

New Afrotropical Sympycninae and redescription of European *Peloropecodes acuticornis* (Oldenberg) (Diptera: Dolichopodidae)

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Descriptions of 9 new dolichopodid species are given in the paper: *Olegonegrobovia daugeroni* spec. nov. and *O. couturieri* spec. nov. from Ivory Coast, *O. longicauda* spec. nov. and *Peloropecodes matilei* spec. nov. from Congo (Kinshasa), *P. decembris* spec. nov. from Madagascar, *P. tsacasi* spec. nov. and *P. comorensis* spec. nov. from Comores, *Micromorphus maraisi* spec. nov. and *Teuchophorus caprici* spec. nov. from Namibia. The genera *Teuchophorus* and *Peloropecodes* are recorded for Tropical Africa for the first time. In addition, the European *P. acuticornis* (Oldenberg, 1916), the type species of *Anomalopyga* Oldenberg, 1916, one of the synonyms of *Peloropecodes*, is redescribed; the northern-African *Conchopus aereus* Vaillant, 1953 is transferred to the genus *Micromorphus*.

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Key words. Diptera, Dolichopodidae, Sympycninae, new species, new combination, Tropical Africa, Europe.

Introduction

The "Catalogue of the Diptera of the Afrotropical Region" (Dyde & Smith 1980) included six sympycnine genera, of which *Campsicnemoides* Curran, 1927 and *Syntormoneura* Curran, 1926 should be placed in synonymy to other genera (Grichanov, in preparation). The former raphiine genus *Syntormon* Loew, 1857 is regarded now as a member of the subfamily Sympycninae (Bickel and Dyde, 1989; Negrobov, 1991). The genus *Acropsilus* Mik, 1878 was kept within the subfamily Sympycninae (=Campsicneminae) for a long time. Following Ulrich (1980), Bickel and Dyde (1989) regarded the genus *Incertae sedis*. Grichanov (1998a) placed the genus in the subfamily Diaphorinae. The genus *Campsicnemus* Haliday in Walker, 1851 has been reviewed recently by Grichanov (1998b), who transferred

Campsicnemus brevitatus Parent, 1937 and *Micromorphus perminutus* Parent, 1937 to *Acropsilus*. The genera *Syntormon* and *Sympycnus* Loew, 1857 deserve separate papers. This work comprises descriptions of new species from the closely related genera *Teuchophorus* Loew, 1857, *Micromorphus* Mik, 1878, *Peloropecodes* Wheeler, 1890, and *Olegonegrobovia* Grichanov, 1995, of which *Teuchophorus* and *Peloropecodes* have not been known from the Afrotropics. The genera *Peloropecodes* and *Micromorphus* have been transferred by Robinson (1970a) to the subfamily Peloropecodinae and left there by Negrobov (1991), while *Teuchophorus* has been regarded as a sympycnine genus (Bickel, 1983; Meuffels & Grootaert, 1986; Grootaert et al., 1995). Robinson (1970a) distinguished Peloropecodinae from Sympycninae by the following generalized sentence: "... species of the group are generally shorter and thicker in build, have a

slightly flattened posterior slope on the thorax, and have generally larger and more exposed hypopygia. In fact, all those characters are highly variable within the genera included by the author in both subfamilies. Even the slightly flattened posterior mesonotum could be found in many species of the genus *Sympycnus*. My experience shows that such character as flattening of a sclerite depends greatly on the age of a fly, body size, degree of sclerotization and collection methods. Depressions on a body of dry specimens become often flat or even convex in alcohol-preserved material and after alkalisation. It is also worth to note, that some of the recently described dolichopodid genera are known from alcohol collections only. I think that the characters related to a sclerite flattening (e.g., on occiput, mesonotum, abdomen etc.) should be used with a great carefulness in the high-rank taxonomy. In addition, as far as I know, neither *Peloroepodes* nor its synonyms have been appropriately redescribed. Published descriptions of their type species do not allow to place them out of Sympycninae. So, I am discussing the Afrotropical genera mentioned in this paper as belonging to the subfamily Sympycninae (=Peloroepodinae). In addition, European *A. acuticornis* Oldenberg, 1916, the type species of *Anomalopyga* Oldenberg, 1916, one of the synonyms of *Peloroepodes*, is redescribed in this paper; northern-African *Conchopus aereus* Vaillant, 1953 is transferred in the genus *Micromorphus*.

Treating material from the collections of the Museum of Natural History, Paris [MNHP], the National Museum of Namibia, Windhoek [NMN], the Royal Institute for Natural Sciences, Brussels [RINS] and the Royal Museum for Central Africa, Tervuren [RMCA], I have found a new abundant material on the subfamily Sympycninae. Descriptions of 9 new species are given in the paper: *Olegonegrobovia daugeroni* spec. nov. and *O. couturieri* spec. nov. from Ivory Coast, *O. longicauda* spec. nov. and *Peloroepodes matilei* spec. nov. from Congo (Kinshasa), *P. decembris* spec. nov. from Madagascar, *P. tsacasi* spec. nov. and *P. comorensis* spec. nov. from Comores, *Micromorphus maraisi* spec. nov. and *Teuchophorus caprivi* spec. nov. from Namibia. The genera *Teuchophorus* and *Peloroepodes* are recorded for Tropical Africa for the first time. Diagnoses of the genera studied and keys to all Afrotropical sympycnine genera and species will be given in one of the next papers.

Deposition of types of the new species is mentioned under the species descriptions. The relative lengths of the podomeres are representative ratios and not measurements (1 mm = 78). Bibliography includes mainly works published after the "Catalogue of the Diptera of the Afrotropical Region" (Dyde & Smith, 1980).

Descriptions

Genus *Peloroepodes* Wheeler, 1890

Known Afrotropical species:

- Peloroepodes matilei* Grichanov, spec. nov.
Peloroepodes decembris Grichanov, spec. nov.
Peloroepodes tsacasi Grichanov, spec. nov.
Peloroepodes comorensis Grichanov, spec. nov.

Peloroepodes acuticornis (Oldenberg)

Robinson, 1970b

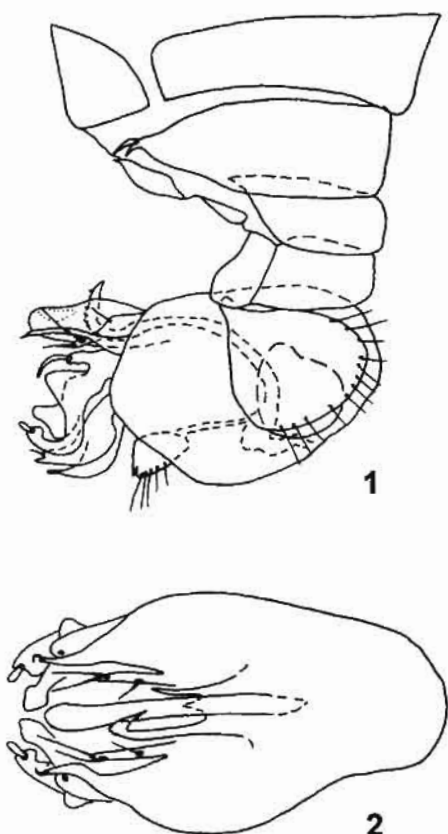
(Figs 1, 2, 22, 33, 50)

Anomalopyga acuticornis Oldenberg, 1916: 187

Type material examined. Lectotype [here designated], ♂, Herkulesbad, 6.7.12 / Type [pink label] / *Anomalopyga acuticornis* m. Old. Type / Typus [red label] / Zool. Mus. Berlin; paralectotypes [here designated], ♂, ♀, [on one pin], Herkulesbad, 30.6.12 / Type [pink label] / *Anomalopyga acuticornis* m. Old. Type / Typus [red label] / Zool. Mus. Berlin; ♂, ♀, [on one pin], [???], 30.6.12 / Typen / *Anomalopyga acuticornis* nov. det. Old. / *A. acuticornis* Oldbg. [Paris Mus. Nat. Hist., Coll. O. Parent].

Material examined. 1 ♂ [figured; Russia:] Krasnodar Territory, Arkhipo-Osipovka, 19.VI.1992, Grichanov [Author's collection]; 1 ♂, 1 ♀, Le Lauron, Georges du Loup, 28.VII.1971, H. Meuffels / France, Alpes Maritimes [Meuffels' collection].

Description. Male. Frons metallic dark-blue, grey pollinose. 1 strong but short postvertical seta positioned far from postocular setal row; upper postocular setae black, lateral and lower white; lower setae slightly longer than upper. Eyes distinctly separated anteriorly. Face dark-blue, whitish pollinose, 1.6 times as high as wide under antennae. Ratio of height of epistome to its maximal width to its minimal width to height of clypeus to its width, 17 : 14 : 6 : 6 : 6. Antenna entirely black or scape and pedicel reddish-brown. Scape small, pedicel slightly larger, globular, with ring of short setulae, of which only 1 dorsal seta longer



Figs 1, 2. *Peloropeodes acuticornis* (Oldenberg).

1, apex of abdomen, left lateral view; 2, hypopygium, ventral view.

than pedicel; 1st flagellomere large, subtriangular, almost symmetrical, 1.3—1.5 times longer than high at base, densely haired. Arista positioned at basal third of dorsal side of 1st flagellomere, 3 times as long as main segments of antenna combined, pubescent, with longest hairs at middle of arista. Ratio of 1st flagellomere to 1st and 2nd aristomeres, 9 : 8 : 36. Palpi and proboscis dark-brown.

Mesonotum metallic bluish-black, densely grey pollinose; pleura dark-blue, whitish pollinose. 1 strong and 1 hair-like intraalar. 6 (2+4) dorsocentral setae with anterior five setae of equal length; 6th seta somewhat shifted towards lateral margin, slightly longer than 5th; several irregular microscopic hairs in front of the 1st seta. 6 pairs of rather long acrostichal setae in 2 rows extending to mesonotal flattening, halfway between 4th and 5th dorsocentral setae. Proepisternum with 1 not long black seta and 1 short white hair above fore coxa.

