvertical bristle is positioned as a linear continuation of the postocular setal row. Ocellar tubercle with a pair of strong setae and pair of posterior hairs. Upper postocular setae short, black, uniseriate; lower postoculars white, in several rows. Ven-

tral postcranium covered with irregular white hairs. Face greenish-blue, silvery-white pollinose, broad; ratio of its height to width under antennae to width at clypeus, 55 : 36 : 20. Bulging clypeus nearly as high as epistome. Proboscis brownish, palpi black, with light hairs and 1-3 black setae. Antennae black, slightly longer than height of head, with small simple segments. Pedicel with short setulae laterally, 1-2 dorsal and 2-3 ventral very long bristles, which 2-3 times longer than 1st flagellomere. First flagellomere rounded, not longer than high, with short hairs. Arista dorsal, microscopically haired. Length ratio of scape to pedicel to first flagellomere to arista, 6 : 6 : 6 : 95.

Thorax: Mesonotum and scutellum metallic bluish-green, slightly pollinose. Pleura bronze, white pollinose. Five dorsocentral bristles gradually decreasing in size anteriorly with two strongest posterior pairs. Usually 2 pairs of long acrostichals. Scutellum with two pairs of strong setae. **Legs**: mostly yellow. Mid coxa with brown external spot; hind femur brownish at extreme apex; tarsi black except for base of anterior four basitarsi. Fore coxa from the front with numerous yellow hairs and 3 black subapical setae. Mid coxa from the outside with light hairs and several black cilia. Hind coxa with one black external seta and several yellow hairs. Femora with 2 rows of white fine ventral hairs, slightly longer than femora diameter. Fore tibia with 2 long black apical posteroventral setae. Fore basitarsus slightly swollen in basal half, with ventral pile along entire length. Length ratio of fore coxa to femur to tibia to tarsus (segments from first to fifth), 50 : 80 : 92 : 78 : 31 : 19 : 12 : 9. Middle tibia with 1 anterodorsal at basal fifth and several apical setae, without remarkable hairs. Mid tarsus simple. Length ratio of middle coxa to femur to tibia to tarsus (segments from first to fifth), 40 : 96 : 135 : 110 : 28 : 21 : 10 : 10. Last tarsomeres of hind tarsi slightly thickened. Length ratio of hind coxa to femur to tibia to tarsus (segments from first to fifth), 30 : 114 : 177 : 84 : 30 : 18 : 12 : 8.**Wings**: elongate-oval, mostly hyaline, brown along costa in apical 2/3, with 2 broad transverse brown stripes along *m-cu* and vein-fork M_{1+2}; veins brown. Venation undisturbed. R_{4+5} gently curved to M_1 in apical fifth. M_{1+2} slightly convex anteriad in apical half. M_1 strongly convex basad, forming acute angle with M_{1+2}. M_2 as a linear continuation of M_{1+2}. Ratio of part of costa between R_{2+3} and R_{4+5} to this between R_{4+5} and M_1, 49 : 5. Crossvein *m-cu* straight. Ratio of crossvein *m-cu* to apical part of M_{1+2} (fork-handle) to apical part of CuA_1, 38 : 65 : 29. Anal vein fold-like, anal lobe and alula developed. Anal angle acute. Lower calypter brown, with mostly black cilia. Halter brown; halter stem thin, 1.5 times longer than knob, with row of setulae in front of knob.

Abdomen: thin and long, metallic green-blue-black, posteriorly entirely black-violet, with short black hairs and long fine marginal setae. First tergite with membranous excavation, longitudinal dorsal furrow and white lateral hairs; ventrum with white hairs. Unmodified segments combined 2 times as long as mesonotum. 5-6th segments swollen, 7th tergite short. Hypopygium subtriangular, black, with short black hairs. Hypandrium distinct. Cercus long, filiform, slightly swollen in basal 1/3, black, with numerous short black hairs along entire length. Cercus 2 times as long as epandrium. Surstylus and epandrial lobe greatly reduced.

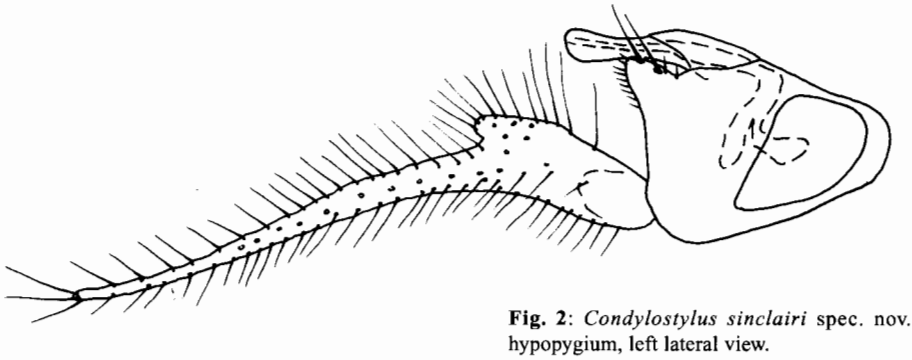


Fig. 2: *Condylostylus sinclairi* spec. nov., hypopygium, left lateral view.

Length: body 4.4 mm; antenna 1.4 mm; wing 4.7 mm/1.6 mm; postabdomen 0.9 mm.

Female

Similar to male except lacking male secondary sexual characters.

Distribution: Namibia.

Etymology: The species is named for Canadian dipterologist, Dr. B. J. SINCLAIR.

Diagnosis: The new species is close to *C. paricoxa* PARENT, 1939 as redescribed by GRICHANOV (1996a: Fig. 3), differing in darker tarsi, wider face, longer fore basitarsus, black antenna, long black cercus etc. Frons with white hairs; fore tibia with 2 long black apical posteroventral setae. First tarsomere slightly swollen in basal half, with short dense ventral hairs. Afrotropical *Condylostylus* species can be distinguished mainly by weak variations of male cercus shape in combination with leg setation and coloration. Surstyli are greatly reduced in African species (in contrast to American and Oriental species) and have no diagnostic value.

Condylostylus ulrichi spec. nov.

(Fig. 3)

Holotype ♂: Kenya, Taita Hills, Macha, 8.I-14.I.1999 [RMCA, stored in alcohol].

Male

Head: Frons metallic blue-green, shining. A strong front vertical bristle bends forward, arising from small bare mound; strong postvertical bristle is positioned as a linear continuation of the postocular setal row. Ocellar tubercle with a pair of strong setae. Ventral postcranium covered with irregular white hairs. Face greenish-blue, mat, narrow; 10 times as high as wide in the middle and 3.3 times as high as wide under antennae. Bulging clypeus 2/3 as wide as epistome under antennae. Proboscis brown, palpi black, with light hairs; palpus also with 2 black cilia. Antennae black, nearly as long as height of head. Pedicel with several dorsal and ventral bristles, which not much longer than 1st flagellomere. First flagellomere subtriangular with rounded apex, as long as or slightly longer than high, with short hairs. Arista positioned just before middle of dorsal side, microscopically haired. Length ratio of scape to pedicel to first flagellomere to arista, 5 : 5 : 8 : 65.

Thorax: Mesonotum and scutellum metallic blue-green. Pleura bronze-black. Five dorsocentral bristles gradually decreasing in size anteriorly. Short acrostichals in two rows, restricted to anterior 2/3 of mesonotum. Scutellum with a pair of strong medial setae and two lateral setae, 2/3 as long as medial. **Legs**: mostly yellow. Fore coxa yellow, mid and hind coxae almost entirely black; hind femur with brownish anterodorsal stripe, almost entirely brown at apex; hind tibia blackish-brown; fore tarsus brown from middle of basitarsus, mid tarsus mostly black except for brownish basitarsus in its basal half, hind tarsus black. Fore coxa from the front with numerous yellow hairs and 1 black subapical seta. Mid coxa from the outside with light hairs. Hind coxa with one fine light external seta and several yellow hairs. Femora with white fine ventral hairs at base, at most half as long as femora diameter. Fore tibia with one long semierect subapical ventral seta. Fore basitarsus 10 times longer than wide, slightly flattened and widened in distal half, with ventral pile and row of elongate posteroventral setulae in basal 1/2. Length ratio of fore coxa to femur to tibia to tarsus (segments from first to fifth), 60 : 85 : 108 : 78 : 25 : 15 : 10 : 8. Middle tibia inconspicuously swollen; ventrally free of setulae, with pile of microscopic hairs; with posteroventral row of elongate setulae along entire length, longer than tibia diameter, and 3 apical setae. Fourth and fifth tarsomeres slightly enlarged and flattened, with elongate setulae. Length ratio of middle coxa to femur to tibia to tarsus (segments from first to fifth), 40 : 108 : 165 : 112 : 25 : 18 : 11 : 20. Hind tarsus simple. Length ratio of hind coxa to femur to tibia to tarsus (segments from first to fifth), 30 : 145 : 215 : 95 : 32 : 21 : 15 : 11.

Wings: long and narrow, mostly hyaline, brownish anteriorly in distal 1/3; veins brown. Venation undisturbed. R_{4+5} gently curved to M_1 in apical fifth. M_{1+2} straight. M_1 with elbow-like curvation, forming right angle with M_{1+2}. M_2 distinct. Ratio of part of costa between R_{2+3} and R_{4+5} to this between R_{4+5} and M_1, 35 : 4. Crossvein *m-cu* straight. Ratio of crossvein *m-cu* to apical part of M_{1+2} (fork-handle) to apical part of CuA_1, 34 : 65 : 17. Anal vein and lobe reduced. Anal angle absent. Lower

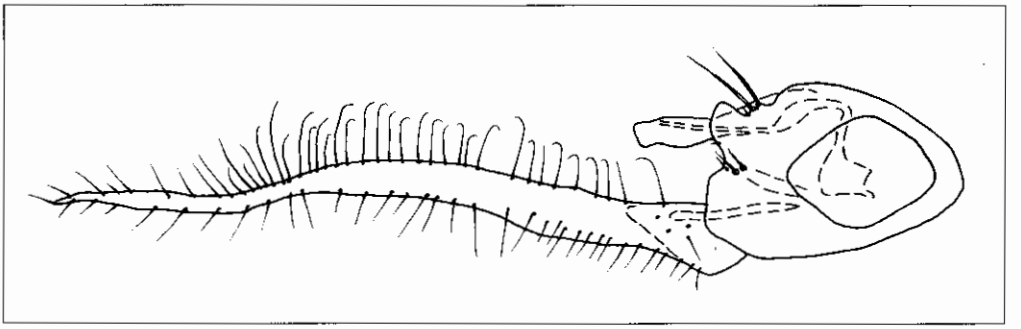


Fig. 3: *Condylostylus ulrichi* spec. nov., hypopygium, left lateral view.

calypter brown, with light cilia. Halter yellow; halter stem thin, 1.5 times longer than knob, with row of setulae in front of knob.

Abdomen thin and long, metallic green-blue-black, posteriorly entirely black-violet, with short black hairs and setae. First tergite with membranous excavation, longitudinal dorsal furrow and white lateral hairs. Unmodified segments combined 3 times as long as mesonotum. 5-6th segments swollen, 7th tergite short. Hypopygium black, with short black hairs. Cercus long, strip-like, black, narrowed and brownish in distal 1/3, with numerous short, ventrally hooked hairs along entire length. Cercus nearly 3 times as long as epandrium. Surstylus and epandrial lobe greatly reduced.

Length: body 5.2 mm; antenna 1.0 mm; wing 4.3 mm/1.2 mm; hypopygium 1.3 mm.

Female

Unknown.

Distribution: Kenya.

Etymology. The species is named for the German dipterologist, Dr. H. ULRICH.

Diagnosis: The new species is close to *C. basovi* GRICHANOV, 1998 (GRICHANOV 1998c: Fig. 8), differing in mostly yellow legs, narrow fore basitarsus, ornamented mid tibia, shorter cercus and other characters. See also diagnosis of *C. sinclairi* spec. nov.

Parentia HARDY, 1935

Parentia asymmetrica spec. nov.

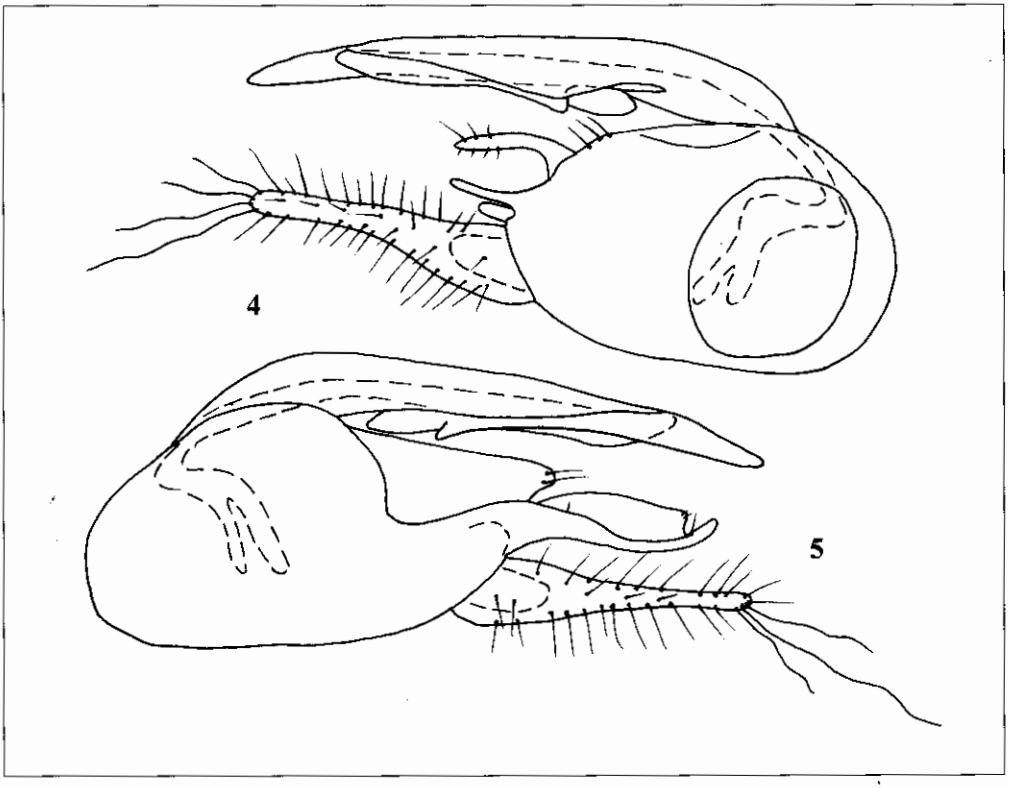
(Figs. 4-5)

Holotype ♂: Namibia, West Caprivi Park, Kwando River: Susuwe, 17°45'37"S, 23°20'55"E, 28.IX.-2.X.1998, A.H. KIRK-SPRIGGS, Malaise trap, dry woodland [NMN, in alcohol]. **Paratypes** [in alcohol]. 5♂♂, 6♀♀, same label.

Male

Head: Frons metallic blue-green, shining. A strong front vertical bristle bends forward, arising from small bare mound; shorter postvertical bristle is positioned as a linear continuation of the postocular setal row. Ocellar tubercle with a pair of strong setae and pair of hairs. Ventral postcranium covered with irregular white hairs. Face (including clypeus) bluish-green, narrowed towards palpi, 2 times as high as wide at clypeus and 1.2 times as high as wide under antennae. Weakly bulging clypeus not reaching lower margin of eyes. Proboscis brown, palpus brown, with light hairs and 2 black setae. Antennae black, slightly longer than height of head. Pedicel globular, with 1-2 long dorsal and ventral bristles, 2 times longer than pedicel. First flagellomere rounded, as long as high, with short hairs. Arista dorsal, microscopically haired. Length ratio of scape to pedicel to first flagellomere to arista (1st to 2nd segments), 5 : 5 : 5 : 4 : 86.

Thorax: metallic blue-green. Five or six dorsocentral bristles gradually decreasing in size anteriorly and 1-2 anterior hairs. Usually three pairs of long acrostichals, nearly as long as anterior dorsocen-



Figs 4-5: *Parentia asymmetrica* spec. nov., hypopygium. – **4**: left lateral view; – **5**: right lateral view.

trals. Scutellum with two pairs of strong setae with lateral setae 2/3 the length of medial. **Legs**: mostly yellow. Fore coxa yellow, middle coxa dark-brown, hind coxa brown, hind femora with brownish dorsal spot at extreme apex; hind tibia brown at extreme apex, anteriorly at basal 1/5 with small brown areole having microscopic setulae situated somewhat thicker than usually; fore and mid tarsi black from tip of basitarsus, hind tarsus entirely black. Fore coxa from the front with numerous yellow hairs and 3 yellow subapical setae. Middle coxa from the outside with white hairs and cilia. Hind coxa with several white hairs in addition to one yellow external seta. Fore femur with short yellow hairs ventrally. Fore tibia with 3-4 short apical seta. Fore tarsus simple. Length ratio of fore coxa to femur to tibia to tarsus (segments from first to fifth), 35 : 69 : 73 : 49 : 19 : 11 : 8 : 6. Mid femur with 1 yellow ventral seta at base, as long as femur diameter, ventral row of black cilia in distal half, half as long as femur diameter. Mid tibia with 4-5 apical setae. Mid tarsus practically simple, basitarsus with elongate setulae slightly longer than diameter of tarsomere and areole in distal 1/2 of ventral side free of setulae. Length ratio of middle coxa to femur to tibia to tarsus (segments from first to fifth), 28 : 85 : 108 : 60 : 23 : 15 : 8 : 7. Hind tibia with a callus described above, several inconspicuous dorsal and 2-3 short apical setae. Hind tarsus simple. Length ratio of hind coxa to femur to tibia to tarsus (segments from first to fifth), 20 : 100 : 123 : 52 : 28 : 17 : 10 : 8. **Wings**: elongate-oval, mostly greyish with posterior margin widely hyaline; veins brown. Venation undisturbed. R_1 reaching 2/5 of wing length. R_{4+5} gently curved to M_1 in apical fifth. M_{1+2} straight. M_1 with wide arc, forming right angle with M_{1+2}. M_2 as faint fold on membrane. Ratio of part of costa between R_{2+3} and R_{4+5} to this between R_{4+5} and M_1, 19 : 5. Crossvein *m-cu* straight. Ratio of crossvein *m-cu* to apical part of M_{1+2} (fork-handle) to apical part of CuA_1, 32 : 33 : 22. Anal vein foldlike, anal lobe and alula developed. Anal angle acute. Lower calypter yellow-brownish, with fine light cilia. Halter yellow, halter stem thin, 1.5 times longer than knob, with row of setulae in front of knob.