Legs including coxae with mostly yellow ground colour, significantly darkened in places; fore coxa brown anteriorly; mid and hind coxae mostly brown with bluish reflection; all femora darkened dorsally; hind tibia gradually darkened towards apex, brownish in distal half; anterior four tarsi brown from tip of basitarsus; hind tarsus entirely brown. Fore coxa with rather long black cilia in distal half; mid coxa anteriorly with several short and long black cilia and apical comb of 5—6 short blunt thickened setae. Trochanters with microscopic black hairs; mid trochanter having also 1 strong dorsal seta. Fore femur with 3 dark elongate posteroventral subapical hairs. Fore tibia slightly thickened towards apex. Fore tibia and tarsus with ordinary setulae. 5th segment of fore tarsus flattened ventrally, with several microscopic ventral spinules; asymmetric claws: posterior claw simple, anterior one enlarged, with short basal spinule. Length ratio of fore coxa to femur to tibia to tarsus (segments from first to fifth), 30 : 45 : 46 : 19 : 9 : 6 : 5 : 5. Mid femur simple, bearing a row of 7—8 fine light ventral hairs along entire length, as long as diameter of femur; 1 strong anterior subapical bristle; no posteroventral setae. Mid tibia simple, with pair of antero- and posterodorsal setae at basal third and same pair at middle, ring of 4—5 apical setae; no ventral setae. Mid tarsus simple; 1—4th segments with short weak apicoventral spinules. Length ratio of mid coxa to femur to tibia to tarsus (segments from first to fifth), 25 : 57 : 62 : 29 : 17 : 13 : 8 : 7. Hind femur with strong anterior subapical and somewhat elongate dorsal setulae in basal half. Hind tibia inconspicuously thickened in distal half, with pair of antero- and posterodorsal setae at basal fourth, 1 anterodorsal just before middle and 1 posterodorsal just beyond middle, 1 strong subapical dorsal seta, slightly longer than diameter of tibia; 3—4 simple short apical setae. Hind basitarsus with very small basal denticle posteriorly, directed towards apex of hind tibia. Length ratio of hind coxa to femur to tibia to tarsus (segments from first to fifth), 15 : 58 : 66 : 19 : 25 : 17 : 11 : 9.

Wing yellowish, almost hyaline, veins brown. Costal setulae and hairs at base slightly longer than those at wing apex. Costa simple. Ratio of part of costa between R_{2+3} and R_{4+5} to that between R_{4+5} and M_{1+2} , 18 : 11. R_{2+3} almost straight, inconspicuously bent; M_{1+2} weakly but distinctly convex anteriorly; R_{4+5} and M_{1+2} inconspicuously converging in distal half. M_{1+2} almost straight,

inconspicuously convex antiad. Ratio of apical to basal part of M_{1+2} , 82 : 42. Ratio of $m-cu$ to maximal distance between R_{4+5} and M_{1+2} to apical part of CuA_1 , 12 : 13 : 28. Crossvein $m-cu$ somewhat weaker than adjacent longitudinal veins, straight, forming right angles with M_{1+2} and CuA_1 . Lower calypter yellow, with black apex and black cilia. Halter yellow.

Abdomen bronze-green, pollinose, with black hairs and rather long marginal setae, conoid; 2–4th sternites large, bluish-black, with short light hairs; 5–6th sternites reduced. 5th tergite ventrally with short spine on both sides; 6th tergite very small, hardly visible; 7th segment very short, divided into sternite and tergite. 8th segment bronze, pollinose, large, covering about 1/3 of left lateral surface of epandrium, bearing numerous short hairs. Epandrium black, globular, slightly longer than high, as wide as high, approximately as long as 3–6th terga combined. Hypandrium asymmetrical, with short narrow right arm and long, curved and serrate distally, pointed at apex left arm. Aedeagus long, broad, with 1–2 plicae. Epandrial lobes relatively long and narrow, 2 pairs; inner lobe bearing 3 strong setae; distoventral lobe having 1 short apical spine. Appendages yellow-brown, symmetric. Two pairs of almost symmetrical surstyli; each surstylus bifurcated; outer lobe of ventral surstylus with a long thick pedunculate basoventral and a short thick apical setae; dorsal surstylus practically bare. Cercus small, subtriangular, with several dorsal setae.

Female. Similar to male except lacking male secondary sexual characters. Face wider than that in male, wider than height of 1st flagellomere; 1st flagellomere as long as high; legs simple, somewhat lighter; last hemitergite with four short black acanthophorites; cercus blade-like, bare, extending slightly beyond apex of hemitergite; anal plate small, with 2 pairs of hairs.

Length (mm): body 1.9, antenna 0.7, wing 2.1/0.7, hypopygium 0.65.

Distribution. Romania, France, Russia (North-western Caucasus).

Diagnosis. Material examined is identical to original description of the species by Oldenberg (1916), although I would not regard ciliation of hind leg to be so remarkable as to write: "Shienen und (abnehmend schwächer) auch Tarsen der Hinterbau unterseits mit sehr kleinen Wimpern besetzt, die auch beim ♀ noch zu erkennen sind". The second European species, *P. meridionalis* Parent, 1928 is very close to *P. acuticornis*, dif-

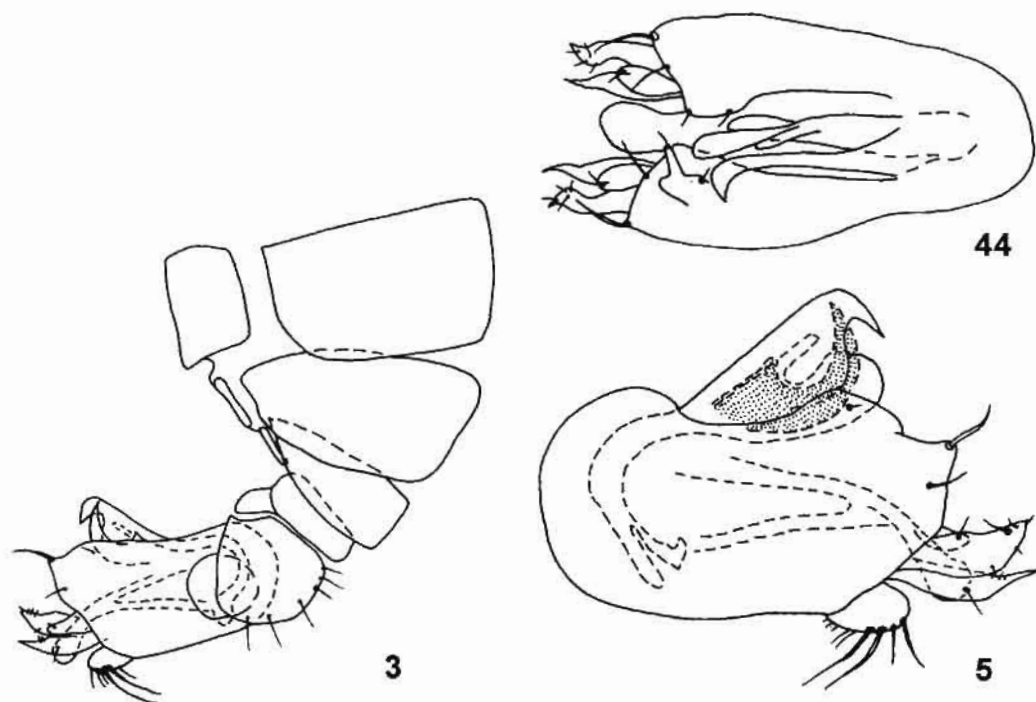
fering (according to Parent, 1938) in much narrower 1st flagellomere mainly. *P. acuticornis* has many differences from the type species of *Peloro- peodes*, *P. salax* Wheeler, 1890. Main diagnostic characters of the latter species (according to Wheeler) are as follows. The scape is stout, subcylindrical, having a few hairs on its under side; male 1st flagellomere is very long, tapering from a broad rounded base to a blunt point, on which is inserted the thick, flexible arista. Thoracic dorsum is moderately arched; scutellum has 4 setae. CuA_1 entering posterior margin somewhat nearer the base than the apex of wing; anal vein distinct. The description has no indication on femoral subapical setae and asymmetrical tarsal claws. I think that those characters may delimit the two genera, *Peloro- peodes* and *Anomalopyga*. However, some of the numerous American species included by Robinson (Foote et al., 1965, Robinson, 1970a, 1970b, 1975) in the *Peloro- peodes* are congeneric with *P. acuticornis*. So, I keep *Anomalopyga* in synonymy to *Peloro- peodes* until a revision of American species will be done. *P. acuticornis* seems to be inhabitant of mountain forests in the southern Europe, occurring in the Caucasus, Carpathians and Alps.

***Peloro- peodes matilei* Grichanov, spec. nov.**
(Figs 3–5, 23, 34, 35, 51)

Holotype. ♂, Congo Belge, P.N.G., Miss. De Saeger, Aka/2, 22-V-1952, H. De Saeger, 3514 [RMCA].

Paratypes. 2 ♂, same label [RMCA].

Description. Male. Frons metallic blue-black, grey pollinose. 1 strong but short postvertical seta positioned far from postocular setal row; postocular setae entirely black; lower setae slightly longer than upper. Eyes distinctly separated anteriorly. Face black, pollinose, widest under antennae, very narrow below middle, 2 times as high as wide under antennae and 10 times as high as wide in middle. Antenna entirely black or scape and pedicel reddish-brown. Scape small, pedicel slightly larger, globular, with ring of short setulae, of which only 1 dorsal seta longer than pedicel; 1st flagellomere slightly higher than long, having distinct acute apex, densely haired. Arista dorsal, 3 times as long as main segments of antenna combined, pubescent, with thickened 1st aristomere, short hairs in basal half and long hairs in distal half, the hairs as long as 1st aristomere. Ratio of pedicel to 1st flagellomere to 1st and 2nd aristomeres, 4 : 5 : 3 : 39. Palpi and proboscis dark-brown.



Figs 3, 4, 5. *Peloropeodes matilei* Grichanov, spec. nov.

3, apex of abdomen, left lateral view; 4, hypopygium, ventral view; 5, hypopygium, right lateral view.

Mesonotum metallic bluish-black, grey pollinose; pleura black, whitish pollinose. 1 strong and 1 hair-like intraalar. 5 (2+3) dorsocentral setae with presutural setae slightly shorter than post-suturals; several irregular short hairs in front of the 1st seta. 5—6 pairs of rather long acrostichal setae in 2 rows extending to mesonotal flattening, halfway between 3rd and 4th dorsocentral setae. Proepisternum with long brownish seta and 1—2 short white hairs above fore coxa.

Legs including coxae mostly yellow; fore and hind coxae brownish at base; mid coxa mostly brown. Fore coxa with rather long black cilia in distal half; mid coxa anteriorly with several long black cilia and apical bundle of 3 short but strong setae. Trochanters with microscopic hairs; mid trochanter having also 1—2 strong dorsal seta; hind trochanter with 1 fine dorsal seta. Fore femur with 1—2 dark elongate posteroventral sub-apical hairs. Fore tibia slightly thickened towards apex, with 2 long fine anterior apical setae; the longest seta 3/4 as long as basitarsus. 1—4th segments with double row of erect ventral hairs, approximately as long as diameter of tarsomeres; 2—4th segments with elongate apicodorsal setu-

lae. 5th segment of fore tarsus enlarged, with 2—4 long anteroventral hairs, at most as long as tarsomere, and asymmetric claws: posterior claw simple; anterior one enlarged, thick, strongly curved, as long as tarsomere. Length ratio of fore coxa to femur to tibia to tarsus (segments from first to fifth), 30 : 43 : 47 : 18 : 11 : 8 : 6 : 8. Mid femur simple, bearing a row of 4 fine dark ventral hairs in basal 1/4, 2 times as long as diameter of femur; 1 strong anterior subapical bristle; 1 fine posteroventral cilia. Mid tibia simple, with pair of antero- and posterodorsal setae at basal 1/4 and same pair at middle, ring of 4—5 apical setae; no ventral setae. Mid tarsus simple; 1—4th segments with short weak apicoventral spinules. Length ratio of mid coxa to femur to tibia to tarsus (segments from first to fifth), 24 : 50 : 59 : 26 : 15 : 12 : 8 : 7. Hind femur with strong anterior subapical and somewhat elongate dorsal setulae in basal half, 1 or 2 irregular ventral rows of about 10 dark hairs in middle half, 1.5 times longer than diameter of femur. Hind tibia simple, with 1 short dorsal beyond middle, 1 strong subapical dorsal seta, as long as diameter of tibia; 1 simple apicoventral seta of the same length. Hind

basitarsus with very small basal denticle posteriorly, directed towards apex of hind tibia. Length ratio of hind coxa to femur to tibia to tarsus (segments from first to fifth), 17 : 57 : 61 : 14 : 25 : 12 : 7 : 9.

Wing hyaline, veins brown. Costal setulae and hairs at base slightly longer than those at wing apex; costal setulae reaching R_{2+3} . Costa simple. Ratio of part of costa between R_{2+3} and R_{4+5} to that between R_{4+5} and M_{1+2} , 17 : 12. R_{2+3} almost straight, inconspicuously bent; R_{4+5} and M_{1+2} parallel in distal half. R_{4+5} and M_{1+2} almost straight, inconspicuously convex anteriorly. Ratio of apical to basal part of M_{1+2} , 69 : 45. Ratio of $m-cu$ to maximal distance between R_{4+5} and M_{1+2} to apical part of CuA_1 , 9 : 11 : 25. Crossvein $m-cu$ somewhat weaker than adjacent longitudinal veins, straight, forming right angles with M_{1+2} and CuA_1 . Lower calypter yellow, with black apex and black cilia. Halter yellow.

Abdomen bronze-green, pollinose, with black hairs and rather long marginal setae, conoid; 2—4th sternites large, brown-black, with short light hairs; 5—6th sternites reduced. 6th tergite very small, hardly visible; 7th segment very short, divided into sternite and tergite. 8th segment brown-black, pollinose, large, covering nearly 1/2 of left lateral surface of epandrium, bearing numerous short hairs. Epandrium black, globular, 1.8 longer than high, as wide as high, approximately as long as 4th and 5th terga combined. Appendages yellow-brown. Hypandrium long, pointed and curved at apex. Aedeagus broad, 3-lobate. Right epandrial lobe reduced to 2 short interior and 2 distoventral setae. Left interior epandrial setae positioned on a small lobe. Surstyli almost symmetrical, 3-lobate; ventral lobe short, half as long as middle, bearing 1 short seta, with rounded apex. Mid and dorsal lobes of equal length, bearing several short setae and setulae, with pointed apex. Large unpaired epandrial process protruding distally between surstyli. Cercus rounded, with 2 long and several short dorsal setae.

Female unknown.

Length (mm): body 1.7, antenna 0.6, wing 1.9/0.6, hypopygium 0.4.

Distribution. Congo (Kinshasa).

Etymology. The species is named for the French dipterologist, Dr. Lonc Matile.

Diagnosis. *P. matilei* differs from *P. acuticornis* in having 5 dorsocentral setae, lacking ventral spinules on 5th segment of fore tarsus, and morphology of hypopygium. The new species differs

from *P. acuticornis* and *P. decembris* in having long apical setae on fore tibia, long ventral cilia on mid and hind femora, trilobate aedeagus and other characters of hypopygium.

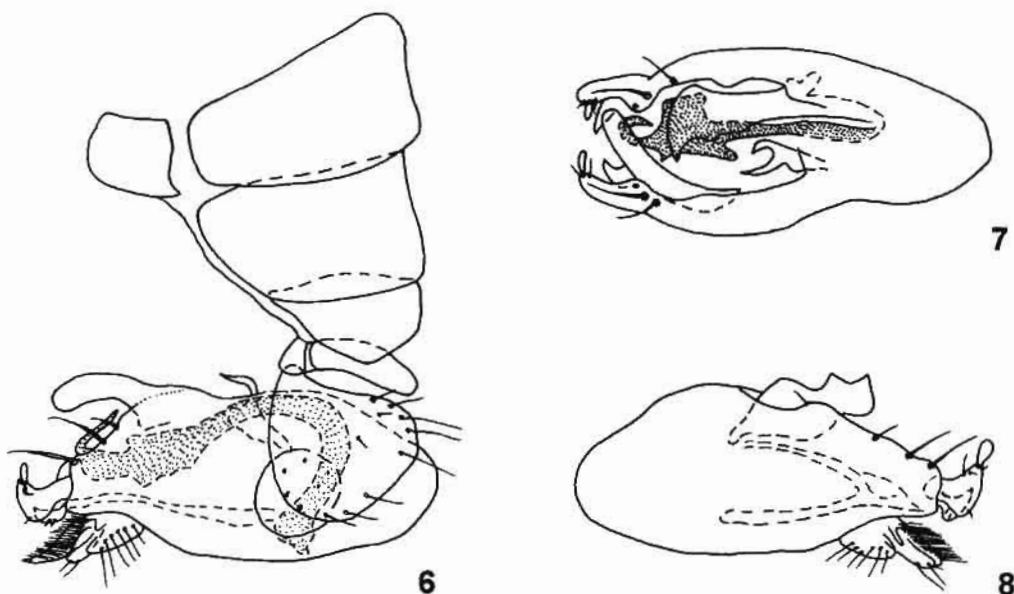
Peloropecodes decembris
Grichanov, spec. nov.
(Figs 6—8, 24, 36, 52)

Holotype [in glycerol]. ♂, Perinet, Madagascar, Dec. 1955, B. Stuckenberg / P. Vanschuytbroeck det. 1957, *Chrysotus cupreus* Macq. / R.I.Sc.N.B. I.G. 20938 [RINS].

Description. Male. Frons and face black. 1 strong but short postvertical seta positioned far from postocular setal row; upper postocular setae black, lower white. Eyes seem to be separated anteriorly (lower part of face destroyed). Face widest under antennae, strongly narrowed in middle. Antenna entirely black. Scape small, pedicel slightly larger, globular, with ring of short setulae, of which only 1 dorsal seta as long as pedicel; 1st flagellomere 1.2 times longer than high at base, with rounded apex, microscopically haired. Arista dorsal; basal half of arista practically glabrous (apical part broken). Ratio of scape to pedicel to 1st flagellomere to 1st segment of arista, 3 : 4 : 7 : 3. Proboscis dark-brown; palpi broken.

Thorax black, with black setae. 1 strong and 1 hair-like intraalar. 5 (2+3) dorsocentral setae with presutural setae slightly shorter than postsutural; 5th seta somewhat shifted towards lateral margin, slightly longer than 4th; several irregular microscopic hairs in front of the 1st seta. 6 pairs of not long acrostichal setae in 2 rows extending to mesonotal flattening, halfway between 3rd and 4th dorsocentral setae. Proepisternum with 1 not long dark seta above fore coxa.

Legs including coxae entirely black, with black setae. Fore and mid coxa with rather long anterior and lateral cilia; mid coxa with simple apical cilia. Trochanters with sparse short hairs; mid trochanter having also 2 strong dorsal setae. Fore femur with 1—2 elongate posteroventral subapical hairs. Fore tibia nearly as thick as fore femur, narrow at extreme base; fore tibia with most setulae transformed into hairs; the longest hairs covering posteroventral side in distal half, as long as diameter of tibia. Fore tarsus with elongate dorsal hairs; 4th tarsomere having pointed anteroventral process as long as the tarsomere; 5th segment of fore tarsus thick, with basoventral tooth and enlarged asymmetric claws: posterior claw simple,

Figs 6, 7, 8. *Peloropecodes decembris* Grichanov, spec. nov.

6, apex of abdomen, left lateral view; 7, hypopygium, ventral view; 8, hypopygium, right lateral view.

anterior one with short spinule. Length ratio of fore coxa to femur to tibia to tarsus (segments from first to fifth), 23 : 36 : 34 : 18 : 8 : 4 : 3 (6 with a process) : 5. Mid femur simple, bearing fine ventral hairs in basal 1/3, 1.0—1.5 times as long as diameter of femur; 1 strong anterior subapical bristle; no posteroventral setae. Mid tibia simple, with pair of antero- and posterodorsal setae at basal fourth and same pair of weaker setae (left leg) or only 1 anterodorsal (right leg) at middle; ring of 4—5 apical setae, of which 1 ventral seta is rather strong. Mid tarsus simple; 1—4th segments with short weak apicoventral spinules. Length ratio of mid coxa to femur to tibia to tarsus (segments from first to fifth), 16 : 43 : 48 : 23 : 10 : 8 : 6 : 6. Hind femur with strong anterior subapical seta, somewhat elongate dorsal setulae in basal half and ventral row of hairs not longer than diameter of femur. Hind tibia simple, with somewhat elongate anteroventral setulae, pair of antero- and posterodorsal weak setae at basal fourth, 1 anterodorsal just before middle and 1 short posterodorsal at distal third, 1 stronger subapical dorsal seta, slightly longer than diameter of tibia; 3—4 simple short apical setae. Hind basitarsus having posteriorly small basal tooth followed by shallow excision and small posteroventral tubercle at basal fourth. Length ratio of hind coxa to femur to tibia to tarsus (segments

from first to fifth), 12 : 47 : 50 : 16 : 16 : 11 : 7 : 6.

Wing hyaline, veins brown-black. Costal setulae and hairs at base slightly longer than those at wing apex. Costa simple. Upper costal setulae not reaching to R_{2+3} , lower setulae going slightly beyond R_{2+3} . Ratio of part of costa between R_{2+3} and R_{4+5} to that between R_{4+5} and M_{1+2} , 14 : 10. R_{2+3} and R_{4+5} almost straight, inconspicuously convex anteriorly; M_{1+2} practically straight; R_{4+5} and M_{1+2} parallel in distal half. Ratio of apical to basal part of M_{1+2} , 66 : 38. Ratio of $m-cu$ to maximal distance between R_{4+5} and M_{1+2} to apical part of CuA_1 , 11 : 12 : 22. Crossvein $m-cu$ somewhat weaker than adjacent longitudinal veins, almost straight, perpendicular to longitudinal wing axis, forming right angle with M_{1+2} and acute (75°) with CuA_1 . Lower calypter brown, with black cilia. Halter brown.