Abdomen: metallic green, with short black hairs and marginal setae. First tergite with narrow membranous excavation, longitudinal dorsal furrow, two pairs of long black dorsolateral setae and short white lateral hairs. Unmodified segments combined 2 times as long as thorax. Hypopygium brown-black, with black hairs. Hypandrium basoventral, long, hood-like. Aedeagus with double dorsal angle. Cercus yellow-brownish, short, slightly swollen at base, narrow at apex, with numerous black hairs along entire length and several long undulate apical setae. Surstyli and epandrial lobes asymmetric. Left surstylus short and thin, spine-shaped; right surstylus long and broad, nearly as long as cercus. Left epandrial lobe as thin curved process with several short subapical setae; right epandrial lobe as broad projection with 2 apical setae.

Length: body 3.6-4.4 mm; antenna 0.9 mm; wing 3.5-4.0 mm/1.0 mm; hypopygium 0.85 mm.

Female

Similar to male except lacking male secondary sexual characters. Hind coxa, femur and tibia entirely yellow, hind basitarsus yellow at base. Femora bare; fore tibia with 1 anterodorsal, 1 posterodorsal short setae; mid tibia with 2 anterodorsal, 2 posterodorsal setae; hind tibia with 2 anterodorsal, 4 posterodorsal setae; hind basitarsus with small basoventral seta; 1st abdominal tergum without long setae.

Distribution: Namibia.

Diagnosis: *P. asymmetrica* is closely related to *P. stenurus* (LOEW, 1858) (described also by CURRAN (1926) as *Condylostylus sicatrix* CURRAN, 1926), differing in almost entirely yellow hind tibia and practically simple middle leg. The new species differs from all other known species of the genus in remarkably asymmetric hypopygium. Male wing has no diagnostic features, being similar to female wing. *P. asymmetrica* is the most close to *Parentia* and cannot be associated with *Condylostylus*, although many Australian species of the genus has quite different male secondary sexual characters (MSSC). Afrotropical species of the genus are confined to southern Africa.

SUBFAMILY MEDETERINAE

Corindia BICKEL, 1986

Corindia demoulini spec. nov.

(Fig. 6)

Holotype ♂: Congo Belge, P. N. G., Miss. DE SAEGER, II/gd/16, 26-IX-1952, Rec. H. DE SAEGER, 4084 [RMCA]. **Paratypes**. 14♂♂ with the same label as holotype (one of them collected by G. DEMOULIN and one by J. VERSCHUREN), differing in the collection dates and codes as follows: I/c/2, 23-VIII-1950, 768; II/gd/10, 28-XII-1951, 2954; II/gd/4, 18-I-1952, 3024; II/gd/6, 22.I.1952, 3031; II/gd/11, 11-III-1952, 3183; II/gd/11, 24-VI-1952, 3701; II/gd/6, 2.IX.1952, 4023; II/gd/16, 26-IX-1952, 4084 [RMCA].

Male

Head: Frons blue-violet. Face entirely shining blue-green. One strong vertical seta laterally of ocellar tubercle; the latter is low and broad, with 2 strong setae and 2 hairs; one fine postvertical seta, one row of short postocular setae present. Face widest under antennae, narrowed downward, clypeus parallel-sided. Ratio of height of epistome to its maximal width to height of clypeus, 18 : 14 : 9. Antenna 1/4 longer than head; scape and pedicel reddish-yellow, 1st flagellomere black-brown; scape vase-like; pedicel globular, with a ring of short apical setulae; first flagellomere smaller than pedicel, as long as high, irregularly rounded. Arista apical, with very short basal segment and short hairs, 6 times longer than antennomeres combined. Palpus and proboscis short, black-brown, with black hairs; palpus with one black seta.

Thorax: Mesonotum flattened in posterior third, metallic blue-green, with light-brown setae. Pleura metallic green. Five pairs of strong dorsocentral setae decreasing in size anteriorly. Acrostichal setae biseriate, becoming quadriseriate on mesonotal flattening. One light propleural seta. Scutellum with a pair of strong and a pair of short hairlike lateral setae. **Legs**: mostly yellow; fore coxa yellow-brownish at base, middle and hind coxae brown with yellow apex, last tarsomeres of all tarsi brown. Fore coxa with short hairs and several apical setae; middle coxa with hairs and one external seta; hind

Abdomen: metallic green, with short black hairs and marginal setae. First tergite with narrow membranous excavation, longitudinal dorsal furrow, two pairs of long black dorsolateral setae and short white lateral hairs. Unmodified segments combined 2 times as long as thorax. Hypopygium brown-black, with black hairs. Hypandrium basoventral, long, hood-like. Aedeagus with double dorsal angle. Cercus yellow-brownish, short, slightly swollen at base, narrow at apex, with numerous black hairs along entire length and several long undulate apical setae. Surstyli and epandrial lobes asymmetric. Left surstylus short and thin, spine-shaped; right surstylus long and broad, nearly as long as cercus. Left epandrial lobe as thin curved process with several short subapical setae; right epandrial lobe as broad projection with 2 apical setae.

Length: body 3.6-4.4 mm; antenna 0.9 mm; wing 3.5-4.0 mm/1.0 mm; hypopygium 0.85 mm.

Female

Similar to male except lacking male secondary sexual characters. Hind coxa, femur and tibia entirely yellow, hind basitarsus yellow at base. Femora bare; fore tibia with 1 anterodorsal, 1 posterodorsal short setae; mid tibia with 2 anterodorsal, 2 posterodorsal setae; hind tibia with 2 anterodorsal, 4 posterodorsal setae; hind basitarsus with small basoventral seta; 1st abdominal tergum without long setae.

Distribution: Namibia.

Diagnosis: *P. asymmetrica* is closely related to *P. stenurus* (LOEW, 1858) (described also by CURRAN (1926) as *Condylostylus sicatrix* CURRAN, 1926), differing in almost entirely yellow hind tibia and practically simple middle leg. The new species differs from all other known species of the genus in remarkably asymmetric hypopygium. Male wing has no diagnostic features, being similar to female wing. *P. asymmetrica* is the most close to *Parentia* and cannot be associated with *Condylostylus*, although many Australian species of the genus has quite different male secondary sexual characters (MSSC). Afrotropical species of the genus are confined to southern Africa.

SUBFAMILY MEDETERINAE

Corindia BICKEL, 1986

Corindia demoulini spec. nov.

(Fig. 6)

Holotype ♂: Congo Belge, P. N. G., Miss. DE SAEGER, II/gd/16, 26-IX-1952, Rec. H. DE SAEGER, 4084 [RMCA]. **Paratypes**. 14♂♂ with the same label as holotype (one of them collected by G. DEMOULIN and one by J. VERSCHUREN), differing in the collection dates and codes as follows: I/c/2, 23-VIII-1950, 768; II/gd/10, 28-XII-1951, 2954; II/gd/4, 18-I-1952, 3024; II/gd/6, 22.I.1952, 3031; II/gd/11, 11-III-1952, 3183; II/gd/11, 24-VI-1952, 3701; II/gd/6, 2.IX.1952, 4023; II/gd/16, 26-IX-1952, 4084 [RMCA].

Male

Head: Frons blue-violet. Face entirely shining blue-green. One strong vertical seta laterally of ocellar tubercle; the latter is low and broad, with 2 strong setae and 2 hairs; one fine postvertical seta, one row of short postocular setae present. Face widest under antennae, narrowed downward, clypeus parallel-sided. Ratio of height of epistome to its maximal width to height of clypeus, 18 : 14 : 9. Antenna 1/4 longer than head; scape and pedicel reddish-yellow, 1st flagellomere black-brown; scape vase-like; pedicel globular, with a ring of short apical setulae; first flagellomere smaller than pedicel, as long as high, irregularly rounded. Arista apical, with very short basal segment and short hairs, 6 times longer than antennomeres combined. Palpus and proboscis short, black-brown, with black hairs; palpus with one black seta.

Thorax: Mesonotum flattened in posterior third, metallic blue-green, with light-brown setae. Pleura metallic green. Five pairs of strong dorsocentral setae decreasing in size anteriorly. Acrostichal setae biseriate, becoming quadriseriate on mesonotal flattening. One light propleural seta. Scutellum with a pair of strong and a pair of short hairlike lateral setae. **Legs**: mostly yellow; fore coxa yellow-brownish at base, middle and hind coxae brown with yellow apex, last tarsomeres of all tarsi brown. Fore coxa with short hairs and several apical setae; middle coxa with hairs and one external seta; hind

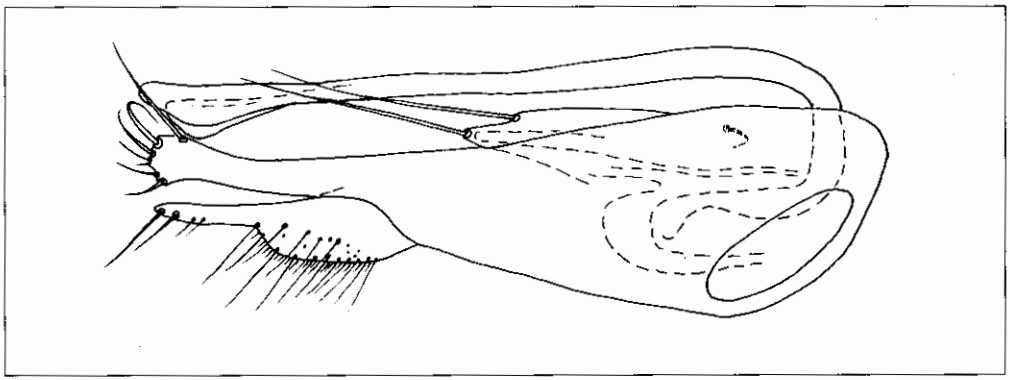


Fig. 6: *Corindia demoulini* spec. nov., hypopygium, left lateral view.

coxa with one strong and one fine external setae. Fore leg without setae. Middle tibia with one strong anterodorsal at basal fourth and one strong apicoventral setae. Hind femur simple. Hind tibia with short setae. All tarsi simple. Length ratio of fore coxa to femur to tibia to tarsus (segments from first to fifth), 35 : 47 : 43 : 24 : 8 : 5 : 4 : 6. Same ratio for middle leg, 30 : 55 : 53 : 28 : 18 : 12 : 6 : 5. Same ratio for hind leg, 20 : 60 : 70 : 15 : 26 : 20 : 12 : 8. **Wings**: simple, hyaline, veins brown; posterior wing margin evenly convex; maximum wing-width at the end of CuA_1. Costa without long hairs, with microsetulae reaching middistance between ends of R_{2+3} and R_{4+5}. R_1 reaching to first fifth of wing. R_{2+3} almost straight. R_{4+5} inconspicuously convex anteriad. Ratio of part of costa between R_{2+3} and R_{4+5} to this between R_{4+5} and M_{1+2}, 36 : 8. Ratio of apical to basal part of M_{1+2}, 82 : 51. R_{4+5} and M_{1+2} weakly convergent, almost parallel 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, 17 : 12 : 30. Anal vein absent; anal lobe small. Alula undeveloped. Lower calypter yellow, with brownish cilia. Halter yellow.

Abdomen: metallic dark-bluish-green, with short light setae. Hypandrium, surstylus and cercus yellow. Epandrium black-green, elongate-triangular, with basolateral foramen. One epandrial seta at base of hypandrium. Epandrial lobe long, broad, with 2 long setae at apex. Hypandrium long and thin, swollen at apex. Aedeagus thin, broadened at apex. Surstylus simple, with about 6 strong apical setae. Cercus suboval; cercus and thin distolateral cercal arm with long dorsal setae as figured.

Length: body without antennae 2.0-2.3 mm, antenna 0.9 mm, wing 2.2/0.8 mm, postabdomen 0.8 mm.

Female

Unknown.

Distribution: Congo (Kinshasa).

Etymology: The species is named for one of the collectors, Mr. G. DEMOULIN.

Diagnosis: The new species is close to *C. danielssoni* GRICHANOV, 1998 (GRICHANOV 1998d: Fig. 3), differing in larger size, several strong apical setae on surstylus and other characters of hypopygium. Other Afrotropical species of *Corindia* have been collected also in the Garamba National Park that has mainly savanna landscape with humid gallery forests along rivers only. The Australian species of the genus are characteristic of sclerophil *Eucalyptus* forests. To date none species of *Corindia* was recorded in rainforests.

Grootaertia GRICHANOV, 1999

Grootaertia irwini spec. nov.

(Fig. 7)

Holotype ♂: South Africa, Cape Prov., 14 mi. SE Langebaan, 200 ft, Sept. 18, 1972, M.E. IRWIN, 3318Aa, coastal dunes and sandy plain [NMP]. **Paratypes**. 13 ♂♂ and 12 ♀♀ with the same label as holotype.

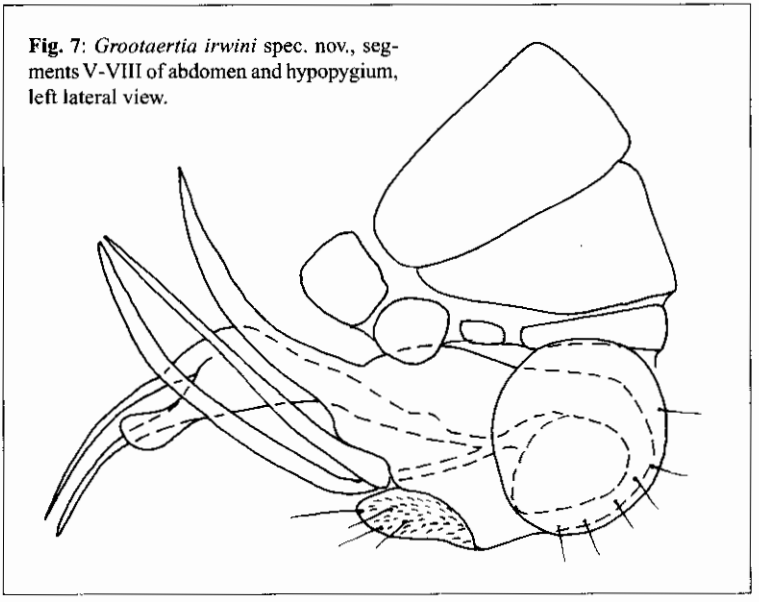


Fig. 7: *Grootaertia irwini* spec. nov., segments V-VIII of abdomen and hypopygium, left lateral view.

Male

Head: Body generally black, with blackish, though shining light setae. Frons and face black, grey pollinose. Ocellar tubercle prominent, with a pair of strong setae. One strong vertical seta laterally on frons present, a strong postvertical one is positioned as a linear continuation of the postocular setal row; postocular setae blackish above, white laterally and below. Ventral postcranium with several long cilia. Face widest under antennae, gradually narrowed towards palpi. Clypeal suture distinct. Ratio of height of face to its maximal width, 20 : 10. Antenna as long as head height, black; pedicel with a ring of short apical setulae; 1st flagellomere elongate-triangular, 1.5 times longer than high, with acute apex and very short hairs. Arista apical, almost glabrous, as long as antennomeres combined. Length ratio of scape to pedicel to first flagellomere to arista, 3 : 4 : 14 : 21. Palpus and proboscis black, with sparse hairs; palpus short, with 1 black seta; proboscis stout, prominent.

Thorax: entirely black, grey pollinose, mesonotum concave in posterior third. Four pairs of strong dorsocentral setae with fourth seta shortened and additional small seta in front of the 1st one. Acrostichal setae absent. One long and one very short humeral, one posthumeral, 2 strong notopleural, 1-2 short presutural and 2 short and strong postsutural (supraalar) setae present. Two propleural setae. Scutellum with a pair of strong setae. **Legs**: with all coxae and femora blackish-brown, tibia and basitarsi dirty-yellow or brownish, other tarsomeres black. Fore coxa with short hairs and several light setae in apical half; 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), 21 : 29 : 33 : 16 : 7 : 5 : 4 : 5. Same ratio for middle leg, 15 : 38 : 45 : 22 : 9 : 6 : 5 : 6. Same ratio for hind leg, 12 : 36 : 45 : 15 : 12 : 8 : 6 : 5. **Wings**: elongate-oval, simple, hyaline; veins brown; posterior wing margin evenly convex; maximum wing-width just before the end of CuA_1. 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 : 6. R_1 reaching 2/5 of wing length. R_{2+3}, R_{4+5} and M_{1+2} slightly convex anteriorly. R_{4+5} and M_{1+2} parallel in apical part. Ratio of apical to basal part of M_{1+2} (from *r-m*), 55 : 25. Crossvein *m-cu* slightly convex. Ratio of cross-vein *m-cu* to maximal distance between R_{4+5} and M_{1+2} to apical part of CuA_1, 7 : 7 : 28. Anal vein fold-like; anal lobe poorly developed; anal angle obtuse. Alula reduced. Lower calypter small, brown, with greatly reduced cilia. Halter black.

Abdomen: black, weakly pollinose, with short setae. 7th tergum semicircular, narrow, lying conformably with 6th tergum. 8th tergum large, covering left basolateral foramen. Epandrium shining black-brown, elongate-oval (lateral view). No epandrial seta. Hypandrium (epandrial lobe?) as long pointed lobe positioned at left distoventral angle of epandrium. Aedeagus long, widened in middle; lateral lobes of aedeagus long, thin, pointed apically. Surstyli brown, glabrous, two pairs, positioned apicodorsally. Cercus brown, visible, with several long dorsal setae.
Length: body without antennae 1.4 mm, antenna 0.5 mm, wing 1.5 mm /0.6 mm, hypopygium 0.6 mm.

Female
Similar to male except lacking male secondary sexual characters. 1st flagellomere slightly longer than high; arista 1.6 times longer than antennomeres combined.

Distribution: South Africa.

Etymology: The species is named after the American dipterologist, Dr. M.I. IRWIN, who has collected a type series of the new species.

Diagnosis: The new species differs from other species of the genus in entirely black body, blackish coxae and femora. It is close to *G. kuznetsovi* GRICHANOV, 1999 (GRICHANOV 1999a: Fig. 15), strongly differing in morphology of hypopygium. *G. kuznetsovi* has long dorsal setae on ventral surstyli, large cercus with distinct fingerlike distolateral lobe.

Grootaertia brevipennis spec. nov.
(Fig. 8)

Holotype ♂: S. Africa: Cape, #51, Hermanus-Hey's Hill, 34°25'S, 19°14'E, 60 m, Date: 7.X.1993, Coll. J. G. H. LONDT, Flowers & Dassie hole [NMP].

Male
Head: Frons black, grey pollinose; face light-brown, white pollinose. Ocellar tubercle prominent, with a pair of strong black setae and 2 short hairs. One strong brown vertical seta laterally on frons present, a strong postvertical one is positioned as a linear continuation of the postocular setal row; postocular setae white. Ventral postcranium with several long cilia. Face widest under antennae, slightly narrowed towards palpi. Clypeal suture marked laterally. Antenna shorter than head height; scape and pedicel yellow; pedicel with a ring of short apical setulae; 1st flagellomere black, rounded, flattened laterally, as long as high, with very short hairs. Arista apical, glabrous, twice longer than antennomeres combined. Length ratio of scape to pedicel to first flagellomere to arista, 4 : 4 : 7 : 34. Palpus and proboscis yellow-brownish, with sparse hairs; palpus short, with 1 light seta; proboscis stout, prominent.
Thorax: Mesonotum concave in posterior third, mostly yellow-brownish, grey pollinose, with dark-brown setae. Mesonotal depression and scutellum bluish-black dorsally; mesonotum anteriorly with medial and two lateral (along rows of dorsocentral setae) dark narrow longitudinal stripes. Pleurae reddish-yellow, with brown longitudinal medial stripe. Four pairs of strong dorsocentral setae with 1 additional small seta in front of the 1st one. Acrostichal setae absent. One long and one very short humeral, one posthumeral, 1 long and strong notopleural, 2 short presutural and 2 strong postsutural (supraalar) setae present. Propleura with one light seta and 2-3 cilia above. Scutellum with a pair of strong setae. **Legs**: including coxae yellow; 5th segment of all tarsi black. Fore coxa with short hairs and several 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 and 1 posterodorsal setae at basal 1/4, 2-3 short apical setae in addition to 1 strong apicoventral seta. Hind tibia with 2 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), 25 : 42 : 45 : 24 : 10 : 7 : 5 : 6. Same ratio for middle leg, 20 : 45 : 53 : 30 : 11 : 8 : 5 : 6. Same ratio for hind leg, 15 : 50 : 62 : 21 : 15 : 10 : 6 : 7. **Wings**: elongate-oval, simple, hyaline; veins yellow-brown; posterior wing margin evenly convex; maximum wing-width just before the end of CuA_1. 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}, 19 : 9. R_1 reaching 2/5 of wing length. R_{2+3}, R_{4+5} and M_{1+2} almost

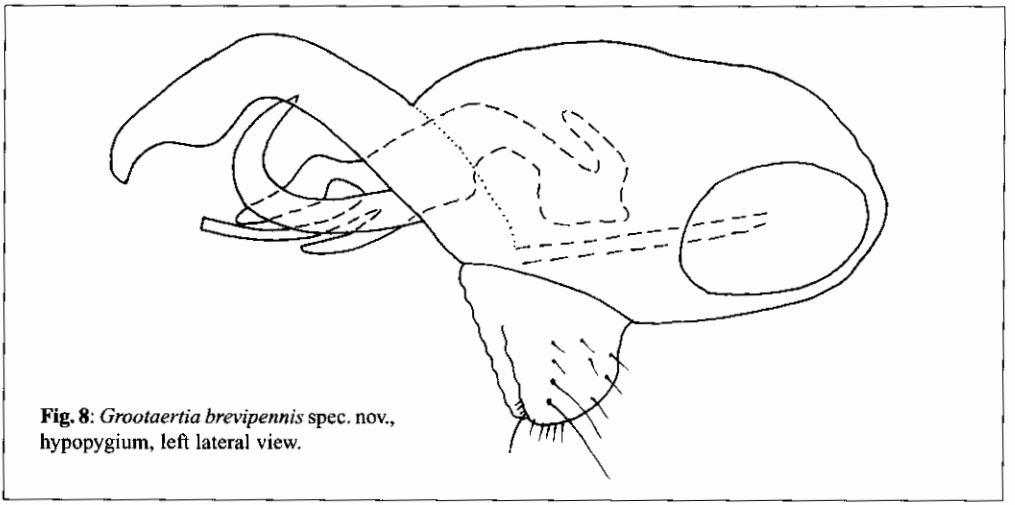


Fig. 8: *Grootaertia brevipennis* spec. nov., hypopygium, left lateral view.

straight, slightly convex anteriorly. R_{4+5} and M_{1+2} parallel in apical part. Ratio of apical to basal part of M_{1+2} (from *r-m*), 85 : 32. Crossvein *m-cu* slightly convex. Apical part of CuA_1 slightly concave, fold-like at wing margin. Ratio of cross-vein *m-cu* to maximal distance between R_{4+5} and M_{1+2} to apical part of CuA_1, 11 : 8 : 42. Anal vein fold-like; anal lobe developed; anal angle obtuse. Alula undeveloped. Lower calypter yellow, with greatly reduced cilia. Halter yellow.

Abdomen: mostly dark-brown, weakly pollinose, with short setae. Sterna yellow, weakly sclerotized. 7th tergum semicircular, narrow, lying conformably with 6th tergum. 8th tergum large, covering left basolateral foramen. Epandrium elongate (lateral view). No epandrial seta. No epandrial lobe. Hypandrium large, almost rectangularly curved, positioned on left side of epandrium. Aedeagus short and broad, with thin apical part; lateral lobes of aedeagus asymmetric. Surstyli yellow, short, hook-like, glabrous; one pair of surstyli attached to epandrium dorsoapically. Cercus large, exposed, with several dorsal setae.

Length: body without antennae 1.8 mm, antenna 0.6 mm, wing 2.0 mm /0.7 mm, hypopygium 0.6 mm.

Female

Unknown.

Distribution: South Africa.

Diagnosis: The new species is similar to *G. asymmetrica* GRICHANOV 1999 (GRICHANOV 1999a: Fig. 9), reliably differing from the latter species in hypopygium morphology only. *G. asymmetrica* has hypandrium short, spade-like, slightly widened distally, with widely rounded distal margin (ventral view), apicoventral in position; 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.

Medetera FISCHER VON WALDHEIM, 1819

Medetera africana africana spec. nov.

(Fig. 9)

Holotype ♂:Scottburg, Natal, S. Africa, B. & P. STUCKENBERG, 15.XI.1963 [NMP]. **Paratype** ♂: South Africa, Natal, Zululand, Ndumu-Game Reserve, 26.X.1972, ME IRWIN, 2632Cc [NMP].

Male

Head: Frons and face black, grey pollinose; clypeus weakly shining in middle. A row of several short black postocular setae at the top of eye and a row of light-brownish postoculars below present; two

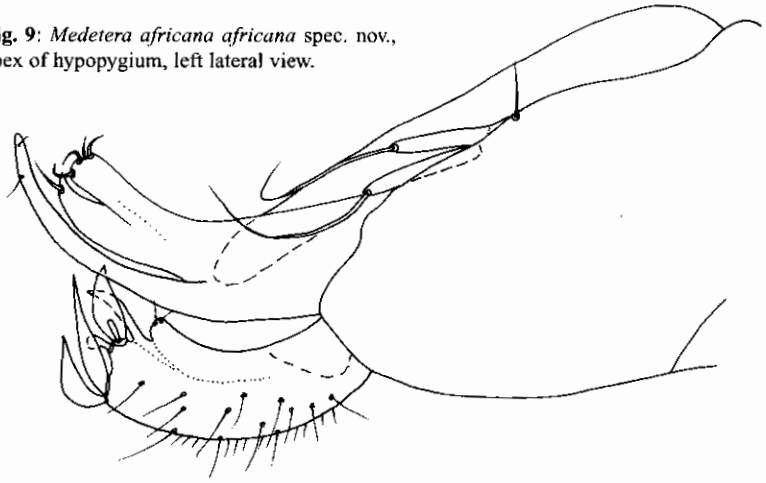


Fig. 9: *Medetera africana africana* spec. nov., apex of hypopygium, left lateral view.

lowest postoculars black. One strong vertical seta laterally on frons. Ocellar tubercle with one pair of strong setae. Ventral postcranium covered with sparse light irregular setae. Face broad, widest under antennae, narrowest at middle, slightly widened below middle. Ratio of height of epistome to its maximal width to height of clypeus to its minimal width, 23 : 17 : 14 : 14. Antenna black, nearly as long as head height; pedicel slightly swollen, with a ring of short apical setulae; first flagellomere small, rounded, with distinct apex and short terminal hairs. Arista subapical, microscopically pubescent. Length ratio of scape to pedicel to first flagellomere to arista, 4 : 5 : 6 : 55. Palpus and proboscis short, black, weakly pollinose, with light hairs; palpus with one black seta.

Thorax: bronze-black, with bluish reflection, grey pollinose, with black setae. Two pairs of strong and two pairs of very short dorsocentral setae with several microscopic hairs anteriorly. Two rows of short acrostichals extending to mesonotal flattening. Propleura with 1 strong black seta and 1 fine hair above fore coxa. Scutellum with a pair of strong medial setae and two lateral setae, half as long as medial. **Legs**: mostly dirty-yellow, all coxae brown, femora slightly darkened in basal half, apical segments of tarsi brown. Coxae with brownish 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), 43 : 65 : 65 : 27 : 25 : 17 : 10 : 9. Mid tibia with one anterodorsal, one posterodorsal at basal 1/4 and 3-4 apical setae. Length ratio of mid coxa to femur to tibia to tarsus (segments from first to fifth), 35 : 70 : 79 : 38 : 32 : 20 : 9 : 8. Hind legs without long setae. Hind tibia posteriorly with several short black spinules covered with apical scale. Hind tarsus simple. Length ratio of hind coxa to femur to tibia to tarsus (segments from first to fifth), 27 : 75 : 94 : 17 : 48 : 22 : 11 : 9. **Wings**: hyaline; veins brown, yellow at base. 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}, 19 : 6. 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*), 10 : 7. Ratio of cross-vein *m-cu* to maximal distance between R_{4+5} and M_{1+2} to apical part of CuA_1, 16 : 22 : 17. Lower calypter yellow, with light cilia. Halters yellow.

Abdomen: black-brown, pollinose, with short black setae; 7th segment half as long as epandrium. Epandrium elongate-oval, highest just before middle, dark-brown. Foramen basolateral. Hypandrium light-brown, midventral, elongate, narrow. Aedeagus slim, simple. Two epandrial lobes situated closely to one another, each bearing long seta. Short epandrial seta present. Surstylus light-brown, trilobate; ventral and mid lobes almost fused, with short apical setae; dorsal lobe longer than ventral, narrow, with several short setae. Cercus dark-brown, shorter than surstylus, elongate, dorsally setose, with 3 large and 2 small apical flattened setae, short ventral protuberance and long narrow sclerotised subapical ventral process.

Length: body without antennae 2.4 mm, antenna 0.9 mm, wing 2.5-2.8 mm / 0.9 mm, hypopygium 0.7 mm.

Female
Unknown.

Distribution: South Africa.

Diagnosis: *M. africana* keys out to *M. seksyaevae* GRICHANOV, 1999 (GRICHANOV 1999a: Fig. 14), differing from the latter species in length ratio of first two segments of fore tarsus (17/48 rather than 15/30) and *m-cu*/CuA_1 wing veins (16/17 rather than 9/18) and morphology of hypopygium. Hypopygium of the new species has some similarity to that in *M. capensis* CURRAN, 1926 and *M. hamata* PARENT, 1936, differing from those species in having long thin epandrial lobes (compare Figs 9-11).

Medetera africana senegalensis subspec. nov.

Holotype ♂: Senegal, Ziguinchor, 13.VIII.1979, A. PAULY réc., P[iege] M[alaise] / Coll. Mus. Tervuren [RMCA].

Diagnosis: *M. africana senegalensis* is almost identical to nominotypical subspecies in any respect including morphology of hypopygium, differing in somewhat smaller size, bluish reflection of face and thorax, mostly black (except for distal 1/3 or 1/4) femora. The habitus is similar to that in *M. varitibia* PARENT, 1935 (male topotypes examined, RINS), which is characterises by midventral projection on surstylus and simple setae on cercus (compare Figs. 9 and 12).
Length: body without antennae 2.1 mm, wing 2.3 mm.

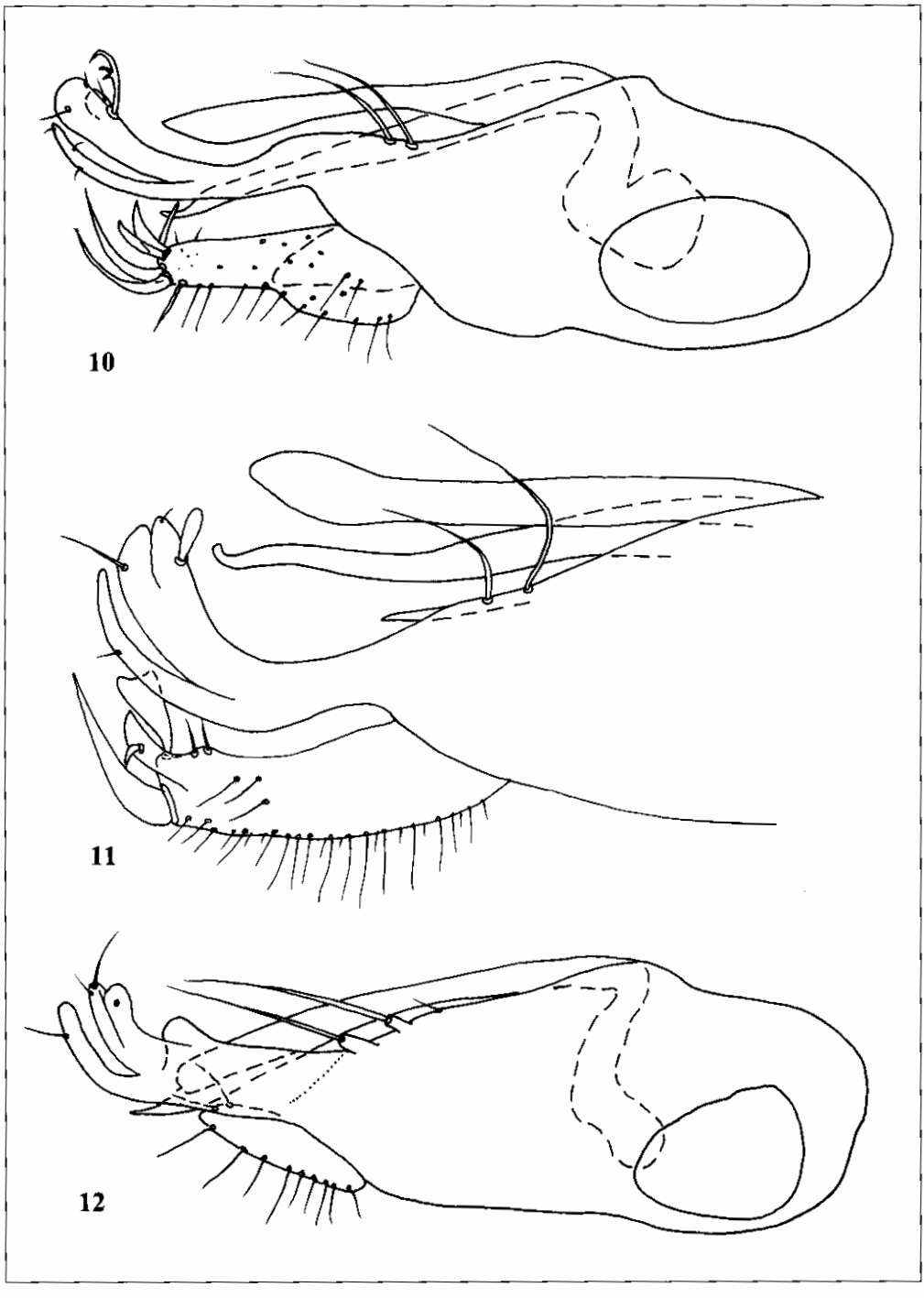
Female
Unknown.