Abdomen greenish-black, with metallic reflection, black hairs and not long marginal setae, conoid; 2—4th sternites large, with short hairs; 5—6th sternites reduced, membranous; 6th tergite half smaller than 5th; 7th segment very small, with reduced sternite, lying along ventral margin of 8th tergite. 8th segment large, covering about 1/3 of left lateral surface of epandrium, bearing short hairs. Foramen midlateral. Epandrium black, elongate-oval, more than twice longer than high, as wide as high, as long as 3—6th terga combined.

Hypandrium left midventral, asymmetrical. Aedeagus strongly and irregularly broadened in front of apex, very narrow at apex. Left epandrial lobe strongly developed, digitiform; right epandrial lobe reduced; 3 epandrial setae distoventrally on both sides. Two pairs of almost symmetrical surstyli; ventral lobe larger than dorsal, with swollen seta apically. Cercus having basal part covered with sparse dorsal cilia, and distoventral part densely haired distally.

Female unknown.

Length (mm): body 1.7, wing 1.7/0.7, hypopygium 0.6.

Distribution. Madagascar.

Diagnosis. *P. decembris* differs from *P. acuticornis* in having only 5 dorsocentral setae, reduced epandrial lobes and other characters of hypopygium. The new species differs from *P. acuticornis* and *P. matilei* in strongly modified fore tibia and 4—5th segments of fore tarsus, stronger oblique *mcu*, which is half as long as *CuA*₁, and hypopygium morphology.

Peloropecodes tsacasi Grichanov, spec. nov.
(Figs 9, 10, 25, 37, 38, 53)

Holotype. ♂, Muséum Paris / GDE Comore-Conseil, 1600—1750 m, 1—2.XII.1982, L. Tsacas rec.

Paratypes: 23 ♂, same label; 22, Muséum Paris / GDE Comore, Nioumbadjou, 600—700 m, 25—27.XI.1982, L. Tsacas rec.; 1 ♂, Muséum Paris / GDE Comore, Mt. Lima Manda, 900—1200 m, 3.XII.1982, L. Tsacas rec.

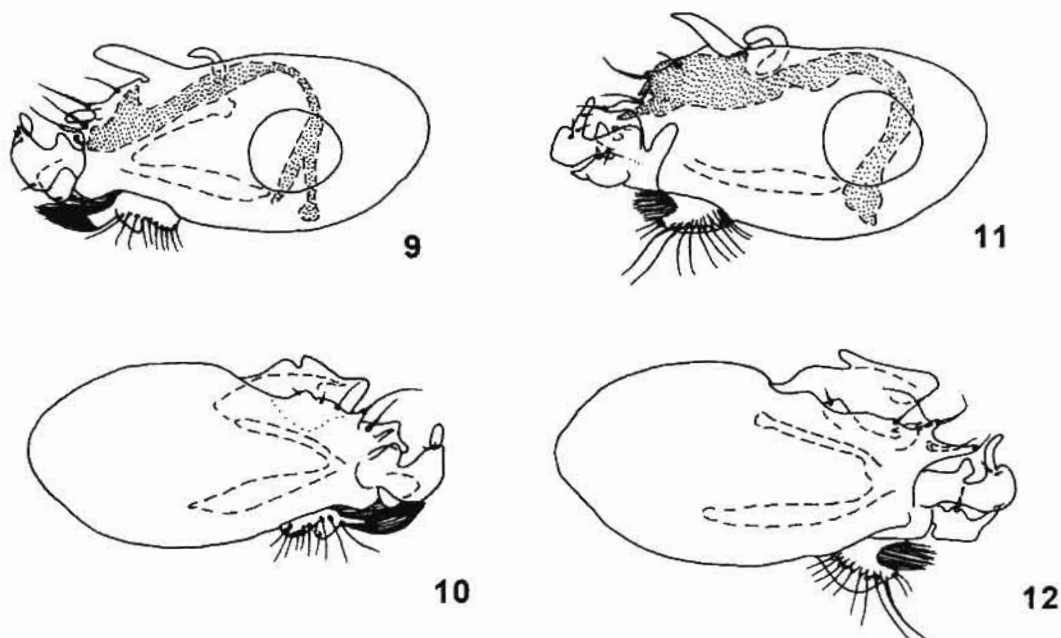
Description. Male. Frons and face black. 1 strong but short postvertical seta positioned far from postocular setal row; upper postocular setae black, lower white. Eyes separated in middle of face by very thin line. Face widest under antennae, strongly narrowed in middle. Ratio of height of epistome to its maximal width to its minimal width to height of clypeus to its width, 21 : 15 : 4 : 6 : 5. Antenna entirely black. Scape small, pedicel slightly larger, globular, with ring of short setulae, of which only 1 dorsal seta longer than pedicel; 1st flagellomere 1.3 times longer than high at base, with rounded apex, microscopically haired. Arista basodorsal, pubescent. Ratio of scape to pedicel to 1st flagellomere to 1st and 2nd aristomeres, 3 : 4 : 8 : 7 : 30. Proboscis and palpi dark-brown.

Thorax black, with black setae. 1 strong and 1 hair-like intraalar. 5 (2+3) dorsocentral setae with presutural setae slightly shorter than post-

sutural; 5th seta somewhat shifted towards lateral margin, slightly longer than 4th; several irregular microscopic hairs in front of the 1st seta. 6 pairs of not long acrostichal setae in 2 rows extending to mesonotal flattening, halfway between 3rd and 4th dorsocentral setae. Proepisternum with 1 long dark seta above fore coxa.

Legs yellow-brown, with black setae; coxae brown, femora blackish or brown, tibiae and basitarsi yellow or brownish yellow, 2—5th segments of tarsi brown. Fore and mid coxa with rather long anterior and lateral cilia; mid coxa with apical spine of glued cilia. Trochanters with sparse short hairs; mid trochanter having also 2 strong dorsal setae. Fore femur with 1—2 elongate posteroventral subapical hairs. Fore tibia thickened, with ventral and posteroventral hairs, as long as diameter of tibia. Fore tarsus with elongate dorsal hairs; 4th tarsomere having pointed anteroventral process as long as the tarsomere; 5th segment of fore tarsus thick, with basoventral tooth and enlarged asymmetric claws; posterior claw simple, anterior one with short spinule. Length ratio of fore coxa to femur to tibia to tarsus (segments from first to fifth), 25 : 50 : 43 : 24 : 9 : 4 : 3 (5 with a process) : 7. Mid femur with ventral swelling at extreme base bearing 2 ventral setae, 4 times as long as diameter of femur; 1 strong anterior subapical bristle; no posteroventral setae. Mid tibia simple, with pair of antero- and posterodorsal setae at basal fourth and 1 antero-dorsal at distal 1/3; ring of 4—5 apical setae, of which 1 ventral seta is rather strong. Mid tarsus simple; 1—4th segments with short weak apicoventral spinules. Length ratio of mid coxa to femur to tibia to tarsus (segments from first to fifth), 21 : 55 : 63 : 32 : 16 : 14 : 9 : 7. Hind femur with strong anterior subapical seta, elongate dorsal setulae in basal half and anteroventral row of cilia decreasing in size distally; the cilia at base longer than diameter of femur. Hind tibia simple, with somewhat elongate anteroventral setulae, pair of antero- and posterodorsal setae at basal fourth and same pair at distal third, 1 stronger subapical dorsal seta, slightly longer than diameter of tibia; 3—4 simple short apical setae. Hind basitarsus having posteriorly small basal tooth followed by shallow excision and small posteroventral tubercle at basal fourth. Length ratio of hind coxa to femur to tibia to tarsus (segments from first to fifth), 16 : 60 : 69 : 20 : 25 : 15 : 10 : 8.

Wing hyaline, veins brown-black. Costal setulae and hairs at base slightly longer than those

Figs 9, 10, 11, 12. *Pelorocephalus*.

9, 10, *P. tsacasi* Grichanov, spec. nov.: 9, hypopygium, left lateral view; 10, hypopygium, right lateral view. 11, 12, *P. comorensis* Grichanov, spec. nov.: 11, hypopygium, left lateral view; 12, hypopygium, right lateral view.

at wing apex. Costa simple. Upper costal setulae not reaching to R_{2+3} , lower setulae going slightly beyond R_{2+3} . Ratio of part of costa between R_{2+3} and R_{4+5} to that between R_{4+5} and M_{1+2} , 17: 13. R_{2+3} and R_{4+5} almost straight, inconspicuously convex anteriorly; M_{1+2} practically straight; R_{4+5} and M_{1+2} parallel in distal half. Ratio of apical to basal part of M_{1+2} , 84: 55. Ratio of $m-cu$ to maximal distance between R_{4+5} and M_{1+2} to apical part of CuA_1 , 11: 12: 31. Crossvein $m-cu$ somewhat weaker than adjacent longitudinal veins, straight, perpendicular to both longitudinal wing veins. Lower calypter brown, with black cilia. Halter brown.

Abdomen black, with metallic reflection, black hairs and not long marginal setae, conoid; 2–4th sternites large, with short hairs; 5–6th sternites reduced, membranous; 6th tergite half smaller than 5th; 7th segment very small, with reduced sternite, lying along ventral margin of 8th tergite. 8th segment large, covering about 1/3 of left lateral surface of epandrium, bearing short hairs. Foramen midlateral. Epandrium black, elongate-oval, more

than twice longer than high, as wide as high, as long as 3–6th terga combined. Hypandrium left midventral, asymmetrical. Aedeagus strongly and irregularly broadened in front of apex, very narrow at extreme apex. Left epandrial lobe strongly developed, digitiform; right epandrial lobe reduced; 3 or 4 epandrial setae distoventrally on both sides. Two pairs of almost symmetrical surstyli; ventral lobe larger than dorsal, with swollen seta apically. Cercus having basal part covered with sparse dorsal cilia, and distoventral part densely haired distally.

Female unknown.

Length (mm): body 1.9, antenna 0.5, wing 2.1/0.8, hypopygium 0.6.

Distribution. Comores.

Etymology. The species is named for the collector, Dr. L. Tsacas.

Diagnosis. *P. tsacasi* is close to *P. decembris*, differing in having yellow-brown legs, apical spine on mid coxa, ornamented mid femur, quantitative characters of wing and legs, and hypopygium morphology.

Peloropeodes comorensis

Grichanov, spec. nov.

(Figs 11, 12, 26, 39, 54)

Holotype. ♂, Muséum Paris / GDE Comore, Nioumbadjou, 600—700 m, 25—27.XI.1982, L. Tsacas rec.