Distribution: Senegal.

Medetera bweza spec. nov.
(Fig. 13)

Holotype ♂: Congo Belge: P. N. A., Tshamugussa (Bweza), 2250 m (Bambous), 10.VIII.1934, G. F. DE WITTE, 526 / P. VANSCHUYTBROECK det. 1951: *Saccopheronta hirsuticosta* PARENT [RMCA].

Male
Head: Frons and face black, entirely grey pollinose. A row of white postocular setae 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 with scape and pedicel reddish-yellow; pedicel slightly swollen, with a ring of short apical setulae; first flagellomere brown, small, rounded, as long as high, with distinct apex and short terminal hairs. Arista dorsal (2nd segment broken). Palpus and proboscis short, black, pollinose, with light hairs; palpus with one dark seta.
Thorax: bronze-black, grey pollinose, with black setae (mostly broken). Two pairs of strong dorsocentral setae with several hairs anteriorly. Two rows of acrostichals extending to mesonotal flattening. Propleura with 1 strong seta (broken) and 1-2 short white hairs above fore coxa. Scutellum with a pair of strong medial setae and two small lateral hairs. **Legs**: mostly yellow, with light ciliation, all coxae black-brown with yellow apex, apical segments of tarsi brown. Coxae with white 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), 33 : 48 : 45 : 19 : 11 : 8 : 6 : 6. Mid tibia with one anterodorsal and one posterodorsal setae at basal 1/4. Mid tarsus broken. Hind legs without long setae. Hind tibia with yellow apical scale only. Hind tarsus with small basoventral tooth. Length ratio of hind coxa to femur to tibia to tarsus (segments from first to fifth), 20 : 55 : 65 : 17 : 27 : 13 : 8 : 7. **Wings**: hyaline, veins brown. Costa without long hairs. R_1 1/3 length of wing. Ratio of part of costa between R_{2+3} and R_{4+5} to this between R_{4+5} and M_{1+2}, 30 : 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*), 90 : 57. 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 : 28. Lower calypter brownish-yellow, with brownish cilia. Halters light.



Figs 10-12: Hypopygia of *Medetera* species in left lateral view. – **10**: *M. capensis* CURRAN, 1926. – **11**: *Medetera hamata* PARENT, 1936; – **12**: *Medetera varitibia* PARENT, 1935

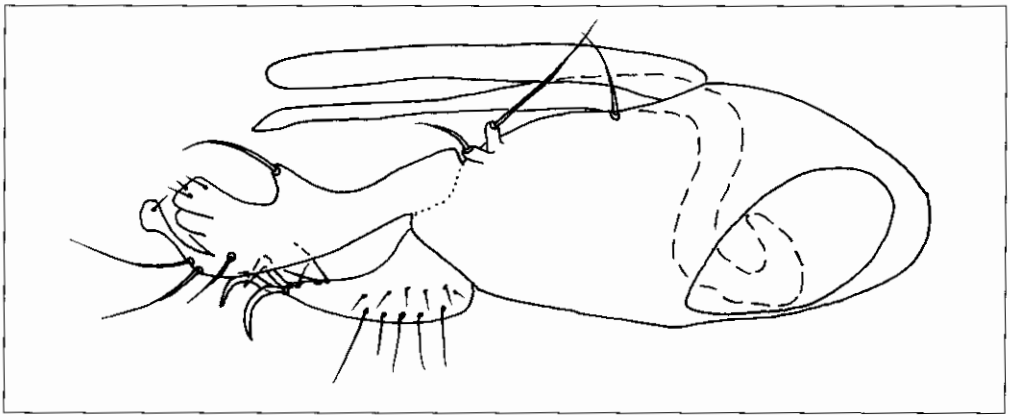


Fig. 13: *Medetera bweza* spec. nov., hypopygium, left lateral view.

Abdomen: black, weakly pollinose, with short light setae; 7th segment short. Epandrium black-brown, slightly longer than high. Foramen basolateral. Hypandrium brown, midventral, elongate, narrow, Aedeagus slim, simple. Epandrial lobi reduced to 2 long pedunculate setae positioned closely to one another. Short epandrial seta present. Surstylus yellow, 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 brown, shorter than surstylus, elongate, dorsally setose, with 2 apical flattened setae and short subapical ventral process.

Length: body without antennae 2.0 mm, wing 2.3 mm / 0.9 mm, hypopygium 0.7 mm.

Female

Unknown.

Distribution: Congo (Kinshasa).

Diagnosis: *M. bweza* is closely related to *M. edwardsi* GRICHANOV, 1997 (GRICHANOV 1997a: Fig. 2) and *M. norlingi* GRICHANOV 1997 (GRICHANOV 1997a: Fig. 3), differing from these species in slightly larger size, somewhat stronger convergent R_{4+5} and M_{1+2} veins and hypopygium morphology as follows. Cercus without ventral projection, with 3 curved flattened setae rather than 1-2 simple setae; dorsal lobe of surstylus short rather than long, arising at distal 1/3 or 1/4 and bearing 2 long dorsal setae; ventral process of surstylus with long rather than short apical seta.

Medetera calvinia spec. nov.

(Fig. 14)

Holotype ♂: Nieuwoudtville Area, Calvinia district, South West Cape, 14 October 1964, B. & P. STUCKENBERG [NMP]. **Paratypes** ♂: same label; E, Strandfontein coast, West of Van Rhynsdorp, South West Cape, 15-17 October 1964, B. & P. STUCKENBERG [NMP].

Male

Head: Frons and face black, grey-brownish pollinose; clypeus mostly shining. A row of several fine short black postocular setae at the top of eye and a row of white postoculars below present; two lowest postoculars long, brown. One strong vertical seta laterally on frons. Ocellar tubercle with one pair of strong setae and 2 short hairs. Ventral postcranium covered with sparse long white irregular setae. Face widest under antennae, parallel-sided below, 3 times higher than wide in middle. Antenna as long as head height, black; pedicel slightly swollen, with a ring of short apical setulae; first flagellomere small, rounded, with short terminal hairs. Arista subapical. Palpus and proboscis short, black, weakly pollinose, with light hairs; palpus slightly shining, with 1 black seta.

Thorax: black, grey pollinose, with black setae. Two pairs of strong dorsocentral setae with row of hair-like setae anteriorly. Two rows of short acrostichals in anterior half of mesonotum. Propleura

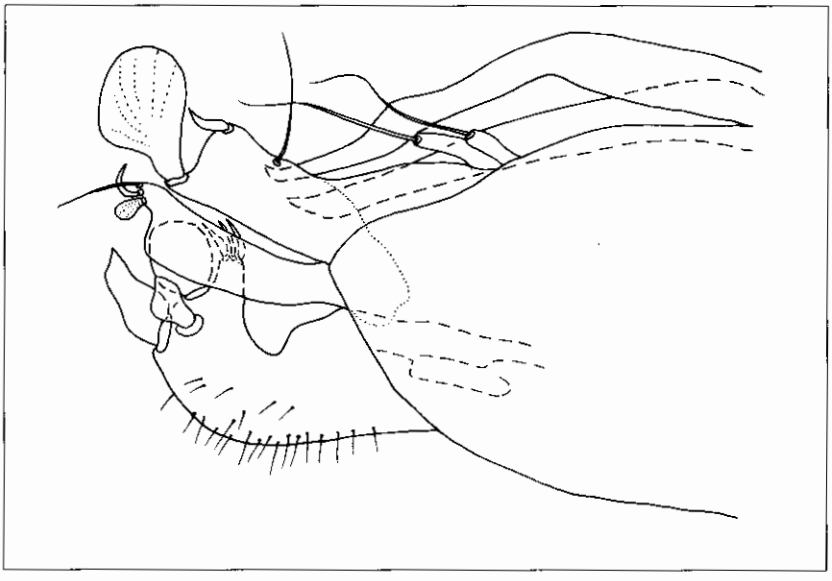


Fig. 14: *Medetera calvinia* spec. nov., apex of hypopygium, left lateral view.

with 1 strong brownish seta and one short white hair above fore coxa. Scutellum with a pair of strong medial setae and two weak lateral setae, half as long as medial. **Legs**: black, knees brown. Coxae with light 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 in distal half and 2-4th segments with ventral pile of short erect hairs. Length ratio of fore coxa to femur to tibia to tarsus (segments from first to fifth), 38 : 53 : 50 : 22 : 18 : 10 : 7 : 7. Mid tibia with one anterodorsal, one posterodorsal at basal 1/4 and several very short apical setae. Mid tarsus with apicoventral spinules. Length ratio of mid coxa to femur to tibia to tarsus (segments from first to fifth), 30 : 60 : 67 : 32 : 21 : 16 : 8 : 8. Hind femur without setae. Hind tibia with dorsal swelling at distal 1/4 bearing elongate setulae and one light seta; with one apicoventral seta, several short black spinules covered with light scale posteriorly. Hind basitarsus with elongate apicoventral setula and small posterior apical scale. Length ratio of hind coxa to femur to tibia to tarsus (segments from first to fifth), 18 : 63 : 78 : 18 : 38 : 20 : 10 : 10. **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}, 21 : 6. R_{4+5} and M_{1+2} distinctly convergent, R_{4+5} slightly bowed anteriorly, M_{1+2} straight. Ratio of apical to basal part of M_{1+2} (from *r-m*), 68 : 60. Ratio of cross-vein *m-cu* to maximal distance between R_{4+5} and M_{1+2} to apical part of CuA_1, 12 : 17 : 12. Anal vein fold-like. Lower calypter brownish-yellow, with yellow cilia. Halters yellow.

Abdomen: flattened dorsoventrally, black, grey pollinose, with short light setae. Epandrium elongate, twice as long as high. Foramen positioned in basal half. Hypandrium arising before middle of epandrium, elongate, narrow. Aedeagus slim, simple. Epandrial lobi reduced to 2 long pedunculate setae positioned closely to one another. Surstylus 1/3 length of epandrium, short and broad, bilobate; ventral lobe with 1 long midventral, 1 thick and short apicoventral, 1 large leaf-like apicodorsal setae; dorsal lobe as long as ventral, with 2 simple apical setae of unequal length and 1 small flattened apical seta. Cercus nearly as long as surstylus, dorsally with short hairs, apically with 3 large flattened setae and subapical ventral projection bearing 3 thick setae.

Length: body without antennae 2.1 mm, antenna 0.7 mm, wing 2.3 mm /0.8 mm, hypopygium 0.5 mm.

Female

Similar to male except lacking male secondary sexual characters. Hind tibia without dorsal setae.

Distribution: South Africa.

Diagnosis: *M. calvinia* is close to *M. ghesquierei* GRICHANOV, 1999 (GRICHANOV 1999a: Fig. 11), *M. rikhterae* GRICHANOV, 1997 (GRICHANOV 1997a: Fig. 7), and *M. ealensis* PARENT, 1936, differing by ventral pile on fore tarsus, dorsal swelling on hind tibia, leaf-like setae on surstylus and cercus (compare Figs. 14 and 15 in this paper).

Medetera cimbebasia spec. nov.

(Fig. 16)

Holotype ♂: Namibia, Lüderitz, Rooiberg, 27°38'S, 16°28'E, 22-24.IX.1997, KIRK-SPRIGGS & MARAIS, Malaise trap sample / Namibian National Insect Collection, National Museum, P. O. Box 1203, Windhoek, Namibia [NMN]. **Paratypes** 3♂♂, 4♀♀: same labels; ♂, Namibia: Brandberg, Plateau Valley at: 21°10'46"S, 14°32'52"E, 1950m, 19-21.X.1998, R. BUTLIN & J. ALTRINGHAM, Malaise trap 6; 2♂♂, Namibia: Brandberg, Pools on Wasserfallfläche, 21°10'40"S, 14°33'08"E, 2000 m, 21-23.X.1998, R. BUTLIN & J. ALTRINGHAM, Malaise trap 8; 1G, 2♀♀, Namibia: Lüderitz, Obib water, 28°00'S, 16°38'E, 19-21.IX.1997, MARAIS & KIRK-SPRIGGS, Malaise trap sample [NMN]. **Additional material**: 1♀, NA99-L03: Namibia: Brandberg, Wasserfallfläche, 1960 m, 21°10'77"S, 14°32'87"E, 07.IV.1999, S. VAN NOORT & S.G. COMPTON, UV Light trap, overlooking well vegetated Valley below waterfall Bushy Karoo-Namib shrubland [NMN].

Male

Head: Frons and face dark-green; frons entirely and epistome laterally whitish pollinose; epistome mat-green, clypeus shining blue-green in middle. Postocular setae white, brownish at the top of eye. One strong but short vertical seta laterally on frons. Ocellar tubercle with one pair of strong setae (broken off). Ventral postcranium covered with sparse long white irregular setae. Face 2.3 times higher than wide under antennae. Ratio of height of epistome to its maximal width to its minimal width to height of clypeus to its maximal width, 25 : 15 : 10 : 12 : 15. Antenna short, as long as head height, brown-black; pedicel slightly swollen, with a ring of short apical setulae; first flagellomere small, rounded, with short terminal hairs. Arista apical. Palpus and proboscis short, black, with light hairs; palpus with 1 brown seta.

Thorax: bluish-green to blue, whitish pollinose, with black setae. Two pairs of strong dorsocentral setae with anterior seta half as long as posterior; a row of several hairs in front of the 1st dorsocentral seta. Two rows of short acrostichals extending to mesonotal flattening. Propleura with 2 strong white subequal setae above fore coxa. Scutellum with a pair of strong medial setae and two lateral setae, 2/

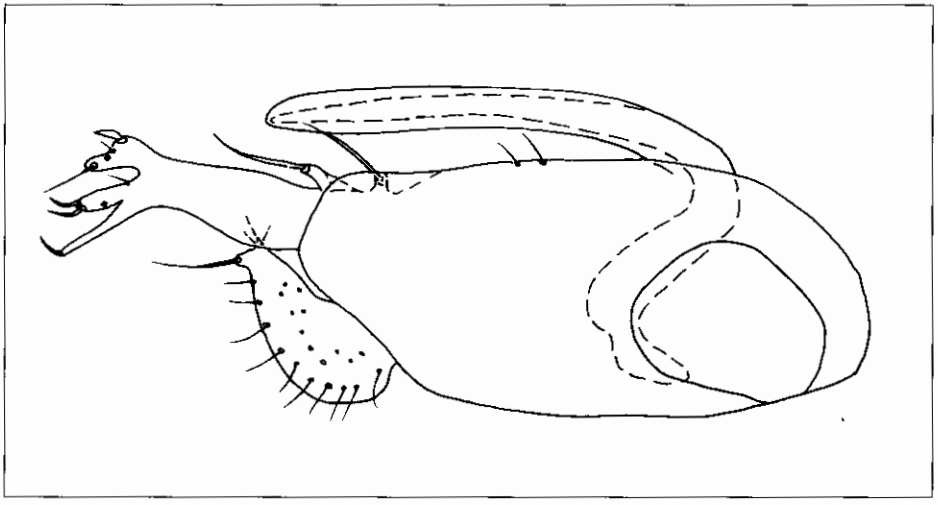


Fig. 15: *Medetera ealensis* PARENT, 1936, hypopygium, left lateral view.

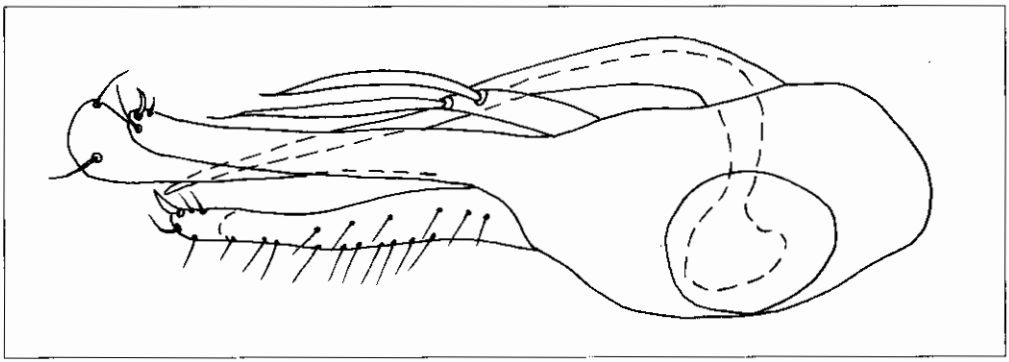


Fig. 16: *Medetera cimbebasia* spec. nov., hypopygium, left lateral view.

3 as long as medial. **Legs**: mostly black-brown, coxae black, knees light-brown. Coxae with black setae; fore coxa with short light hairs; mid and hind coxae each with one fine external seta. Fore legs without strong setae. Length ratio of fore coxa to femur to tibia to tarsus (segments from first to fifth), 46 : 62 : 62 : 28 : 35 : 21 : 8 : 9. 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), 25 : 70 : 72 : 45 : 34 : 18 : 7 : 8. Hind femur with row of elongate anteroventral setulae in distal 1/3 and row of elongate dorsal setulae in basal 1/3. Hind tibia slightly swollen at extreme apex, with 1-2 short subapical dorsal setae, short posterodorsal apical hook of 2 curved setae, several black apical spinules covered with brownish scale. Hind basitarsus with small basal tooth posteroventrally. Length ratio of hind coxa to femur to tibia to tarsus (segments from first to fifth), 21 : 70 : 81 : 20 : 48 : 24 : 9 : 9. **Wings**: hyaline; veins mostly brown, yellow at base. 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}, 22 : 5. R_{4+5} and M_{1+2} distinctly convergent, R_{4+5} slightly bowed anteriorly. Ratio of apical to basal part of M_{1+2} (from *r-m*), 88 : 68. Ratio of cross-vein *m-cu* to maximal distance between R_{4+5} and M_{1+2} to apical part of CuA_1, 14 : 19 : 15. Anal vein fold-like. Lower calypter yellow, with yellow cilia. Halters yellow.
Abdomen: black, grey pollinose, with short, shining light setae. Epandrium elongate, twice as long as high. Foramen midlateral. Hypandrium arising just before missle of epandrium, elongate, narrow. Aedeagus slim, simple. Epandrial lobe nearly half as wide as surstylus, long, with 2 long flattened setae. Surstylus slightly longer than epandrium; ventral lobe shorter than dorsal, with several short setae at apex; dorsal lobe widened at apex, with 2 apical setae. Cercus shorter than surstylus, dorsally setose, with one small flattened apical seta.
Length: body without antennae 2.5 mm (male) - 3.0 mm (female), antenna 0.9 mm, wing 2.7 mm / 0.8 mm (male) - 3.0 mm / 1.0 mm (female), hypopygium 0.8 mm.

Female
Similar to male except lacking male secondary sexual characters. Several upper postocular setae dark-brown.

Distribution: Namibia.

Etymology: "Cimbebas" is the archaic name for the area between Cape Negro and the Tropic of Capricorn on the southwest African seaboard.

Diagnosis: *M. cimbebasia* is a sister species to *M. vaalensis* GRICHANOV spec. nov., differing from the latter in white setae on coxae, entirely brown-black tibia, elongate-oval epandrium, thick epandrial lobe bearing flattened setae. The new species is also close to *M. rikhterae* GRICHANOV, 1997 (GRICHANOV 1997a: Fig. 7), differing in elongate 2nd segment of fore tarsus, very long cercus and surstylus, flattened setae on epandrial lobe and cercus.

Medetera londti spec. nov.

(Fig. 17)

Holotype ♂: South Africa, Natal, Mhlopeni Nature Res., 15 km SE Muden, 2930AB, Coll.: J. G. H. LONDT, Date: 22.XII.1983 [NMP]. **Paratype** ♂: South Africa: Natal, Renegate, SE 3030CD, 11-20.I.1985, J. LONDT, Malaise trap set in riverine bush [NMP]. Additional material: E, S. Africa: Transvaal, 37 km N. Louis Trichardt, Limpopo Valley, 2229DD, Jan. 1975, STUCKENBERG, arid bushveld; 2♀♀, Capland, Willomore, 20, 29.XII.1925, Dr. BRAUNS [NMP].

Male

Head: Frons and face green-black, brownish pollinose; clypeus mostly shining blue-green. A row of several short brown postocular setae at the top of eye and a row of long white postoculars below present. One strong vertical seta laterally on frons, half as long as ocellar setae. Ventral postcranium covered with sparse long white irregular setae. Face under antennae slightly wider than face at palpi, with weakly concave lateral margins, 2.7 times higher than wide in middle. Antenna as long as head height, black; pedicel slightly swollen, with a ring of short apical setulae; first flagellomere small, rounded, with distinct apex and short terminal hairs. Arista subapical. Palpus and proboscis short, black, weakly shining, with light and dark hairs; palpus with one brown seta.

Thorax: bluish-black, grey pollinose, with black setae. Two pairs of strong dorsocentral setae of unequal length; a row of several hairs in front of the 1st dorsocentral seta. Two rows of short acrostichals extending to mesonotal flattening. Propleura with 3 strong white setae of equal length above fore coxa. Scutellum with a pair of strong medial setae and two lateral setae, 2/3 as long as medial.

Legs: entirely black-brown. Coxae with white setae; fore coxa with short light hairs and several apical setae; mid and hind coxae each with one fine external seta. Fore legs without strong setae. Fore tarsus simple. Length ratio of fore coxa to femur to tibia to tarsus (segments from first to fifth), 50 : 70 : 72 : 38 : 36 : 20 : 10 : 12. Mid tibia with one anterodorsal, one posterodorsal at basal 1/4 and several very short apical setae. Mid tarsomeres with short apicoventral spinules. Length ratio of mid coxa to femur to tibia to tarsus (segments from first to fifth), 31 : 80 : 88 : 59 : 36 : 20 : 10 : 10. Hind femur with row of several white dorsal setae in basal half, nearly as long as femur diameter. Hind tibia abruptly narrowed at extreme apex, with small brownish apicoventral scale and somewhat larger black apical posterior scale covering extreme base of basitarsus. Hind tarsus simple. Length ratio of hind coxa to femur to tibia to tarsus (segments from first to fifth), 24 : 79 : 100 : 20 : 55 : 28 : 11 : 11.

Wings: greyish, almost hyaline; veins brown, yellow at base. 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}, 23 : 7. R_{4+5} and M_{1+2} distinctly convergent, R_{4+5} slightly bowed anteriorly. Ratio of apical to basal part of M_{1+2} (from *r-m*), 109 : 95. Ratio of

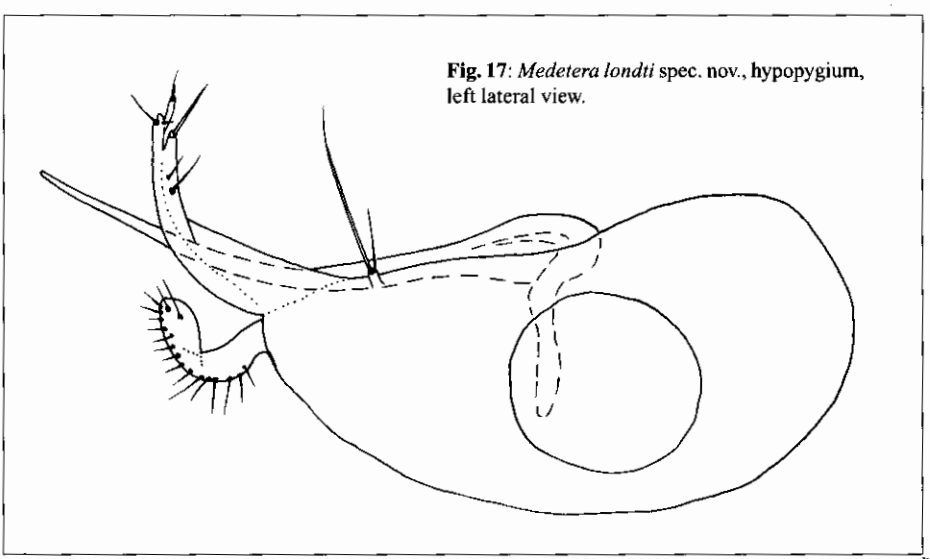


Fig. 17: *Medetera londti* spec. nov., hypopygium, left lateral view.

cross-vein *m-cu* to maximal distance between R_{4+5} and M_{1+2} to apical part of CuA_1, 22 : 28 : 15; *m-cu* weakly convex posteriorly. Anal vein fold-like. Lower calypter yellow, with yellow cilia. Halters yellow.

Abdomen: greenish-black, grey pollinose, with short light setae. Epandrium elongate, twice as long as high. Foramen midlateral. Hypandrium midventral, elongate, narrow. Aedeagus slim, simple. Epandrial lobe reduced to short peduncle bearing one long and one short setae. Surstylus short, 2/5 length of epandrium, greatly narrowed in distal half, split at extreme apex, with narrow apical process, several apical and subapical setae as figured. Cercus 2 times shorter than surstylus, elbow-like, dorsally and apically setose, with simple setae.

Length: body without antennae 3.2 mm, antenna 1.0 mm, wing 3.2 mm / 1.0 mm, hypopygium 0.94 mm.

Female

Similar to male except lacking male secondary sexual characters.

Distribution: South Africa.

Etymology: The species is named after one of the collectors, Dr. J. G. H. LONDT.

Diagnosis: *M. londti* is very close to *M. rikhterae* GRICHANOV 1997 (GRICHANOV 1997a: Fig. 7), differing in subapical arista, narrow apex of hind tibia, curved and narrowed in distal half surstylus, elbow-like cercus etc.

Medetera pallidotiosa spec. nov.

(Fig. 18)

Holotype ♂: South Africa, Coldstream, 3323Dc, Cape Prov., 25-28 Oct. 1964, STUCKENBERG [NMP]. **Paratypes** 2♂♂, 1♀, same label.

Male

Head: Frons and face black, entirely grey pollinose; clypeus shining in middle. A row of black-brown postocular setae present. One strong vertical seta laterally on frons. Ocellar tubercle with one pair of strong setae. Ventral postcranium covered with sparse light irregular setae. Face widest under antennae, narrowest in middle, slightly widened towards palpi. Ratio of height of epistome to its maximal width to height of clypeus to its minimal width, 18 : 12 : 7 : 9. Antenna black, nearly as long as head height; pedicel slightly swollen, with a ring of short apical setulae; first flagellomere small, rounded, as long as high, with short terminal hairs. Arista apical. Palpus and proboscis short, black, pollinose, with light hairs; palpus with one dark seta.

Thorax: black, densely grey pollinose, with black setae. Two pairs of strong and 4-5 anterior pairs of very small dorsocentral setae. Two rows of acrostichals not reaching mesonotal flattening. Propleura with 1 strong black seta and 1 short black hair above fore coxa. Scutellum with a pair of strong setae, without lateral hairs. **Legs**: mostly dirty-yellow, with all coxae black, femora black-brown in basal half, apical segments of tarsi 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), 30 : 45 : 45 : 20 : 15 : 10 : 8 : 6. Mid tibia with one anterodorsal and one posterodorsal setae at basal 1/4. Mid tarsus simple. Length ratio of mid coxa to femur to tibia to tarsus (segments from first to fifth), 22 : 48 : 55 : 27 : 17 : 11 : 7 : 6. Hind legs without long setae. Hind tibia with posteriorly with several microscopic black spinules covered with apical scale. Hind tarsus simple. Length ratio of hind coxa to femur to tibia to tarsus (segments from first to fifth), 18 : 49 : 68 : 13 : 26 : 14 : 8 : 7.**Wings**: hyaline, veins brown. Costa without long hairs. R_1 1/3 length of wing. Ratio of part of costa between R_{2+3} and R_{4+5} to this between R_{4+5} and M_{1+2}, 20 : 7. 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*), 77 : 50. Ratio of cross-vein *m-cu* to maximal distance between R_{4+5} and M_{1+2} to apical part of CuA_1, 12 : 16 : 20 (12 : 16 : 16 in paratypes). Lower calypter brownish-yellow, with brownish, though shining light cilia. Halters yellow.

Abdomen: black, weakly pollinose, with short light setae; 7th segment half as long as epandrium. Epandrium twice longer than high, black, with black-brown appendages. Foramen basolateral. Hypandrium brown, basoventral, elongate, narrow. Aedeagus slim, simple. Epandrial lobi reduced to 2

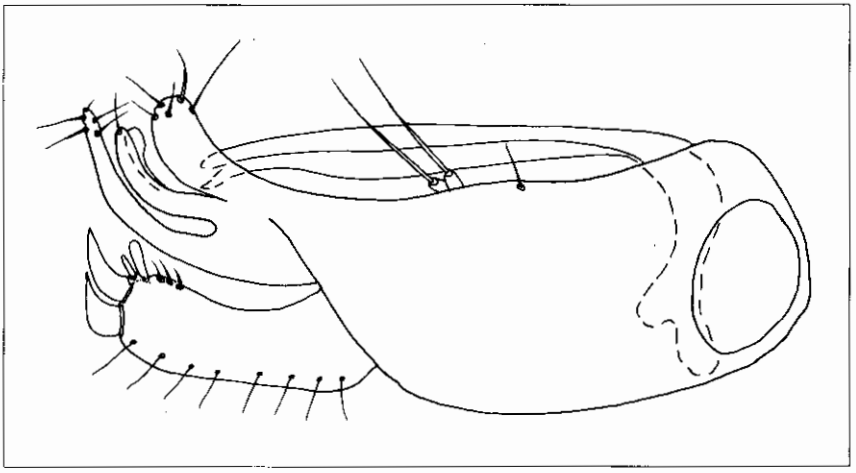


Fig. 18: *Medetera pallidotiosa* spec. nov., hypopygium, left lateral view.

long pedunculate setae positioned closely to one another. Short epandrial seta halfway between pedunculate setae and base of hypandrium present. Surstylus trilobate; ventral lobe broadest, with several long apical setae; middle lobe with subapical process and 1 apical seta; dorsal lobe long, narrow, with 4 long subapical and 1 short apical setae. Cercus nearly as long as surstylus, broad, elongate, dorsally setose, with 2 large apical flattened setae, 2 thick and 3 simple apicoventral setae.
Length: body without antennae 2.0 mm, antenna 0.6 mm, wing 2.1 mm / 0.8 mm, hypopygium 0.5 mm.

Female
Similar to male except lacking male secondary sexual characters.

Distribution: South Africa.

Diagnosis: *M. pallidotiosa* keys out to *M. ghesquierei* GRICHANOV, 1999 (GRICHANOV 1999a: Fig. 11), differing in having simple setae on surstylus. The new species is also close to *M. nocturna* CURRAN, 1927 (male determined by O. PARENT was examined, RINS, Fig. 19) and *M. praedator* CURRAN, 1926 (male paratype examined, RMCA, Fig. 20), differing from the 1st species in having simple setae on surstylus, and from the 2nd in absence of long apicodorsal flattened seta on cercus.

Distribution: South Africa.

Medetera praedator aequatorialis subspec. nov.

(Fig. 21)

Holotype ♂: [Tanzania] Makoa, 22-23.II.1952, D. O. Africa Exp. / P. VANSCHUYTBROECK det. 195? *Medetera varitibia* PAR. / R.I.Sc.N.B. I.G. 22942 [RINS]. **Paratypes** 2♂♂: [Congo (Kinshasa):] Kibati (1900 m), 19.I.1934, G. F. DE WITTE, Parc Nat. Albert, 168 / P. VANSCHUYTBROECK det. 1951 *Saccopheronta quinta* PARENT [RMCA]; 1G, Musée du Congo, N. Kivu, X.1933, Kibati (plaine de lave), Dr. de WULF / R. Det. S 2966 / *Medetera otiosa* PARENT, [det.] O. PARENT [RMCA]; 1G, Urundi: Bururi, alt. 1900 m, 26.II.1948, F. FRANÇOIS / R.I.Sc.N.B. I.G. 24452 [RINS].

Length: body without antennae 2.0 mm, wing 2.2 mm / 0.9 mm.

Female
Unknown.

Distribution: Tanzania, Burundi, Congo (Kinshasa).

Diagnosis: Having two strong scutellar setae and two strong dorsocentral setae, *M. praedator aequatorialis* is almost identical to nominotypical subspecies in any respect, differing in legs coloration and morphology of hypopygium. *M. p. praedator* has yellow tibia and broad, rounded at apex middle

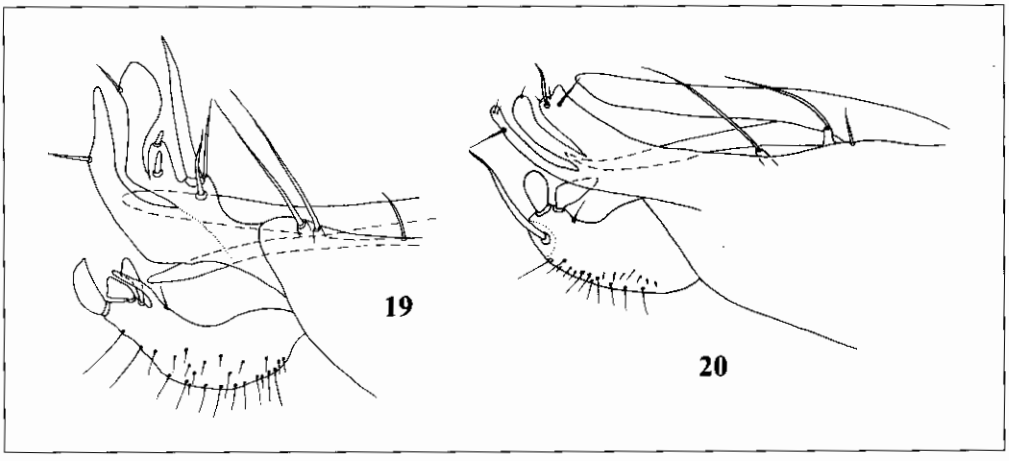


Fig. 19: *Medetera nocturna* CURRAN, 1927, apex of hypopygium, left lateral view.
Fig. 20: *Medetera praedator praedator* CURRAN, 1926, apex of hypopygium, left lateral view.