Description. Male. Frons and face black. 1 strong but short postvertical seta positioned far from postocular setal row; upper postocular setae black, lower white. Eyes separated in middle of face by very thin line. Face widest under antennae, strongly narrowed in middle. Ratio of height of epistome to its maximal width to its minimal width to height of clypeus to its width, 24 : 11 : 1 : 7 : 5. Antenna having light-brown scape and pedicel and black-brown 1st flagellomere. Scape small, pedicel slightly larger, globular, with ring of short setulae, of which only 1 dorsal seta as long as pedicel; 1st flagellomere 1.3 times longer than high at base, with rounded apex, microscopically haired. Arista dorsal, pubescent. Ratio of scape to pedicel to 1st flagellomere to 1st and 2nd aristomeres, 3 : 4 : 7 : 4 : 25. Proboscis and palpi dark-brown.

Thorax black, with black setae. 1 strong and 1 hair-like intraalar. 5 (2+3) dorsocentral setae with presutural setae slightly shorter than post-sutural; 5th seta somewhat shifted towards lateral margin, slightly longer than 4th; several irregular microscopic hairs in front of the 1st seta. 6 pairs of not long acrostichal setae in 2 rows extending to mesonotal flattening, halfway between 3rd and 4th dorsocentral setae. Proepisternum with 1 long dark seta above fore coxa.

Legs including coxae mostly yellow, with black setae; fore coxa anteriorly, mid and hind coxae externally, and all femora dorsally brown. Fore and mid coxa with rather long anterior and lateral cilia; mid coxa with apical spine of glued cilia. Trochanters with sparse short hairs; mid trochanter having also 2 strong dorsal setae. Fore femur with 1—2 elongate posteroventral subapical hairs. Fore tibia slightly thickened, with elongate ventral hairs. Fore tarsus with elongate dorsal hairs; 4th tarsomere having narrow pointed anteroventral process as long as the tarsomere; 5th segment of fore tarsus thick, with basoventral tooth and enlarged asymmetric claws: posterior claw simple, anterior one with short spinule. Length ratio of fore coxa to femur to tibia to tarsus (segments from first to fifth), 20 : 40 : 28 : 15 : 5 : 4 : 3 (5 with a process) : 5. Mid femur simple, bearing

several fine ventral hairs base, shorter than diameter of femur; 1 strong anterior subapical bristle; no posteroventral setae. Mid tibia simple, with pair of antero- and posterodorsal setae at basal fourth and 1 anterodorsal at distal 1/3; ring of 4—5 apical setae. Mid tarsus simple; 1—4th segments with short weak apicoventral spinules (5th segment broken). Length ratio of mid coxa to femur to tibia to tarsus (segments from first to fourth), 16 : 43 : 45 : 20 : 10 : 8 : 7. Hind femur with strong anterior subapical seta, somewhat elongate dorsal setulae at base and anteroventral row of hairs at apex. Hind tibia simple, with somewhat elongate anteroventral setulae, pair of antero- and posterodorsal weak setae at basal fourth, 1 anterodorsal at middle and 1 short posterodorsal at distal third, 1 stronger subapical dorsal seta, slightly longer than diameter of tibia; 3—4 simple short apical setae. Hind basitarsus having several elongate ventral setulae and shallow excavation at basal fourth. Length ratio of hind coxa to femur to tibia to tarsus (segments from first to fifth), 10 : 43 : 52 : 13 : 15 : 10 : 8 : 6.

Wing hyaline, veins brown-black. Costal setulae and hairs at base slightly longer than those at wing apex. Costa simple. Upper costal setulae not reaching to R_{2+3} , lower setulae going slightly beyond R_{2+3} . Ratio of part of costa between R_{2+3} and R_{4+5} to that between R_{4+5} and M_{1+2} , 12 : 11. R_{2+3} and R_{4+5} almost straight, inconspicuously convex anteriorly; M_{1+2} practically straight; R_{4+5} and M_{1+2} parallel in distal half. Ratio of apical to basal part of M_{1+2} , 65 : 35. Ratio of $m-cu$ to maximal distance between R_{4+5} and M_{1+2} to apical part of CuA_1 , 9 : 10 : 21. Crossvein $m-cu$ somewhat weaker than adjacent longitudinal veins, straight, almost perpendicular to longitudinal wing axis, forming right angle with M_{1+2} and nearly right angle with CuA_1 . Lower calypter brown, with black cilia. Halter yellow-red.

Abdomen black, with metallic reflection, black hairs and not long marginal setae, conoid; 2—4th sternites large, with short hairs; 5—6th sternites reduced, membranous; 6th tergite half smaller than 5th; 7th segment very small, with reduced sternite, lying along ventral margin of 8th tergite. 8th segment large, covering about 1/3 of left lateral surface of epandrium, bearing short hairs. Foramen positioned laterally, just before middle of epandrium. Epandrium black-brown, elongate-oval, twice longer than high, as wide as high, as long as 3—6th terga combined. Hypandrium left mid-ventral, asymmetrical. Aedeagus strongly and

irregularly broadened in front of apex, narrow at apex. Left epandrial lobe strongly developed, digitiform, pointed at apex; right epandrial lobe reduced; 4 epandrial setae distoventrally on both sides, 2 of them pedunculate. Two pairs of asymmetrical surstyli; ventral lobe larger than dorsal, with narrow ventral subapical process; dorsal lobe narrow at apex, with strong ventral seta. Cercus covered with strong dorsal pedunculate setae, densely haired ventrally.

Female unknown.

Length (mm): body 1.7, antenna 0.5, wing 1.7/0.6, hypopygium 0.5.

Distribution. Comores.

Etymology. The species is named after the Comores Islands, the type locality of *P. comorensis*.

Diagnosis. *P. comorensis* is very close to *P. decembris*, differing in having mostly yellow legs, apical spine on mid coxa, almost simple fore tibia and hind basitarsus, and hypopygium morphology.

Genus *Micromorphus* Mik, 1878

Known Afrotropical species:

Micromorphus maraisi Grichanov, spec. nov.

Micromorphus spatulipes Parent, 1937a: 128.

Micromorphus maraisi

Grichanov, spec. nov.

(Figs 13, 27, 55)

Holotype [in alcohol]. ♂, Namibia: Khorixas district, Huab River, Krone 721, 20°37'09"S, 13°57'31"E, 23—26.X.1998, Kirk-Spriggs & Marais, Malaise trap [NMN].

Paratypes [in alcohol]. 2 ♀, same label; 1 ♂ [in glycerol], 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 [NMN].

Description. Male. Frons blue-black, pollinose. 1 strong but short postvertical seta positioned far from postocular setal row; upper postocular setae black, lower white; 1—2 upper and 1—2 lower setae slightly longer than others. Eyes distinctly separated anteriorly. Face blue-black, pollinose, 1.3 times as high as wide under antennae. Ratio of height of epistome to its maximal width to its minimal width to height of clypeus to its width, 13 : 13 : 6 : 4 : 6. Antenna dark-brown with whitish 2nd aristomere, 1.3 times longer than head height.

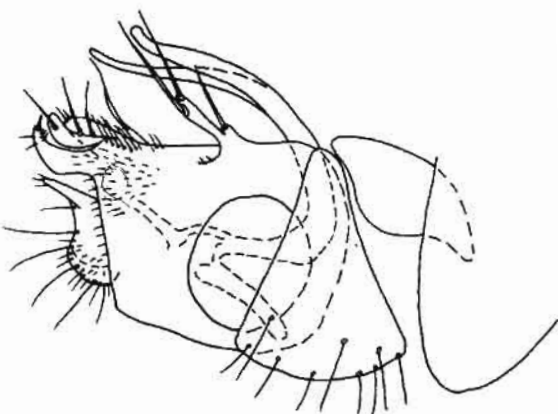


Fig. 13. *Micromorphus maraisi* Grichanov, spec. nov., apex of abdomen, left lateral view.

Scape small, vase-like, with projecting inner angle forming distal denticle; pedicel larger, globular, with ring of short setulae; 1st flagellomere as long as high at base, densely haired. Arista mid-dorsal, 3 times as long as main segments of antenna combined, microscopically pubescent, with thick 1st and filiform 2nd segment of arista. Ratio of scape to pedicel to 1st flagellomere to 1st and 2nd aristomeres, 4 : 5 : 6 : 3 : 40. Palpi and proboscis dark-brown, palpus irregularly rounded.

Thorax mostly orange-yellow; mesonotum with median longitudinal brown stripe; the stripe diffusing in anterior half, broad in posterior half, adjoining to small basal brown spot on scutellum; pleura with several brown spots. 1 long and 1 short intraalar setae. 5 (2+3) dorsocentral setae slightly decreasing in length anteriorly; 5th seta not shifted towards lateral margin; several irregular microscopic hairs in front of the 1st seta. No acrostichal setae. Proepisternum with 1 strong black seta and 1 short hair above fore coxa. Scutellum with 2 strong bristles, without lateral hairs.

Legs including coxae yellow; 2—3 apical segments of all tarsi dirty-yellow. Fore coxa with rather long black cilia in distal half; mid coxa with several short and long black cilia anteriorly and fine seta externally. Mid and hind trochanters having 1 fine dorsal seta. Fore leg without remarkable setae. Fore tibia simple, with several short apical setae. Fore tarsus simple, with ordinary setulae. Length ratio of fore coxa to femur to tibia to tarsus (segments from first to fifth), 25 : 36 : 36 : 20 : 9 : 7 : 5 : 5. Mid femur simple, bearing 1 strong anterior subapical bristle and 1 fine posteroventral cilia. Mid tibia simple, with

1 very strong anterodorsal and 1 fine posterodorsal setae at basal third and 3 apical setae; no ventral setae. Mid tarsus simple; 1—4th segments each with circlet of short apical spinules. Length ratio of mid coxa to femur to tibia to tarsus (segments from first to fifth), 20 : 40 : 51 : 28 : 14 : 10 : 6 : 5. Hind femur with 1 strong anterior subapical seta and somewhat elongate dorsal setulae at base. Hind tibia simple, with 1 strong anterior at basal 1/3, and 3 short posterodorsal, 2—3 very short ventral, 3—4 simple short apical setae. Hind basitarsus with short basoventral seta. Length ratio of hind coxa to femur to tibia to tarsus (segments from first to fifth), 15 : 42 : 55 : 16 : 16 : 10 : 6 : 5.

Wing entirely greyish, veins brown. Costal setulae and hairs at base slightly longer than those at wing apex; costal setulae reaching R_{2+3} . Costa simple. Ratio of part of costa between R_{2+3} and R_{4+5} to that between R_{4+5} and M_{1+2} , 16 : 11. R_{2+3} , R_{4+5} and M_{1+2} weakly but distinctly convex anteriorly; R_{2+3} and R_{4+5} slightly diverging towards wing apex; R_{4+5} and M_{1+2} parallel in distal half. Ratio of apical to basal part of M_{1+2} , 73 : 37. Ratio of $m-cu$ to maximal distance between R_{4+5} and M_{1+2} to apical part of CuA_1 , 9 : 9 : 34. Crossvein $m-cu$ somewhat weaker than adjacent longitudinal veins, slightly convex, forming right angles with M_{1+2} and CuA_1 . Lower calypter brownish, with dark cilia. Halter yellow.

Abdomen dark-brown, with black hairs and marginal setae, cylindrical; 2—4th sternites large, light-brown, with short light hairs; 5—6th sternites small. 7th segment short. 8th segment brown, large, covering about 1/3 of left lateral surface of epandrium, bearing numerous short hairs. Epandrium brown, globular, slightly longer than high, as wide as high, approximately as long as 5th tergite. Hypandrium basoventral, simple and narrow; aedeagus simple and narrow. Appendages brown, symmetric. Midventral epandrial lobe digitiform, narrow, with one basal and two apical strong setae; one pedunculate epandrial seta just before distoventral epandrial lobe. Two pairs of surstyli; ventral surstylus with 3 strong setae; dorsal surstylus with apical spine and several subapical hairs. Cercus short, with narrow basoventral process and several long dorsal cilia.

Female. Similar to male except lacking male secondary sexual characters. Face wider than that in male; abdomen usually lighter; last hemitergite with four short black acanthophorites.

Length (mm): body 1.6, antenna 0.6, wing 1.7/0.6, hypopygium 0.15.

Distribution. Namibia.

Etymology. The species is named for one of the collectors, Dr. E. Marais.

Diagnosis. The new species differs from Palearctic *M. albipes* (Zetterstedt, 1843) as described by Parent (1938) in mostly orange-yellow rather than black thorax, slender and whitish rather than black arista, and some other subtle characters. *M. maraisi* differs from the second Afrotropical species, *M. spatulipes* Parent, 1937 from «Rhodesia», in simple fore tarsus. The new species is very close in habitus to Palearctic *M. aereus* (Vaillant, 1953; Fig. 29; *Conchopus*), n. comb., included by Negrobov (1991) in the genus *Chrysotimus* Loew, 1857. However, the latter species has a series of strong dorsoapical setae on cercus, differently shaped and setosed surstylus.

Genus *Teuchophorus* Loew, 1857

Teuchophorus caprivi

Grichanov, spec. nov.

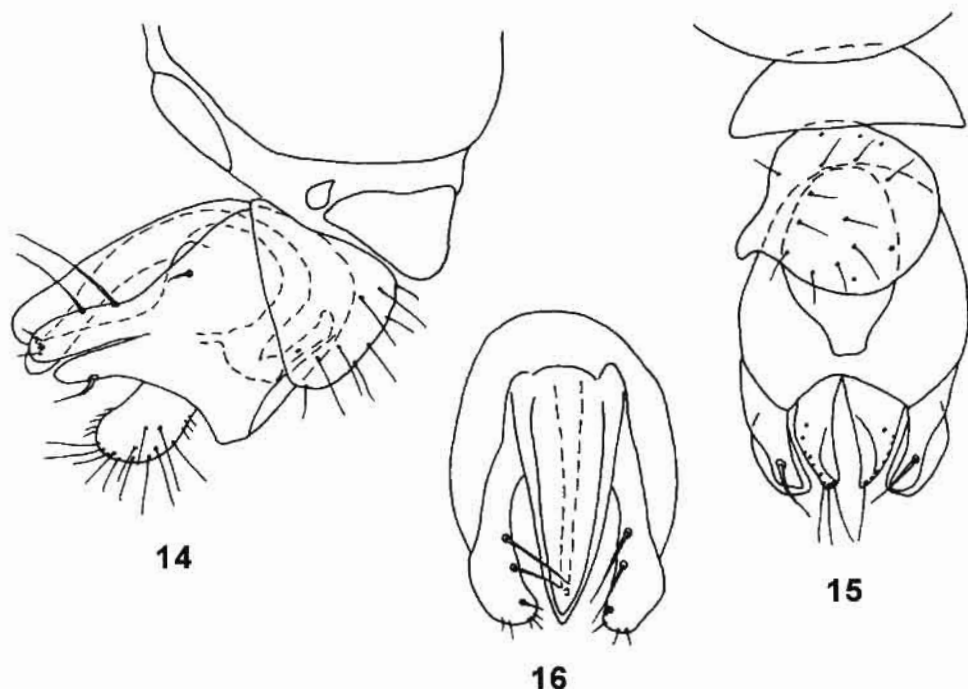
(Figs 14—16, 28, 40, 41, 56)

Holotype [in alcohol]. ♂, 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 [NMN].

Paratypes [in alcohol; 1 ♂ in glycerol]. 2 ♂, 3 ♀, same label.

Description. Male. Frons metallic blue-black. 2 short postverticals; upper postocular setae black, lateral and lower white; lower setae slightly longer than upper. Eyes distinctly separated anteriorly. Face bronze-black, 3.5 times as high as wide under antennae. Ratio of height of epistome to its maximal width to its minimal width to height of clypeus to its width, 15 : 5 : 3 : 2 : 2. Antenna black. Scape very small, pedicel slightly larger, globular, with ring of short setulae; 1st flagellomere slightly larger than pedicel, slightly shorter than high at base, with weakly projecting medial apex and short hairs. Arista dorsal, thrice as long as main segments of antenna combined, pubescent, with longest hairs at middle of arista. Ratio of 1st and 2nd aristomeres, 4 : 28. Palpi and proboscis dark-brown.

Mesonotum metallic bronze, with blue and copper reflection, pleura mostly brown, yellow-brown at base of wing and above posterior four

Figs 14—16. *Teuchophorus capivi* Grichanov, spec. nov.

14, apex of abdomen, left lateral view; 15, apex of abdomen, dorsal view; 16, hypopygium, ventral view.

coxae. 2 strong intraalar setae. 6 (2+4) dorsocentral setae with anterior four setae of equal length; 5th seta hair-like, slightly shifted towards median, small, half as long as 6th; 6th seta somewhat shifted towards lateral margin, slightly longer than 4th; several irregular hairs in front of the 1st seta. 5–6 acrostichal setae in one row extending to 4th dorsocentral seta. Proepisternum with 3 short white hairs above fore coxa. Scutellum with two strong bristles and several microscopic marginal hairs.

Legs including coxae yellow, apical segments of tarsi darkened. Fore and mid coxae with short dark hairs and cilia. Trochanters with short black hairs. Fore femur with a dark fine posteroventral subapical bristle. Fore tibia and tarsus with ordinary setulae. Length ratio of fore coxa to femur to tibia to tarsus (segments from first to fifth), 27 : 35 : 32 : 16 : 8 : 6 : 5 : 5. Mid femur simple, bearing 2 subequal black setae at basal fourth, 1/3 longer than diameter of femur; 1 strong anterior, 1 strong and 1 fine posteroventral subapical bristles. Mid tibia simple, with pair of antero- and posterodorsal setae at basal third, 1 anterodorsal seta at middle, 2 strong ventral bristles in third quarter and ring of 4–5 apical setae. Mid tarsus simple; 1–4th segments with short weak apicov-

entral spinules. Length ratio of mid coxa to femur to tibia to tarsus (segments from first to fifth), 19 : 45 : 45 : 22 : 11 : 9 : 6 : 6. Hind femur with strong anterior subapical seta and somewhat elongate dorsal setulae along entire length. Hind tibia inconspicuously thickened in distal half, with 1 dorsal at basal 1/3, row of 2 strong and 4 weak dorsal setae in distal half, row of 3–4 elongate anteroventral setulae in third quarter; 1 strong subapical ventral seta, slightly longer than diameter of tibia; 1 thickened undulate apicoventral seta, as long as tibia diameter; several simple short apical setae. Hind basitarsus with very small basal denticle posteriorly, directed towards apex of hind tibia. Length ratio of hind coxa to femur to tibia to tarsus (segments from first to fifth), 13 : 50 : 50 : 14 : 17 : 11 : 7 : 6.

Wing greyish, veins light-brown. Costal setulae, as well as hairs along posterior wing margin, gradually decreasing in length towards wing apex. Costal swelling broad at end of R_1 , at least 2 times longer than $m-cu$. Ratio of part of costa between R_{2+3} and R_{4+5} to that between R_{4+5} and M_{1+2} , 32 : 14. R_{2+3} straight; M_{1+2} weakly convex anteriorly; R_{4+5} and M_{1+2} inconspicuously diverging in distal half. M_{1+2} upturned immediately beyond

m-cu. Ratio of apical to basal part of M_{1+2} 65 : 35. Ratio of *m-cu* to maximal distance between R_{4+5} and M_{1+2} to apical part of CuA_1 10 : 8 : 23. Crossvein *m-cu* weakened, strongly oblique, forming acute (ca. 60°) angle with CuA_1 . Lower calypter brown, with black cilia. Halter yellow.

Abdomen bronze, with black hairs and short marginal setae, cylindrical; 2—4th sternites light-brown. 5th sternite normally developed, slightly smaller than 4th sternite. 6th tergite half as long as 5th; 7th segment symmetrically positioned at base of epandrium. 8th segment basodorsal in position. Hypopygium dark brown, not longer than height of 6th tergite. Epandrium small, with mostly middorsal foramen. Hypandrium basoventral, broad, simple; aedeagus simple. Two pairs of black surstyli separated from base; ventral surstylus with 2 strong midventral setae and several apical hairs; dorsal surstylus with 1 dorsal seta. Cercus short, spoon-like, dirty-yellow, densely haired.

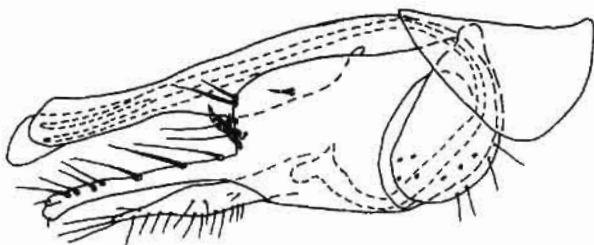
Female. Similar to male except lacking male secondary sexual characters. Face wider than that in male, as wide as height of 1st flagellomere; legs and wings simple; mid tibia with 1 anteroventral rather than 2 ventral setae; hind tibia with 1 anterodorsal in addition to 3 dorsal, without strong ventral setae; ventrum yellow; last hemitergite with four short black acanthophorites.

Length (mm): body 1.6, antenna 0.5, wing 1.7/0.5, hypopygium 0.2.