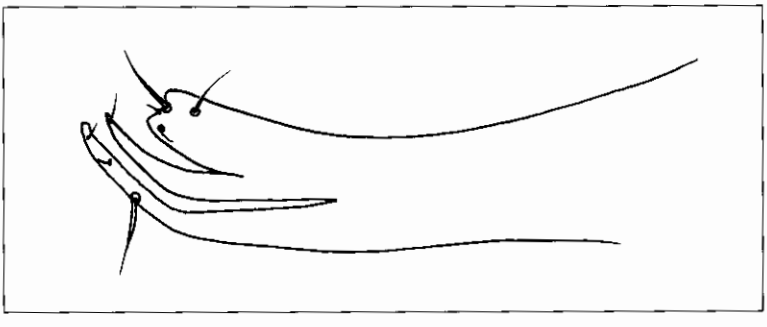


Fig. 21: *Medetera praedator aequatorialis* subspec. nov., surstylus, left lateral view.

lobe of surstylus (Fig. 20), whereas *M. p. aequatorialis* has entirely black legs and narrow pointed middle lobe of surstylus. Nominotypical subspecies is known from South Africa only.

Medetera vaalensis spec. nov.

(Fig. 22)

Holotype ♂: S. Africa: Transvaal, nr. Louis Trichardt, Wilies Poort, 2229DD, Jan. 1975, STUCKENBERG, streambank.

Male

Head: Frons greenish-black, brownish pollinose; face metallic, laterally pollinose; epistome mat-green, clypeus shining dark-green. A row of several fine short black postocular setae at the top of eye and a row of long white postoculars below present. One strong vertical seta laterally on frons, as long as distance between ocelli. Ocellar tubercle with one pair of long and strong setae. Ventral postcranium covered with sparse long white irregular setae. Face widest at palpi, narrowed in middle, 3.5 times higher than wide under antennae and 2.3 times higher than maximal width of clypeus. Antenna slightly longer than head height, black-brown; pedicel slightly swollen, with a ring of short apical setulae; first flagellomere small, rounded, with short terminal hairs. Arista apical. Palpus and proboscis short, black, weakly pollinose, with light hairs; palpus mat, with 1 black seta.

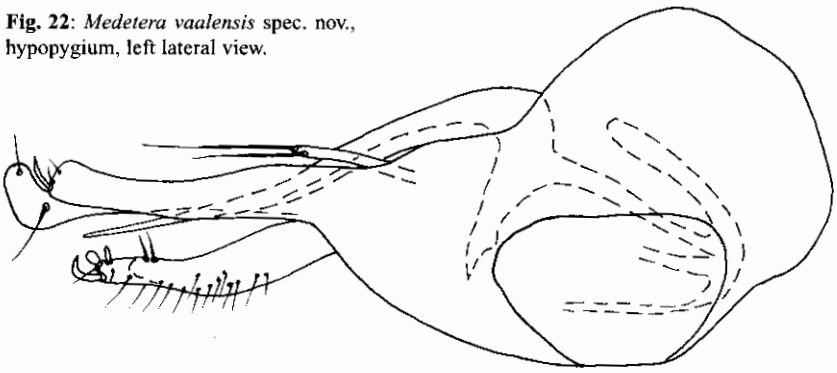


Fig. 22: *Medetera vaalensis* spec. nov., hypopygium, left lateral view.

Thorax: blue-black, grey-white pollinose, with black setae. Four pairs of strong dorsocentral setae gradually decreasing in size anteriorly; each seta 1/2 shorter than preceding one; several hairs in front of the 1st dorsocentral seta. Two rows of short acrostichals extending to mesonotal flattening. Propleura with 3 strong black-brown setae of unequal length above fore coxa. Scutellum with a pair of strong medial setae and two lateral setae, 2/3 as long as medial. **Legs**: with all coxae and femora black; knees, tibia and basitarsi light-brown; other tarsomeres brown. 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 tarsus simple. Length ratio of fore coxa to femur to tibia to tarsus (segments from first to fifth), 50 : 68 : 66 : 34 : 42 : 26 : 12 : 9. 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), 35 : 64 : 83 : 55 : 35 : 22 : 10 : 8. Hind femur without long setae, with elongate anterodorsal setulae at base. Hind tibia slightly swollen at extreme apex, with 1-2 short subapical dorsal setae, short posterodorsal apical hook of 2 curved setae, several black apical spinules covered with brownish scale. Hind basitarsus with small basal tooth posteroventrally. Length ratio of hind coxa to femur to tibia to tarsus (segments from first to fifth), 26 : 70 : 95 : 21 : 56 : 28 : 12 : 8. **Wings**: hyaline; veins mostly brown, yellow at base. 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}, 24 : 6. R_{4+5} and M_{1+2} distinctly convergent, R_{4+5} slightly bowed anteriorly. Ratio of apical to basal part of M_{1+2} (from *r-m*), 94 : 84. Ratio of cross-vein *m-cu* to maximal distance between R_{4+5} and M_{1+2} to apical part of CuA_1, 15 : 23 : 18. Anal vein distinct. Lower calypter yellow, with yellow cilia. Halters yellow.

Abdomen: blue-black, grey pollinose, with short black, though shining light setae. Hypopygium black, with brown appendages. Epandrium greatly swollen in basal half, slightly longer than high. Foramen midlateral. Hypandrium midventral, elongate, narrow. Aedeagus slim, simple. Epandrial lobe as long and thin process bearing 2 long simple setae at apex. Surstylus shorter than epandrium, narrow; ventral lobe shorter than dorsal, with several short setae at apex; dorsal lobe widened at apex, with 2 apical setae. Cercus shorter than surstylus, dorsally setose, with 3 small flattened apical and 2 simple subapical ventral setae.

Length: body without antennae 2.7 mm, antenna 1.0 mm, wing 2.8 mm / 1.0 mm, hypopygium 1.1 mm.

Female

Unknown.

Distribution: South Africa.

Diagnosis: *M. vaalensis* is closely related to *M. cimbebasia* GRICHANOV, spec. nov., differing from the latter in black setae on coxae, light-brown tibia, swollen at base epandrium, narrow epandrial lobe bearing simple setae.

Thrypticus GERSTAECKER, 1864

Thrypticus parabellus spec. nov.

(Fig. 23-24)

Holotype ♂: Gillits, Pinetown district, Natal, S. Africa, B. & P. STUCKENBERG [NMP].

Male

Head: Frons and face metallic bluish-green. One strong vertical seta laterally on frons, one fine postvertical seta present. Ocellar tubercle with a pair of strong setae. Face widest under antennae, narrowed downward, clypeus parallel-sided. Ratio of height of epistome to its maximal width to height of clypeus, 18 : 18 : 10. Postocular setae light. Antenna entirely black; pedicel with a ring of short apical setulae; first flagellomere higher than long, transverse-oval, with short hairs. Arista apical, with microscopic hairs. Palpus and proboscis short, black, palpus with one black seta.

Thorax: Mesonotum flattened in posterior third, metallic bluish-green, with light setae. Pleura metallic green. Four pairs of strong dorsocentral setae decreasing in size anteriorly with short hairs in front of the 1st seta. Acrostichal setae biseriate. Presutural part of mesonotum bearing numerous short irregular hairs. ?One light propleural cilia. Scutellum with a pair of strong setae. **Legs**: with all coxae and femora metallic green-black; trochanters brown; femora yellow at distal apices; fore and hind tibia mostly brown, yellow at base; mid tibia yellow; fore and hind tarsi entirely black; mid basitarsus mostly brownish; mid tarsi brown-black from tip of basitarsus. Fore coxa with short hairs and several light apical setae; middle coxa with hairs and 2 external setae; hind coxa with one long and 2 somewhat shorter light strong external setae. Fore leg without setae. Mid femur with strong posterior subapical seta. Mid tibia without dorsal setae, with one strong apicoventral seta. Hind femur simple. Hind tibia with short apical setae. 1-4th segments of all tarsi with short apical spinules; 5th segments flattened. Length ratio of fore coxa to femur to tibia to tarsus (segments from first to fifth), 40 : 51 : 53 : 24 : 14 : 8 : 6 : 8. Same ratio for middle leg, 30 : 56 : 58 : 29 : 19 : 10 : 8 : 8. Same ratio for hind leg, 23 : 58 : 74 : 23 : 25 : 15 : 9 : 10. **Wings**: simple, hyaline, veins mostly brown, yellow at base; posterior wing margin evenly convex; maximum wing-width at the end of CuA_1. Costa without long hairs. R_1 reaching first third of wing. R_{2+3} almost straight. Ratio of part of costa between R_{2+3} and R_{4+5} to this between R_{4+5} and M_{1+2}, 25 : 10. Ratio of apical to basal part of M_{1+2}, 98 : 48. R_{4+5} and M_{1+2} slightly convex anteriad, almost parallel, inconspicuously convergent 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, 15 : 12 : 42. Anal vein fold-like; anal lobe small. Alula undeveloped. Lower calypter yellow, with light cilia. Halter yellow.

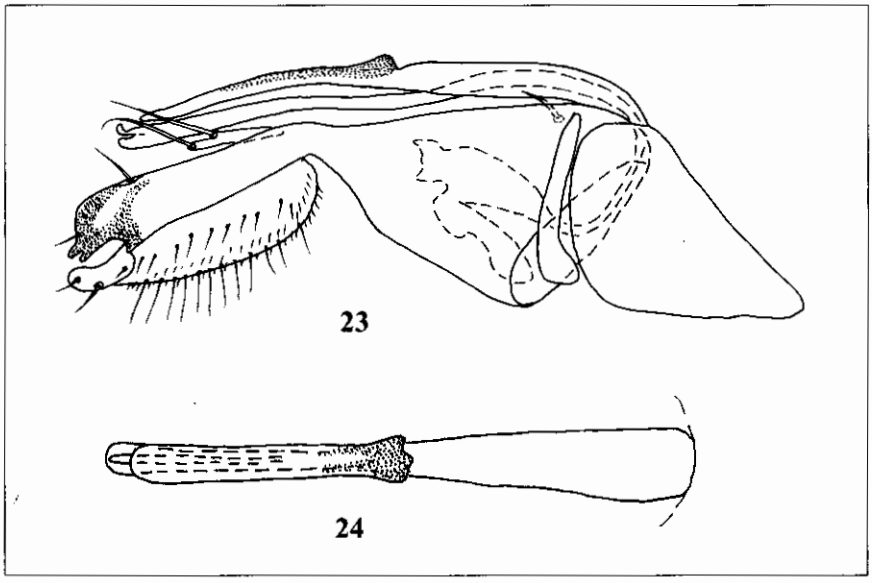
Abdomen: including epandrium metallic dark-bluish-green, grey pollinose, with light setae. Hypandrium, surstylus and cercus brown-black. Epandrium subtriangular, wide basally, narrowed apically; 7th segment symmetrical, embracing base of epandrium; 8th segment narrow, stick-shaped, lying along left distal margin of 7th segment. One strong curved internal epandrial seta at base of hypandrium. Epandrial lobe elongated, thin, with 2 long setae, one apical and one subapical. Hypandrium arising basoventrally, nearly straight, swollen in basal half (ventral view), long and thin, parallel-sided in distal half, with short constriction in the middle and strong basal melanization beyond constriction. Aedeagus thin, arising from base of epandrium, apically cleft, with broad dorsal and narrow ventral lobes. Surstylus 3/4 as long as epandrium, deflected dorsad, lying conformably with similarly deflected cerci. Surstylus (lateral view) lobate, slightly widened apicad, distally melanised, with strong ventral seta at 2/3; distal third of surstylus convex ventrally, concave dorsally, split at extreme apex, with 1 fine short and 2 microscopic distoventral setae. Cercus oblong, with sparse dorsal and lateral setae and distinct apical digitiform section having rounded apex and bearing 2 rather strong dorsal setae.

Length: body without antennae 2.4 mm, antenna 0.7 mm, wing 2.4 mm / 0.9 mm, hypopygium 0.8 mm.

Female

Unknown.

Distribution: South Africa.



Figs 23-24: *Thrypticus parabellus* spec. nov. – **23**: hypopygium, left lateral view; – **24**: hypandrium, ventral view.

Diagnosis: The new species is very close to *T. bellus* LOEW, 1869, differing in larger size and following characters. Tibia bicolorate: fore and hind tibia mostly brown, mid tibia entirely yellow; hind coxa with 3 external setae; mid tibia without posterodorsal seta; hypandrium swollen in basal half; surstylus with rather deep incision at extreme apex; cercal apical lobe with rounded apex.

Review of Namibian material

Until recently, very little information was available with respect to the Namibian Dolichopodidae. Twenty species were recorded and described in recent reviews of Afrotropical genera and subfamilies of the family (GRICHANOV 1996-1999). The majority of species have been collected in the central arid part of the country, being xerophilous and halophilous by nature. Some of these species are widely distributed across semi-deserts or maritime territories of the Old World [*Amblypsilopus munroi* (CURRAN, 1924), *Hydrophorus praecox* LEHMANN, 1822, *Tachytrechus tessellatus* (MACQUART, 1842), *Thinophilus indigenus* BECKER, 1902]. The remaining are regarded as being endemic to Namibia (*Medetera chumakovi* GRICHANOV, 1997, *Medetera rikhterae* GRICHANOV, 1997, *Thinophilus munroi setiscutellatus* GRICHANOV,1997) or to southern part of Africa [*Cemocarus griseatus* (CURRAN, 1926), *Hydrophorus vaalensis* PARENT, 1954; *Medetera norlingi* GRICHANOV, 1997; *Medetera polleti* GRICHANOV, 1997; *Medetera subchevi* GRICHANOV, 1997; *Condylostylus imitator* CURRAN, 1924. Namibia as a whole and north-eastern parts of the country (Kwando river basin) has a significant tropical element, with many species common with central Africa or occurring across the continental Afrotropics. To date I have examined about 50 species of the family collected in Namibia, some of which should be described as new taxa, but the real number may reach 100-200 species following a special expedition covering a wider geographical area of the country. First records of a species from Namibia are marked with (!).

SUBFAMILY SCIAPODINAE

Amblypsilopus BIGOT, 1889

1. ***Amblypsilopus munroi* (CURRAN, 1924)**

GRICHANOV, 1999b.

= *Amblypsilopus parilis* PARENT, 1931 (*Chrysosoma*); GRICHANOV, 1996b: 292.

Material examined: 3♂♂, 14♀♀, Namibia: Rundu dist., Katara Okawango R., 17°48'56"S, 18°53'38"E, 20-23.I.1998, KIRK-SPRIGGS & MARAIS, Malaise traps; 1♂, 1♀, Namibia: Rundu dist., Simanya Okawango River, 17°33'17"S, 18°32'30"E, 23-24.I.1998, KIRK-SPRIGGS & MARAIS, Malaise traps, riverine forest.

Distribution: South Africa; Namibia, Zimbabwe, Angola, Mozambique, Tanzania, Congo (Kinshasa), Nigeria; Sri Lanka.

Chrysosoma GUERIN-MENEVILLE, 1831

2. ***Chrysosoma tricrinitum* PARENT, 1933**

Material examined: 7♂♂, 2♀♀, Namibia: West Caprivi Park, Kwando River: Susuwe, 17°45'37"S, 23°20'55"E, 28.IX.-02.X.1998, A.H. KIRK-SPRIGGS, Malaise trap, dry woodland; 1♂, 1♀, Namibia: West Caprivi Park, Kwando River: Susuwe, 17°45'37"S, 23°20'55"E, 26-30.IX.1998, A.H. KIRK-SPRIGGS, Yellow pan, dry woodland; 3♂♂, 5♀♀, Namibia: West Caprivi Park, Kwando River: Susuwe, 17°45'37"S, 23°20'55"E, 26-29.IX.1998, A.H. KIRK-SPRIGGS, Multicolour pan traps, riverine edge.

Distribution: Congo (Kinshasa), Burundi, Sierra Leone, Nigeria, Tanzania, Mozambique, Malawi, South Africa, Namibia (!).

Condylostylus BIGOT, 1859

3. ***Condylostylus imitator* CURRAN, 1924**

Material examined: 1♂, Nakatwa, Mudamu Game Reserve, 18°11'S, 23°25'E, 08-13.III.1992, E. MARAIS & M. PUSCH.

Distribution: Zimbabwe, Botswana, Namibia (!).

SUBFAMILY DOLICHOPODINAE

Hercostomus LOEW, 1857

4. ***Hercostomus argyropus par* PARENT, 1934**

GRICHANOV, 1999c.

Material examined: 1♂, Buffalo Base, West Caprivi Park, 18°08'S, 21°41'E, 03-05.IV.1990, E. MARAIS; 8♂♂, 37♀♀, Namibia: West Caprivi Park, Kwando River: Susuwe, 17°45'37"S, 23°20'55"E, 28.IX.-02.X.1998, A.H. KIRK-SPRIGGS, Malaise trap, dry woodland; 1♂, Namibia: West Caprivi Park, Kwando River: Susuwe, 17°45'37"S, 23°20'55"E, 26-29.IX.1998, A.H. KIRK-SPRIGGS, 5 Orange pan experiment; 1♀, Namibia: West Caprivi Park, Kwando River: Susuwe, 17°45'37"S, 23°20'55"E, 26-29.IX.1998, A.H. KIRK-SPRIGGS, Multicolour pan traps, riverine edge; 1G, Botswana: Third Bridge, 19°14'S, 23°21'E, 10.III.1993, E. MARAIS.

Distribution: Kenya; Tanzania, Congo (Kinshasa), Uganda, Burundi, Angola, Namibia (!), Botswana (!).

Lichtwardtia ENDERLEIN, 1912

5. ***Lichtwardtia angularis* (MACQUART, 1842)**

Material examined: 1♀, Buffalo Base, West Caprivi Park, 18°08'S, 21°41'E, 03-05.IV.1990, E. MARAIS; 1G, Botswana: Third Bridge, 19°14'S, 23°21'E, 10.III.1993, E. MARAIS.