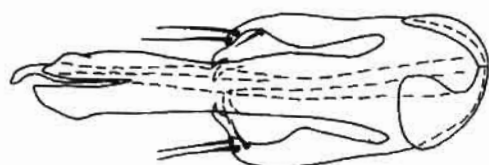
Distribution. Namibia.

Etymology. The species is named after the West Caprivi Park, the type locality of *T. caprivi*.

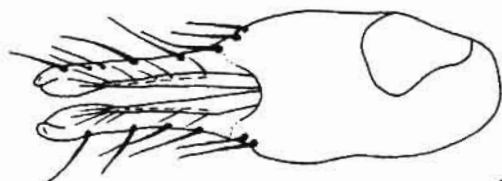
Diagnosis. *T. caprivi* has wing costa thickened, typical of Palearctic species, being close to Mediterranean *T. bipilosus* Becker, 1908, as redescribed by Grootaert et al. (1995), differing in having a pair of ventral setae on mid femur, a pair of ventral setae on mid tibia and simple short setae on hind tibia. The species keys out also to New Guinean *T. denticulatus* Meuffels and Grootaert, 1986, although the latter species has only one short posteroventral seta on fore tibia, strong ventral setae on mid and hind femora, absence of long anteroventral seta at distal third of hind femur.



17



18



19

Figs 17—19. *Olegonegrobovia longicauda* Grichanov, spec. nov.

17, apex of abdomen, left lateral view; 18, apex of abdomen, ventral view; 19, hypopygium, dorsal view.

Genus *Olegonegrobovia* Grichanov, 1995

Known Afrotropical species:

- Olegonegrobovia barkalovi* Grichanov, 1995.
- Olegonegrobovia couturieri* Grichanov, spec. nov.
- Olegonegrobovia daugeroni* Grichanov, spec. nov.
- Olegonegrobovia longicauda* Grichanov, spec. nov.
- Olegonegrobovia pappi* Grichanov, 1996.
- Olegonegrobovia zlobini* Grichanov, 1995.

Olegonegrobovia longicauda Grichanov, spec. nov.

(Figs 17—19, 29, 42, 43, 57)

Holotype. ♂, Congo Belge, P.N.G., Miss. De Saeger, II/gd/8, 10—IV—1952, H. De Saeger, 3313 [RMCA].

Paratype. ♂, Congo Belge, P.N.G., Miss. De Saeger, Makpe/5-XI-1951, Réc. H. De Saeger, 2718 [RMCA].

Description. Male. Frons metallic blue-black, weakly pollinose. One short fine postvertical seta not far from postocular setal row; upper postocular setae black, lower white; lower setae slightly longer than upper. Eyes almost contiguous in middle of face. Face blue-black, pollinose, widest under antennae, narrowest above clypeus. Ratio of height of epistome to its maximal width to its minimal width to height of clypeus to its width, 15 : 10 : 0.5 : 5 : 3. Antenna black. Scape small, pedicel slightly larger, globular, with ring of short setulae; 1st flagellomere slightly larger than pedicel, slightly longer than high at base, with acute and flattened laterally apex and short hairs. Arista mid-dorsal, thrice as long as main segments of antenna combined, pubescent, with increasing length of hairs towards apex of arista. Ratio of scape to pedicel to 1st flagellomere to 1st and 2nd aristomeres, 3 : 4 : 7 : 7 : 35. Palpi and proboscis dark-brown.

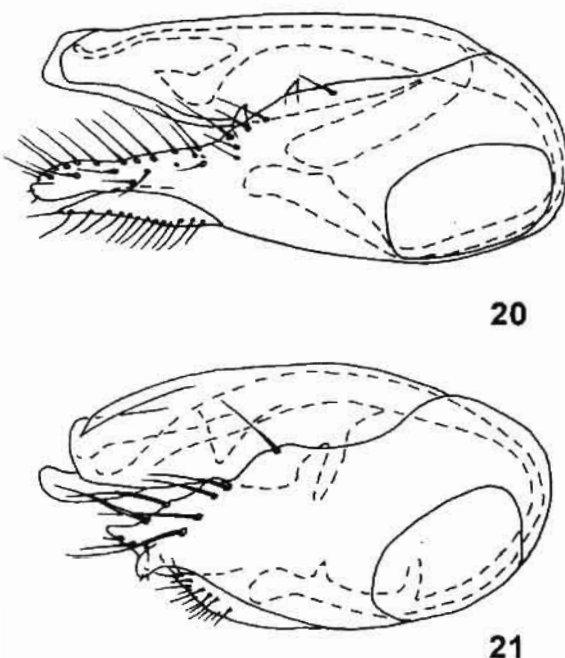
Mesonotum metallic bronze-black, pollinose; pleura mostly blackish-brown, light-brown at base of wing and above posterior four coxae. 2 strong intraalar setae. 6 (2+4) dorsocentral setae of approximately equal length; 6th seta somewhat shifted towards lateral margin; several irregular hairs in front of the 1st seta. 8 acrostichal setae in one row extending to a level of 5th dorsocentral seta. Proepisternum without setae, practically bare or with 1 microscopic hair.

Legs including coxae yellow, apical segments of tarsi darkened. Hind femur dorsally in distal third and hind tibia in basal half dirty-yellow. Fore and mid coxae with short dark hairs and cilia. Trochanters with short black hairs. Fore femur with 1—2 dark posteroventral subapical hairs. Fore tibia with ordinary setulae. 2—5th segments of fore tarsus with elongate dorsal hairs, as long as tarsomeres diameter. Length ratio of fore coxa to femur to tibia to tarsus (segments from first to fifth), 26 : 38 : 34 : 14 : 3 : 2 : 2 : 3. Mid femur with low ventral eminence at basal fifth, bearing 2 unequal yellow-brownish thick setae, the longest seta 2 times longer than diameter of femur; mid femur with shallow ventral excavation just beyond eminence, 1 strong anterior, 1 strong and 1 fine posteroventral subapical bristles. Mid tibia slightly thickened in second and distal fourth, with rather deep anteroventral excavation in 3rd quarter; mid tibia with 5—6 strong ventral setae before middle, 1 simple dorsal at middle, 1 long subapical dorsal, short row of 4—5 short subapical anterodorsal setae, of which one distal seta

slightly thickened, 1 very short and 1 very long thick setae at distal fifth; the thick seta 1/3 as long as tibia; mid tibia also with 1 short but remarkably curved anterior subapical seta and 2 simple apical setae. Mid tarsus with basitarsus having 1 strong basoventral seta and several elongate curved setulae in distal half; 2nd tarsomere flattened ventrally, with pile of microscopic hairs; 1—4th segments with short weak apicoventral spinules. Length ratio of mid coxa to femur to tibia to tarsus (segments from first to fifth), 21 : 46 : 40 : 20 : 15 : 10 : 7 : 7. Hind femur with strong anterior subapical seta and the same seta at middle of anterior surface; somewhat elongate dorsal setulae gradually decreasing in length towards apex. Hind tibia inconspicuously thickening from base towards apex, with 1 dorsal at distal 1/3, posterior row of long hairs in basal 2/3, slightly longer than diameter of tibia, 1 subapical dorsal seta, 2—3 simple apical setae. Hind basitarsus with very small basal denticle posteriorly, directed towards apex of hind tibia. 1—5th tarsomeres with elongate dorsal setulae along entire length. Length ratio of hind coxa to femur to tibia to tarsus (segments from first to fifth), 16 : 53 : 60 : 14 : 22 : 12 : 8 : 7.

Wing greyish, almost hyaline, veins light-brown. Costa simple. Ratio of part of costa between R_{2+3} and R_{4+5} to that between R_{4+5} and M_{1+2} , 24 : 12. R_{2+3} straight; R_{4+5} and M_{1+2} gently convex anteriorly, parallel in distal half. Ratio of apical to basal part of M_{1+2} , 70 : 43. Ratio of $m-cu$ to maximal distance between R_{4+5} and M_{1+2} to apical part of CuA_1 , 10 : 10 : 20. Crossvein $m-cu$ not weaker than adjacent longitudinal veins, slightly convex, perpendicular to longitudinal wing axis, forming almost right angle with CuA_1 . Anal lobe long and narrow, clearly developed, 1.4 times longer than apical part of CuA_1 , fairly sclerotised on distal margin, bearing there bundle of 2—3 short and 5—6 long black bristles, 1.3 times longer than $m-cu$. Lower calypter brown, with black cilia. Halter brownish-yellow.

Abdomen bronze-black, with black hairs and short marginal setae, cylindrical; 2—4th sternites light-brown. 5—6th sternites reduced, membranous; 6th tergite as long as 5th; 7th tergite asymmetrical, situated on epandrium right-basolaterally, fused with 8th tergite in middle of epandrium. 8th segment left basolateral in position. Hypopygium dark brown, longer than 2—5th tergites combined. Epandrium large, with mostly left basoventral foramen. Hypandrium brown, long, split at apex; aedeagus



Figs 20, 21. *Olegonegrobovia* sp., hypopygium, left lateral view.

20, *O. daugeroni* Grichanov, spec. nov.; 21, *O. couturierii* Grichanov, spec. nov.

trilobate. One short and 4 long epandrial setae distally. Epandrium with 2 pairs of hook-like processes distally. One pair of long symmetrical surstyli; surstylus brown, cleft at extreme apex, with row of 4—6 lateral setae. Cercus brown, long and narrow, densely haired.

Female unknown.

Length (mm): body 1.4—1.6, antenna 0.5, wing 1.8/0.5, hypopygium 0.8.

Distribution. Congo (Kinshasa).

Diagnosis. *O. longicauda* is close in habitus to *O. barkalovi* Grichanov, 1995, differing in very long surstylus and cercus. It is also close to *O. pappi* Grichanov, 1996, but the latter species has shorter surstylus with more numerous ventral setae, shorter and broader cercus, and another type of setation on mid tibia with thick long ventral seta positioned in the middle of the tibia.

Olegonegrobovia daugeroni

Grichanov, spec. nov.

(Figs 20, 30, 44, 45, 58)

Holotype. ♂, Côte d'Ivoire, Loc. Cascade Man, Date: 21.XI.1974, G. Couturier / O.R.S.T.O.M. [NHMP].

Paratype. 1 ♂, same labels [NHMP].

Description. Male. Frons and face black, brownish pollinose. One short fine postvertical seta not far from postocular setal row; upper postocular setae black, lower white. Eyes almost contiguous in middle of face. Face widest under antennae, narrowest above clypeus. Ratio of height of epistome to its maximal width to its minimal width to height of clypeus to its width, 23 : 9 : 0.5 : 6 : 4. Antenna black. Scape small, pedicel slightly larger, globular, with ring of short setulae; 1st flagellomere subtriangular, slightly larger than pedicel, as long as high at base, with flattened laterally apex and short hairs. Arista mid-dorsal, 4—5 times as long as main segments of antenna combined, pubescent, with short hairs. Ratio of scape to pedicel to 1st flagellomere to 1st and 2nd aristomeres, 3 : 4 : 6 : 5 : 36. Palpi and proboscis dark-brown.