Distribution: Senegal; Gambia, Nigeria, Gabon, Uganda, Kenya, Tanzania, Congo (Kinshasa), Zambia, South Africa, Swaziland, Mozambique, Botswana (!), Namibia (!).

6. ***Lichtwardtia fractinervis*** **(PARENT, 1929)**

GRICHANOV, 1998b.

Material examined: 1♂, Namibia: Rundu dist., Simanya Okawango River, 17°33'17"S, 18°32'30"E, 23-24.I.1998, KIRK-SPRIGGS & MARAIS, Malaise traps, riverine forest; 1♀, Namibia: Rundu dist., Katara Okawango R., 17°48'56"S, 18°53'38"E, 20-23.I.1998, KIRK-SPRIGGS & MARAIS, Malaise traps.

Distribution: Benin; Ghana, Nigeria, Congo (Kinshasa), Uganda, Angola, Namibia, Malawi.

7. ***Lichtwardtia sukharevae*** **GRICHANOV, 1998**

Material examined: 1♂, Namibia: West Caprivi Park, Kwando River: Susuwe, 17°45'37"S, 23°20'55"E, 28.IX.-02.X.1998, A.H. KIRK-SPRIGGS, Malaise trap, dry woodland; 1♂, Namibia: West Caprivi Park, Kwando River: Susuwe, 17°45'37"S, 23°20'55"E, 26-29.IX.1998, A.H. KIRK-SPRIGGS, 5 Orange pan experiment; 1♂, Namibia: West Caprivi Park, Kwando River: Susuwe, 17°45'37"S, 23°20'55"E, 26-29.IX.1998, A.H. KIRK-SPRIGGS, 5 Yellow pan experiment.

Distribution: Botswana, Madagascar, Namibia (!).

Pelastoneurus LOEW, 1861

8. ***Pelastoneurus ambiguus*** **PARENT, 1934**

Material examined: 2♂♂, Namibia: West Caprivi Park, Kwando River: Susuwe, 17°45'37"S, 23°20'55"E, 28.IX.-02.X.1998, A.H. KIRK-SPRIGGS, Malaise trap, dry woodland; 1G, 2♀♀, Namibia: Khorixas district, Huab River, Krone 721, 20°37'09"S, 13°57'31"E, 23-26.X.1998, KIRK-SPRIGGS & MARAIS, Malaise trap.

Distribution: Ghana; Congo (Kinshasa), Namibia (!).

Tachytrechus HALIDAY in WALKER, 1851

9. ***Tachytrechus tessellatus*** **(MACQUART, 1842)**

GRICHANOV, 1998a:120.

Material examined: 1♂, Namibia: Naukluft Pk., Tsams Ost spring, 24°14'45"S, 16°06'17"E, 26-27.IX.1997, KIRK-SPRIGGS & MARAIS, Malaise trap; 1♂, Namibia: Khorixas district, Huab River, Krone 721, 20°37'09"S, 13°57'31"E, 23-26.X.1998, KIRK-SPRIGGS & MARAIS, Malaise trap.

Distribution: Senegal; Gambia, Nigeria, Congo (Kinshasa), Burundi, Tanzania, Aldabra, Ethiopia, South Africa, Swaziland, Malawi, Angola, Namibia, Botswana, Mozambique, Madagascar, Mauritius, Seychelles, Socotra, Egypt; Oriental Region, New Caledonia.

SUBFAMILY MEDETERINAE

Corindia BICKEL, 1986

10. ***Corindia saegeri*** **GRICHANOV, 1998**

Material examined. 1G, Namibia: West Caprivi Park, Kwando River: Susuwe, 17°45'37"S, 23°20'55"E, 26-30.IX.1998, A.H. KIRK-SPRIGGS, Riparian Winkler extract.

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

Medetera FISCHER VON WALDHEIM, 1819

11. ***Medetera capensis*** **CURRAN, 1926**

Material examined. 6♂♂, 2♀♀, Namibia: Brandberg, Wasserfallfäche at: 21°13'05"S, 14°31'01"E, 1980 m, 10-12.XI.1998, A.H. KIRK-SPRIGGS, Malaise traps river bed; 1♂, 1♀, Namibia: Brandberg, Wasserfallflache at: 21°10'42"S, 14°32'55"E, 2000 m, 22.X.1998, R. BUTLIN & J. ALTRINGHAM, at light 1900-0700; 1♂, Namibia: Brandberg, Plateau Valley at: 21°10'46"S, 14°32'52"E, 1950 m, 21-23.X.1998, R. BUTLIN & J. ALTRINGHAM, Malaise trap 7; 1♀, Namibia: Brandberg, Pools on Wasserfallflache, 21°10'40"S, 14°33'08"E, 2000 m, 21-23.X.1998, R. BUTLIN & J. ALTRINGHAM, Malaise trap 8; 1♀, Namibia: Lüderitz dist., 8 km W Rosh Pinah, 27°59'28"S, 16°39'14"E, 10-26.VIII.1998, KIRK-SPRIGGS & MARAIS, Malaise trap sample; 1♂, Namibia: Rundu dist., Halili, 17°52'58"S, 19°26'49"E, 20.I.1998, KIRK-SPRIGGS & MARAIS, light trap, primary forest.

Distribution: South Africa; Namibia (!).

12. *Medetera chumakovi* Grichanov, 1997

Grichanov 1997a:183.

Distribution: Namibia.

13. *Medetera lvovskii* Grichanov, 1999

Material examined. 1♂, 10 km NE Dikweya, Kavango, 17°41'S, 18°32'E, 14-27.I.1993, E. Marais, Pres. pitf. trap; 1♀, Chamwaala, Ovambo, 17°25'S, 16°03'E, 21.I.1993, E. Marais; 1♂, 1♀, Etudilondjaba, Ovambo, 17°36'S, 17°36'E, 14-27.I.1993, E. Marais, Pres. pitf. trap; 2♂♂, 1E, Edimba, Ovambo, 17°28'S, 16°23'E, 14-26.I.1993, E. Marais, Pres. pitf. trap; 2♂♂, 1♀, Namibia: West Caprivi Park, Kwando River: Susuwe, 17°45'37"S, 23°20'55"E, 26-30.IX.1998, A.H. Kirk-Spriggs, Yellow pan dry woodland.

Distribution: Congo (Kinshasa); Namibia (!).

14. *Medetera norlingi* Grichanov, 1997

Grichanov 1997a: 176.

Material examined. 1♀, Waterberg Plateau, Park Restcamp, 20°30'S, 17°14'E, 09-13.IV.1993, Malaise trap; 1♀, Namibia: Hereroland East, Eiseb River at: 20°39'S, 20°05'E, 18.XI-15.XII.1988, M. Paxton, E. Marais, Pres. pitf. trap; 5♀♀, Namibia: Rundu dist., 1 km S of Katara, 17°50'25"S, 18°54'26"E, 22-23.I.1998, Kirk-Spriggs & Marais, Malaise traps, primary forest; 7♀♀, Namibia: Rundu dist., Simanya Okawango River, 17°33'17"S, 18°32'30"E, 23-24.I.1998, Kirk-Spriggs & Marais, Malaise traps, riverine forest; 1♂, 2♀♀, Namibia: West Caprivi Park, Kwando River: Susuwe, 17°45'37"S, 23°20'55"E, 28.IX.-02.X.1998, A.H. Kirk-Spriggs, Malaise trap, dry woodland; 2♀♀, Leeupan, Kaudom Game reserve, 18°40'S, 20°52'E, 12-14.I.1991, E. Marais.

Distribution: Namibia, Botswana, Angola, South Africa.

15. *Medetera normalis* Curran, 1924

Grichanov, 1997a: 180.

Material examined. 1♀, Namibia: Mariental district, Viljoenskroon, 507, 25°10'S, 19°58'E, 29.III-05.VI.1998, G. Olivier, Malaise traps; 1♀, Botswana: Third Bridge, 19°14'S, 23°21'E, 10.III.1993, E. Marais; 2♀♀, Ogongo agric. col., Ovamboland, SE 1715 Cb, IX-26.X.1993, 26.X-01.XII.1993, Pres. pitf. traps; 1♀, CDM Camp: Tsumkwe, Bushmanland, SE 1920 Cb, V.1993, pittraps, S.V. Green; 1♂, Buffalo Base, West Caprivi Park, 18°08'S, 21°41'E, 03-05.IV.1990, E. Marais; 5♂♂, 15♀♀, Namibia: West Caprivi Park, Kwando River: Susuwe, 17°45'37"S, 23°20'55"E, 28.IX.-02.X.1998, A. H. Kirk-Spriggs, Malaise trap, dry woodland; 2♀♀, Namibia: West Caprivi Park, Kwando River: Susuwe, 17°45'37"S, 23°20'55"E, 26-29.IX.1998, A.H. Kirk-Spriggs, Multicolour pan traps, riverine edge; 1♀, Windhoek, 22°34'S, 17°05'E, 27.II.1996, coll. J. Fish; 1♀, Namibia: Lüderitz, Rooiberg, 27°38'S, 16°28'E, 22-24.IX.1997, Kirk-Spriggs & Marais, Malaise trap sample; 1♀, Namibia: Naukluft Pk., Tsams Ost spring, 24°14'45"S, 16°06'17"E, 26-27.IX.1997, Kirk-Spriggs & Marais, Malaise trap.

Distribution: South Africa, Namibia, Botswana, Burundi, Tanzania, Congo (Kinshasa), Congo (Brazzaville), Ghana.

16. *Medetera polleti* Grichanov, 1997

Grichanov 1997a: 179.

Distribution: Namibia, Botswana.

17. *Medetera pseudotiosa* Grichanov, 1999

Grichanov 1999a.

Distribution: Namibia, Congo (Kinshasa).

18. *Medetera rikhterae* Grichanov, 1997

Grichanov 1997a:180.

Material examined. 1♂, Namibia: Opuwa dist., Okazawana, 18°25'S, 13°47'E, 31.III.1996, E. Marais & A. H. Kirk-Spriggs.

Distribution: Namibia.

19. *Medetera simplicis* Curran, 1924

Grichanov 1997a: 187.

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

20. *Medetera subchevi* GRICHANOV, 1997

GRICHANOV 1997a: 177.

Material examined. 1♂, 1♀, Namibia: Rundu dist., 1 km S of Katara, 17°50'25"S, 18°54'26"E, 22-23.I.1998, KIRK-SPRIGGS & MARAIS, Malaise traps, primary forest; 5♀♀, Namibia: Rundu dist., Simanya Okawango River, 17°33'17"S, 18°32'30"E, 23-24.I.1998, KIRK-SPRIGGS & MARAIS, Malaise traps, riverine forest; 1♀, Namibia: Rundu dist., Katara Okawango R., 17°48'56"S, 18°53'38"E, 20-23.I.1998, KIRK-SPRIGGS & MARAIS, Malaise traps; 1♀, Namibia: Mariental district, Viljoenskroon, 507, 26°08'39"S, 19°57'11"E, 7-9.II.1998, KIRK-SPRIGGS & MARAIS, Malaise traps; 2♂♂, 15♀♀, Namibia: West Caprivi Park, Kwando River: Susuwe, 17°45'37"S, 23°20'55"E, 28.IX.-02.X.1998, A. H. KIRK-SPRIGGS, Malaise trap, dry woodland; 12♂♀, Namibia: Mariental district, Viljoenskroon, 507, 25°10'S, 19°58'E, 08-29.III.1998, 29.III-05.VI.1998, 26.IV-02.V.1998, 19-25.XI.1998, 26.XI-02.XII.1998, G. OLIVIER, Malaise traps; 1♀, Ohamwaala, Ovambo, 17°25'S, 16°03'E, 23.I.1993, E. MARAIS; 10♂♂, 14♀♀, Botswana: Third Bridge, 19°14'S, 23°21'E, 10.III.1993, E. MARAIS; 2♂♂, 1♀, CDM Camp: Tsumkwe, Bushmanland, SE 1920 Cb, V.1993, pittraps, S.V. GREEN; 1E, Odila River at Ovambo, 17°29'S, 16°51'E, 23.I.1993, E. MARAIS, Malaise traps; 4♀♀, Kaudom Camp, Kaudom Game reserve, 18°30'S, 20°44'E, 12-15.II.1992, E. MARAIS & P. PUSCH, Light trap.

Distribution: Namibia, South Africa, Botswana.

Thrypticus GERSTAECKER, 1864

21. *Thrypticus kataevi* GRICHANOV, 1998

Material examined. 1♂, 1♀, NA99-L01: Namibia: Brandberg, Messum Valley 700 m 21°13'29"S, 14°30'98"E, 03.IV.1999, S. VAN NOORT & S.G. COMPTON, UV Light trap, sparsely vegetated river Valley Bushy Karoo-Namib shrubland.

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

SUBFAMILY HYDROPHORINAE

Cemocarus MEUFFELS & GROOTAERT, 1984

22. *Cemocarus griseatus* (CURRAN, 1926)

GRICHANOV, 1997b: 155.

Material examined. 4♂♂, Namibia: Lüderitz dist., Van Reenenbaai at: 27°24'19"S, 15°12'42"E, 3.IX.1998, KIRK-SPRIGGS, Sampling station 63, 64 / National Museum of Namibia, Marine littoral survey 1998; 1♀, Namibia: Lüderitz dist., Orangemund at: 28°37'16"S, 16°26'08"E, 25.VIII.1998, KIRK-SPRIGGS, Sampling station 62 / National Museum of Namibia, Marine littoral survey 1998.

Distribution: South Africa, Namibia.

Hydrophorus FALLÉN, 1823

23. *Hydrophorus hydrophylax* PARENT, 1939

DYTE & SMITH 1980: 455.

Distribution: Uganda, ?Namibia.

24. *Hydrophorus jeanneli* PARENT, 1938

DYTE & SMITH 1980: 455.

Distribution: Kenya, Zaire, Tanzania, ?Namibia.

25. *Hydrophorus praecox* (LEHMANN, 1822)

GRICHANOV, 1997b: 151.

Material examined. 51♂♂, 127EE, NA99-L01: Namibia: Brandberg, Messum Valley 700 m 21°13'29"S, 14°30'98"E, 03.IV.1999, S. van NOORT & S. G. COMPTON, UV Light trap, sparsely vegetated river Valley Bushy Karoo-Namib shrubland; 3♂♂, 2♀♀, NA99-L03: Namibia: Brandberg, Wasserfallfläche, 1960 m, 21°10'77"S, 14°32'87"E, 07.IV.1999, S. VAN NOORT & S. G. COMPTON, UV Light trap, overlooking well vegetated Valley below waterfall Bushy Karoo-Namib shrubland; 1♂, NA99-L02: Namibia: Brandberg, Wasserfallfläche, 2000 m, 21°10'76"S, 14°33'16"E, 06.IV.1999, S. VAN NOORT & S.

G. COMPTON, UV Light trap, open plain with grasses & shrubs Bushy Karoo-Namib shrubland; 1♂, NA99-M01: Namibia: Brandberg, Messum Valley 700 m 21°13'29"S, 14°30'98"E, 02-05.IV.1999 S. VAN NOORT & S. G. COMPTON, Malaise trap, Bushy Karoo-Namib shrubland; 1♀, NA99-M02: Namibia: Brandberg, Messum Valley, 700 m, 21°13'29"S, 14°30'98"E, 02-05.IV.1999, S. VAN NOORT & S. G. COMPTON, Malaise trap, Bushy Karoo-Namib shrubland; 1♀, NA99-L04: Namibia: Brandberg, Königstein, 2470 m, 21°09'00"S, 14° 34'51"E, 11.IV.1999, S. VAN NOORT & S. G. COMPTON, UV Light trap, saddle below peak with grasses & shrubs Bushy Karoo-Namib shrubland; 1♀, Namibia: Naukluft Pk., Tsams Ost spring, 24°14'45"S, 16°06'17"E, 26-27.IX.1997, KIRK-SPRIGGS & MARAIS, Malaise trap; 3♂♂, 6♀♀, Namibia: Lüderitz, Obib water, 28°00'S, 16°38'E, 19-21.IX.1997, MARAIS & KIRK-SPRIGGS, Malaise trap sample; 1♂, Bogenfels Area, 27°26'S, 15°24'E, Diamond area 1, 11/12 April 1986, J. IRISH; 6♀♀, Gobabeb, Namib Naukluft Park, 23°24'S, 15°03'E, VII.1988, VII.1989, IX.1989, Light trap: Kuiseb; 15♂♀, Gobabeb, Namib.-Naukluft Park, 23°24'S, 15°03'E, XII.1988, M. NEL, Light trap in Kuiseb River; 5♂♂, 1♀, State Museum Windhoek, SMI 2210, Panner HC-7, Rossing Mine Survey, SE 2214 B6, 6/6/84, C. MEYER; 1♂, 1♀, State Museum Windhoek, SMI 423, Diptera, Okau Sontair Munutum R., 12.5 km inland SE 1812 HC, Skeleton Coast Park, 22 Jan. 83, BETHUNA, DAY; 2♂♂, 1♀, State Museum Windhoek, SMI 422, Diptera, Salt seep, 2 km inland Sechomib R., SE 1812 Cb, Skeleton Coast Park, 22 Jan. 83, BETHUNA, DAY; 1♀, State Museum Windhoek, Diptera adult, Hoanib River Khowarib Schlucht, SE 1913 Bd, 11 April 1991, B. A. CURTIS; 1♀, State Museum Windhoek, SMI 707, Fish Pond, Rössing, 3/7/84, C. MEYER; 1♀, State Museum Windhoek, SMI 418, Diptera [...] Skeleton Coast Park, 21 Jan. 83, BETHUNA, DAY; 1♂, 1♀, Boulder Pool 3, Rössing Survey, SE 2214Db, 04.VI.1984, C. MEYER SMI 2207; 1♂, 10 km S Rundu, Kavango, 18°00'S, 19°41'E, 12.I.1993, E. MARAIS, Light trap; 1♂, Tuguva, Kavango, 17°26'S, 18°27'E, 13.I.1993, E. MARAIS, Light trap; 25♂♀, Ekuma R. M., Etosha, Pan, Outjo, S.M.N. 22851; 1♀, Epembe, Kaokoland, 17°34'S, 13°32'E, 5-11.XI.1989, C. S. ROBERTS; 1♀, S.M.N. 7535, Okankuejo, Etosha Pan, Outjo, March 1972, H. EBEDES; 1♂, 2♀♀, Omuulu, Ovambo, 17°30'S, 16°10'E, 14.I.1993, E. MARAIS, at light; 1♂, 1♀, Orupembe, Kaokoland, 18°10'S, 12°34'E, 02.V.1991, E. MARAIS.

Distribution: South Africa, Namibia, Angola, Botswana, South Arabia, Ethiopia, Mauritania, Gambia, Nigeria, Kenya, Tanzania, Mauritius, Rodriguez, Aldabra, St. Helena, Cape Verde Islands, Canary Islands; Palearctic, Oriental Regions, Australia, New Zealand.

26. *Hydrophorus vaalensis* PARENT, 1954

GRICHANOV, 1997b: 153.

Distribution: South Africa; ?Namibia, ?Zimbabwe.

Thinophilus WAHLBERG, 1844

27. *Thinophilus bipunctatus* CURRAN, 1926

Material examined. 2♂♂, 4♀♀, Kunene Mouth, Skeleton Coast, 17°16'S, 11°47'E, 20-22.IV.1994, E. MARAIS, Malaise trap, Yellow tray; 1♀, Namibia: Khorixas district, Huab River, Krone 721, 20°37'09"S, 13°57'31"E, 23-26.X.1998, KIRK-SPRIGGS & MARAIS, Malaise trap.

Distribution: South Africa; Congo (Kinshasa), Namibia (!).

28. *Thinophilus indigenus* BECKER, 1902

GRICHANOV 1997c: 137.

Distribution: Egypt; Mongolia, Iran, Turkey, Algeria, Cape Verde Is., Ethiopia, South Yemen, Nigeria, Benin, Ghana, Zaire, Tanzania, Madagascar, Angola, Namibia, South Africa, Swaziland; India, Nepal, Malaya, Borneo, Philippines, Taiwan.

29. *Thinophilus munroi setiscutellatus* GRICHANOV, 1997

GRICHANOV 1997c: 141.

Material examined. 2♀♀, Bogenfels Area, 27°26'S, 15°24'E, Diamond area 1, 11/12 April 1986, J. IRISH.

Distribution: Namibia.

30. *Thinophilus palpatus* PARENT, 1930

GRICHANOV 1997c: 144.

Distribution: Ethiopia, Nigeria, Angola, Namibia, Botswana.

31. *Thinophilus prudens* CURRAN, 1926

Material examined. 1♂, Namibia: Khorixas district, Huab River, Krone 721, 20°37'09"S, 13°57'31"E, 23-26.X.1998, KIRK-SPRIGGS & MARAIS, Malaise trap.

Distribution: South Africa, Namibia (!), Angola, Ghana, Zaire, Senegal.

SUBFAMILY DIAPHORINAE

Asyndetus LOEW, 1869

32. *Asyndetus virgatus* CURRAN, 1926

Material examined. 2♀♀, Namibia: Omaruru District Ugab R., 2 km W Brandberg, Wes, 20°58'05"S, 14°06'36"E, 22-24.X.1998, A.H. KIRK-SPRIGGS & E. MARAIS, Malaise trap sample; 1♀, NA99-Y88: Namibia: Brandberg, Hungorob Valley 1180 m, 21°11'40"S, 14°31'69"E, 05-16.IV.1999 S. VAN NOORT & S. G. COMPTON, Yellow Pan trap, Bushy Karoo-Namib shrubland; 5♂♂, 5♀♀, Namibia: West Caprivi Park, Kwando River: Susuwe, 17°45'37"S, 23°20'55"E, 28.IX.-02.X.1998, A.H. KIRK-SPRIGGS, Malaise trap, dry woodland; 2♂♂, 1♀, Namibia: West Caprivi Park, Kwando River: Susuwe, 17°45'37"S, 23°20'55"E, 26-29.IX.1998, A.H. KIRK-SPRIGGS, 5 Yellow pan experiment; 6♂♂, 9♀♀, Namibia: West Caprivi Park, Kwando River: Susuwe, 17°45'37"S, 23°20'55"E, 26-30.IX.1998, A.H. KIRK-SPRIGGS, Yellow pan, dry woodland; 1♂, 2♀♀, Namibia: West Caprivi Park, Kwando River: Susuwe, 17°45'37"S, 23°20'55"E, 26-29.IX.1998, A.H. KIRK-SPRIGGS, Multicolour pan traps, riverine edge; 1♂, Namibia: West Caprivi Park, Kwando River: Susuwe, 17°45'37"S, 23°20'55"E, 26-29.IX.1998, A.H. KIRK-SPRIGGS, 5 White pan experiment; 1♂, Leeupan, Kaudom Game reserve, 18°40'S, 20°52'E, 12-14.I.1991, E. MARAIS.

Distribution: South Africa, Namibia (!).

Chrysotus MEIGEN, 1824

33. *Chrysotus inconspicuus* LOEW, 1860

Material examined. 1♀, NA99-L01: Namibia: Brandberg, Messum Valley, 700 m, 21°13'29"S, 14°30'98"E, 03.IV.1999, S. VAN NOORT & S. G. COMPTON, UV Light trap, sparsely vegetated river Valley Bushy Karoo-Namib shrubland; 10♀♀, Namibia: West Caprivi Park, Kwando River: Susuwe, 17°45'37"S, 23°20'55"E, 28.IX.-02.X.1998, A.H. KIRK-SPRIGGS, Malaise trap, dry woodland; 1♂, 2♀♀, Namibia: West Caprivi Park, Kwando River: Susuwe, 17°45'37"S, 23°20'55"E, 26-29.IX.1998, A.H. KIRK-SPRIGGS, 5 Yellow pan experiment; 2♀♀, Namibia: West Caprivi Park, Kwando River: Susuwe, 17°45'37"S, 23°20'55"E, 26-29.IX.1998, A.H. KIRK-SPRIGGS, 5 White pan experiment.

Distribution: South Africa; Kenya, Namibia (!).

Cryptophleps LICHTWARDT, 1898

34. *Cryptophleps* spec. aff. *rothii* COUTURIER, 1978

Material examined. 1♀, Namibia: Omaruru District Ugab R., 2 km W Brandberg, Wes, 20°58'05"S, 14°06'36"E, 22-24.X.1998, A.H. KIRK-SPRIGGS & E. MARAIS, Malaise trap sample.

Distribution: Ivory Coast; Namibia (!).

Diaphorus MEIGEN, 1824

35. *Diaphorus lawrencei* CURRAN, 1926

Material examined. 1♀, Namibia: West Caprivi Park, Kwando River: Susuwe, 17°45'37"S, 23°20'55"E, 28.IX.-02.X.1998, A.H. KIRK-SPRIGGS, Malaise trap, dry woodland.

Distribution: Mozambique; Chad, Ghana, Congo (Kinshasa), Malawi, South Africa, Namibia (!).

Trigonocera BECKER, 1902

36. *Trigonocera africana* NAGLIS, 1999

NAGLIS 1999: 333.

Distribution: Zambia, Namibia.

SUBFAMILY SYMPYCNINAE

Campsicnemus HALIDAY in WALKER, 1851

37. *Campsicnemus caffer* CURRAN, 1926

Material examined. 3♂♂, 3♀♀, NA99-L01: Namibia: Brandberg, Messum Valley, 700 m, 21°13'29"S, 14°30'98"E, 03.IV.1999, S. VAN NOORT & S.G. COMPTON, UV Light trap, sparsely vegetated river Valley Bushy Karoo-Namib shrubland; 1♂, Namibia: West Caprivi Park, Kwando River: Susuwe, 17°45'37"S, 23°20'55"E, 28.IX.-02.X.1998, A. H. KIRK-SPRIGGS, Malaise trap, dry woodland; 1♂, Namibia: West Caprivi Park, Kwando River: Susuwe, 17°45'37"S, 23°20'55"E, 26-30.IX.1998, A. H. KIRK-SPRIGGS, Yellow pan, dry woodland; 2♂♂, 1♀, Namibia: West Caprivi Park, Kwando River: Susuwe, 17°45'37"S, 23°20'55"E, 26-29.IX.1998, A. H. KIRK-SPRIGGS, Multicolour pan traps, riverine edge.

Distribution: South Africa; Namibia (!).

Sympycnus LOEW, 1857

38. *Sympycnus munroi* CURRAN, 1925

Material examined. 1♂, NA99-L01: Namibia: Brandberg, Messum Valley, 700 m, 21°13'29"S, 14°30'98"E, 03.IV.1999, S. VAN NOORT & S.G. COMPTON, UV Light trap, sparsely vegetated river Valley Bushy Karoo-Namib shrubland; 2♂♂, Namibia: West Caprivi Park, Kwando River: Susuwe, 17°45'37"S, 23°20'55"E, 26-30.IX.1998, A.H. KIRK-SPRIGGS, Yellow pan, dry woodland; 6♂♂, 9♀♀, Namibia: West Caprivi Park, Kwando River: Susuwe, 17°45'37"S, 23°20'55"E, 28.IX.-02.X.1998, A. H. KIRK-SPRIGGS, Malaise trap, dry woodland.

Distribution: South Africa; Kenya, Congo (Kinshasa), Namibia (!).

Key to Namibian Genera of Dolichopodidae

There are several indeterminable or possibly new species to be described later in the following genera: *Acropsilus* MIK, 1878, *Micromorphus* MIK, 1878, *Teuchophorus* LOEW, 1857.

1 Wing vein M_2 present, even if as fold or indication on membrane 2

\- Vein M_2 absent, without fold or indication on membrane 5

2 Both pairs of scutellar setae long; arista dorsal or dorsoapical; pedicel with long dorsal and ventral setae; 3

\- Scutellum usually with one pair of strong setae, lateral setae short, hairlike or absent; other features various 4

3 Males with distoventral hypandrium and modified fore basitarsus, usually with long abdomen, often with disturbed wing venation; wing often with dark brown band; frons of both sexes with raised mound bearing strong vertical seta and several or sometimes numerous hairs ..... ***Condylostylus***

\- Males with unmodified fore basitarsus, short abdomen, well developed basoventral hypandrium; M_1 gently arched to apex, not recurved basad; frons with vertical seta not arising on setose mound ..... ***Parentia***

4 Arista usually apical on triangular first flagellomere; *m-cu* sinuous; arista usually long, and more than half body length in females; tibiae often with major setae; male cercus often forked or bearing dorsal tooth ..... ***Chrysosoma***

\- Arista usually distinctly dorsal on subrectangular first flagellomere and rarely longer than head width, or if apical or dorsoapical, then always with following characters: tibial chaetotaxy often weak, especially on males; *m-cu* straight, male cercus simple ..... ***Amblypsilopus***

5 Frons strongly excavated above between eyes; M_{1+2} with two bends at the middle of distal part; dorsocentral bristles strong in both sexes; arista usually dorsal; strong vertical seta present in both sexes; clypeus adjacent to margin of eyes ..... ***Mesorhaga***

- Frons seldom strongly excavated, M_{1+2} usually straight or evenly curved, with only one bend, sometimes broken or disrupted at the middle of distal part **6**

6 Costa of wing ending at tip of R_{2+3}; M_{1+2} weak or broken near middle of distal part **7**

- Costa of wing extending to tip of M_{1+2}; M_{1+2} never weaker near middle of distal part .. **8**

7 Male hypopygium usually with strong macrochaetae; acrostichals usually present ..... ***Asyndetus***

- Male hypopygium without strong macrochaetae; acrostichals absent or microscopic . ***Cryptophleps***

8 Scape with hairs above **9**

- Scape bare above **12**

9 Hind basitarsus with distinct bristle above; wing vein M_{1+2} broken in middle of distal part, joining costal vein just before wing tip, having two stublike veins; R_{4+5} and distal part of M_{1+2} nearly parallel ..... ***Lichtwardtia***

- Hind basitarsus without bristles above; R_{4+5} and distal part of M_{1+2} usually converging **10**

10 Several strong anterodorsal setae in apical half of the hind femur in addition to the true anterior subapical seta; face narrowed under antennae and somewhat widened towards clypeus; wing vein M_{1+2} usually with gentle curvation before the middle of distal part, then running towards R4+5 and reaching costa far before the tip of wing; arista short and bare; first flagellomere usually short and suboval ..... ***Tachytrechus***

- Hind femur usually with one true anterior subapical seta; face regularly narrowed towards clypeus or parallel-sided; wing vein M_{1+2} either with curvation beyond the middle of distal part or M_{1+2} reaching costa near the tip of wing; arista often pubescent; first flagellomere usually subtriangular, asymmetric **11**

11 Wing vein M_{1+2} straight or inconspicuously sinuate in basal 1/3 of distal part, usually joining costal vein just before wing tip; R_{4+5} and M_{1+2} weakly convergent in distal part; middle and hind femora always with one strong anterior subapical seta positioned just before apex ..... ***Hercostomus***

- Vein M_{1+2} usually distinctly bent in distal part with strongly convergent R_{4+5} and M_{1+2}; if R_{4+5} and M_{1+2} straight and parallel to each other, then subapical seta positioned at distal third or just behind the middle of hind femora; middle or hind femur sometimes with 2 or more strong anterior subapical setae ..... ***Pelastoneurus***

12 Posterior slope of mesonotum distinctly flattened between dorsocentral setae **13**

- Posterior slope of mesonotum not distinctly flattened, usually with a slight transverse depression just before scutellum **16**

13 Hind femur with a true anterior subapical seta; arista dorsal; acrostichal setae absent; hypopygium globular, sessile ..... ***Micromorphus***

- Hind femur without a true anterior subapical seta, sometimes with a few longer setae along anteroventral margin near tip, rarely with a row of anterior setae beyond the

middle; arista usually apical or subapical; antenna often radially symmetrical from anterior view **14**

14 R_{4+5} and M_{1+2} convergent, at most subparallel at apex; thorax densely pollinose ..... ***Medetera***

- R_{4+5} and M_{1+2} parallel to apex; thorax shining green **15**

15 Female oviscapt blade-like, sclerotised, narrow in dorsal view; male surstylus strongly deflexed dorsad, usually lying conformably with similarly deflexed, oblong-shaped cerci ..... ***Thrypticus***

- Female oviscapt soft, male surstylus and cercus usually not deflexed dorsad ..... ***Corindia***

16 Wing cross-vein *m-cu* distinctly longer than distal part of CuA_1 ..... **17**

- Wing cross-vein *m-cu* not distinctly longer than distal part of CuA_1 ..... **18**

17 First flagellomere trapezoidal, with subapical arista located in dorsoapical excavation; fore femur without strong setae; 6th and 7th male terga well developed ..... ***Cemocarus***

- First flagellomere with apicoventral incision; fore femur thickened, ventrally with strong bristles and spines; at least 7th male tergum greatly reduced ..... ***Hydrophorus***

18 Hind femur without a true anterior subapical seta, sometimes with a few longer anteroventral setae near tip **19**

- Hind femur with a true anterior subapical seta **23**

19 Male 1st flagellomere at least twice longer than high at base, bud-like, with abruptly drawn-out apex; arista apical or slightly subapical, sometimes inserted in apical incision **20**

- Male 1st flagellomere usually not longer than high, reniform, ovate or subtriangular with rounded, rarely acute apex; or if 1st flagellomere much longer than high, then arista distinctly dorsal **21**

20 Male eighth tergite with strong and often long macrochaetae ..... ***Trigonocera***

- Male eighth tergite usually with simple hairs, rarely with short setae ..... ***Chrysotus*** (part)

21 Male face usually broad, eyes contiguous or distinctly convergent above antennae; middle tibia often with ventral seta; male eighth tergite with strong macrochaetae; female face usually with parallel sides and antennae positioned in middle of head ..... ***Diaphorus***

- Male frons broad, eyes distinctly convergent or contiguous below antennae; middle tibia rarely with ventral seta; male eighth tergite rarely with strong setae; female face usually narrowed ventrad with antennae positioned at upper third of head **22**

22 Male hypopygium pedunculate; 7th and 8th segments are often folded, so as hypopygium seems sessile; hypandrium situated before the middle of ventral side of epandrium; female face usually with distinct setae on clypeus ..... ***Acropsilus***

- Male hypopygium sessile; hypandrium situated beyond the middle of ventral side of epandrium; female face without distinct setae on clypeus ..... ***Chrysotus***

23 Face narrow in middle, extending downward ..... ***Campsicnemus***

- Face narrowed gradually or with more or less parallel sides **24**

24 Abdomen broad, rather strongly flattened dorsoventrally; 1st flagellomere rounded .... ***Thinophilus***

- Abdomen not broad and flattened dorsoventrally, usually cylindrical or tapering; 1st flagellomere subtriangular **25**

25 Four or five pairs of strong dorsocentral bristles; male wing costa with long and thick stigma beyond R_1 .... ***Teuchophorus***

- Six pairs of dorsocentral bristles; male wing costa without stigma beyond R_1 .... ***Sympycnus***

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