Mesonotum black, brownish pollinose, with weak bluish reflection. 2 strong intraalar setae. 6 (2+4) dorsocentral setae of approximately equal length; 6th seta somewhat shifted towards lateral margin; several irregular hairs in front of the 1st seta. 9 acrostichal setae in one row extending to a level of 4th dorsocentral seta. Proepisternum without setae, with 1 microscopic hair.

Legs mostly brown; coxae brown except yellow apex; trochanters yellow; fore leg dirty yellow except dark apical tarsomeres; anterior four knees, mid femur at both apices and hind femur in basal 1/3 yellow-brownish. Fore and mid coxae with short dark hairs and cilia. Trochanters with short black hairs. Fore femur with 1—2 dark posteroventral subapical hairs. Fore tibia and tarsus with elongate dorsal hairs; 2nd tarsomere of fore tarsus slightly swollen, with ventral pad of short hairs; 5th tarsomere flattened. Length ratio of fore coxa to femur to tibia to tarsus (segments from first to fifth), 25 : 39 : 34 : 18 : 5 : 4 : 4 : 5. Mid femur with low ventral eminence at basal fifth, bearing 2 unequal brown thick setae, the longest seta slightly longer than diameter of femur; mid femur with shallow posteroventral excavation just beyond eminence, 1 strong anterior, 1 fine posteroventral subapical setae, row of short stiff anteroventral cilia. Mid tibia slightly thickened in second and distal fourth, with rather deep anteroventral excavation in 3rd quarter; mid tibia with 5—6 strong posteroventral setae before middle, 1 simple dorsal at basal 1/4, 1 subapical dorsal, short row of 4 curved anterior setae at distal 1/3, 1 anterior at middle, 1 long thick setae at distal 1/4; the thick seta 1/4 as long as tibia; mid tibia also with 1 apicoventral seta and several

elongate subapical ventral hairs. 2nd tarsomere of mid tarsus flattened ventrally, with whitish pile of microscopic hairs; 1—4th segments with short weak apicoventral spinules. Length ratio of mid coxa to femur to tibia to tarsus (segments from first to fifth), 23 : 50 : 50 : 17 : 11 : 9 : 8 : 8. Hind femur with strong anterior subapical seta, anterior, anteroventral and ventral rows of hairs, 0.5—1.0 as long as femur diameter. Hind tibia slightly thickened in distal half, with 4—5 short dorsal in addition to 1 strong subapical dorsal seta, elongate posterior setulae, 2—3 simple apical setae. Hind basitarsus with very small basal denticle posteriorly, directed towards apex of hind tibia. 1—5th tarsomeres with elongate dorsal setulae along entire length. Length ratio of hind coxa to femur to tibia to tarsus (segments from first to fifth), 15 : 59 : 61 : 16 : 17 : 11 : 9 : 8.

Wing greyish, veins brown. Costa simple. Ratio of part of costa between R_{2+3} and R_{4+5} to that between R_{4+5} and M_{1+2} , 23 : 13. R_{2+3} straight; R_{4+5} and M_{1+2} gently convex anteriorly, parallel in distal half. Ratio of apical to basal part of M_{1+2} , 74 : 55. Ratio of $m-cu$ to maximal distance between R_{4+5} and M_{1+2} to apical part of CuA_1 , 14 : 13 : 20. Crossvein $m-cu$ not weaker than adjacent longitudinal veins, straight, perpendicular to longitudinal wing axis, forming obtuse outer angle with CuA_1 . Anal lobe long and narrow, clearly developed, as long as apical part of CuA_1 , fairly sclerotised on distal margin, bearing there bundle of 2—3 short and 5—6 long black bristles, as long as $m-cu$. Lower calypter black, with black cilia. Halter having black knob and brown stem.

Abdomen black, with black hairs and short marginal setae, cylindrical. 5—6th sternites reduced, membranous; 6th tergite as long as 5th; 7th tergite as narrow asymmetrical strip lying along proximal margin of 8th segment, fused with 8th tergite. 8th segment left basolateral in position. Hypopygium dark brown, longer than 2—5th tergites combined. Epandrium large, with mostly left basoventral foramen. Hypandrium brown, long, massive; aedeagus trilobate. A row of short epandrial setae distally. Epandrium with 2 pairs of hook-like processes distoventrally. One pair of long symmetrical surstyli, shorter than epandrium; surstylus brown, cleft at extreme apex, with 2 irregular rows of numerous ventrolateral setae. Cercus brown, long and narrow, densely haired. Female unknown.

Length (mm): body 1.8, antenna 0.8, wing 2.0/0.7, hypopygium 0.6.

Distribution: Ivory Coast.

Etymology. The species is named for the French dipterologist, Dr. Ch. Daugeron.

Diagnosis. Having brown coxae, *O. daugeroni* is close in habitus to *O. xlobini* Grichanov, 1995, differing in almost entirely brown posterior four legs; the wing comb of bristles is shorter, than that in *O. xlobini*; $m-cu$ is perpendicular to longitudinal wing axis; hind femur has long ventral ciliation.

***Olegonegrobovia couturieri*
Grichanov, spec. nov.**

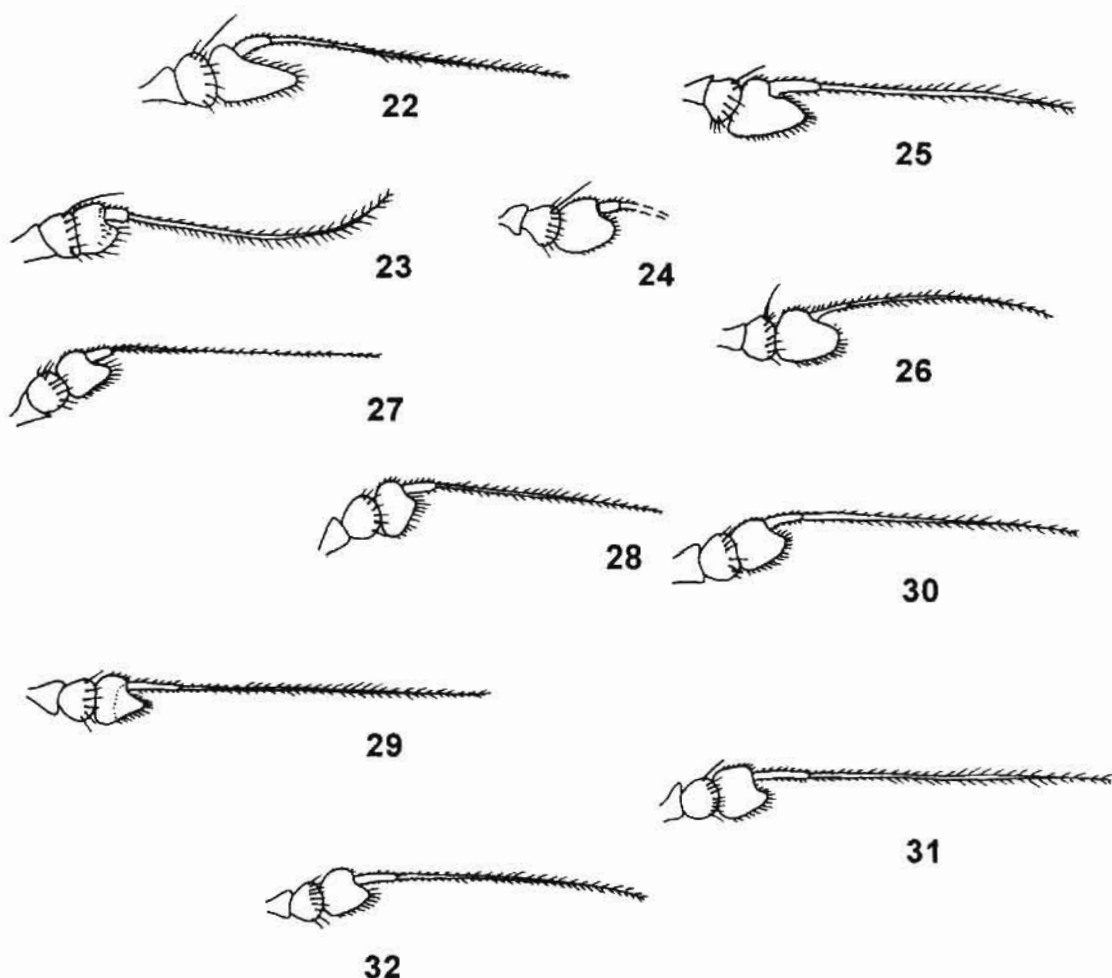
(Figs 21, 31, 46, 47, 59)

Holotype. ♂, Côte d'Ivoire, Loc. Cascade Man, Date: 21.XI.1974, G. Couturier / O.R.S.T.O.M [NHMP].

Description. Male. Frons bluish-black, brownish pollinose. One short fine postvertical seta not far from postocular setal row; upper postocular setae black, lower white. Eyes almost contiguous in middle of face. Face black, pollinose, widest under antennae, narrowest above clypeus. Ratio of height of epistome to its maximal width to its minimal width to height of clypeus to its width, 17 : 9 : 0.5 : 6 : 4. Antenna black. Scape small, pedicel slightly larger, globular, with ring of short setulae; 1st flagellomere subtriangular, slightly larger than pedicel, as long as high at base, with flattened laterally apex and short hairs. Arista mid-dorsal, thrice as long as main segments of antenna combined, pubescent. Ratio of scape to pedicel to 1st flagellomere to 1st and 2nd aristomeres, 2 : 3 : 5 : 5 : 35. Palpi and proboscis dark-brown.

Mesonotum bluish-black, pollinose; pleura brown-black. 2 strong intraalar setae. 6 (2+4) dorsocentral setae of approximately equal length; 6th seta somewhat shifted towards lateral margin; several irregular hairs in front of the 1st seta, 8 acrostichal setae in one row extending to a level of 4th dorsocentral seta. Proepisternum without setae, with 1 short light hair.

Legs including coxae yellow, apical segments of tarsi darkened. Hind femur in distal half and hind tibia in basal half greyish-yellow. Fore and mid coxae with short dark hairs and cilia. Trochanters with short black hairs. Fore femur with 1—2 dark posteroventral subapical hairs. Fore tibia with ordinary setulae. 2—5th segments of fore tarsus with elongate dorsal hairs, as long as tarsomeres diameter. Length ratio of fore coxa to femur to tibia to tarsus (segments from first to fifth),

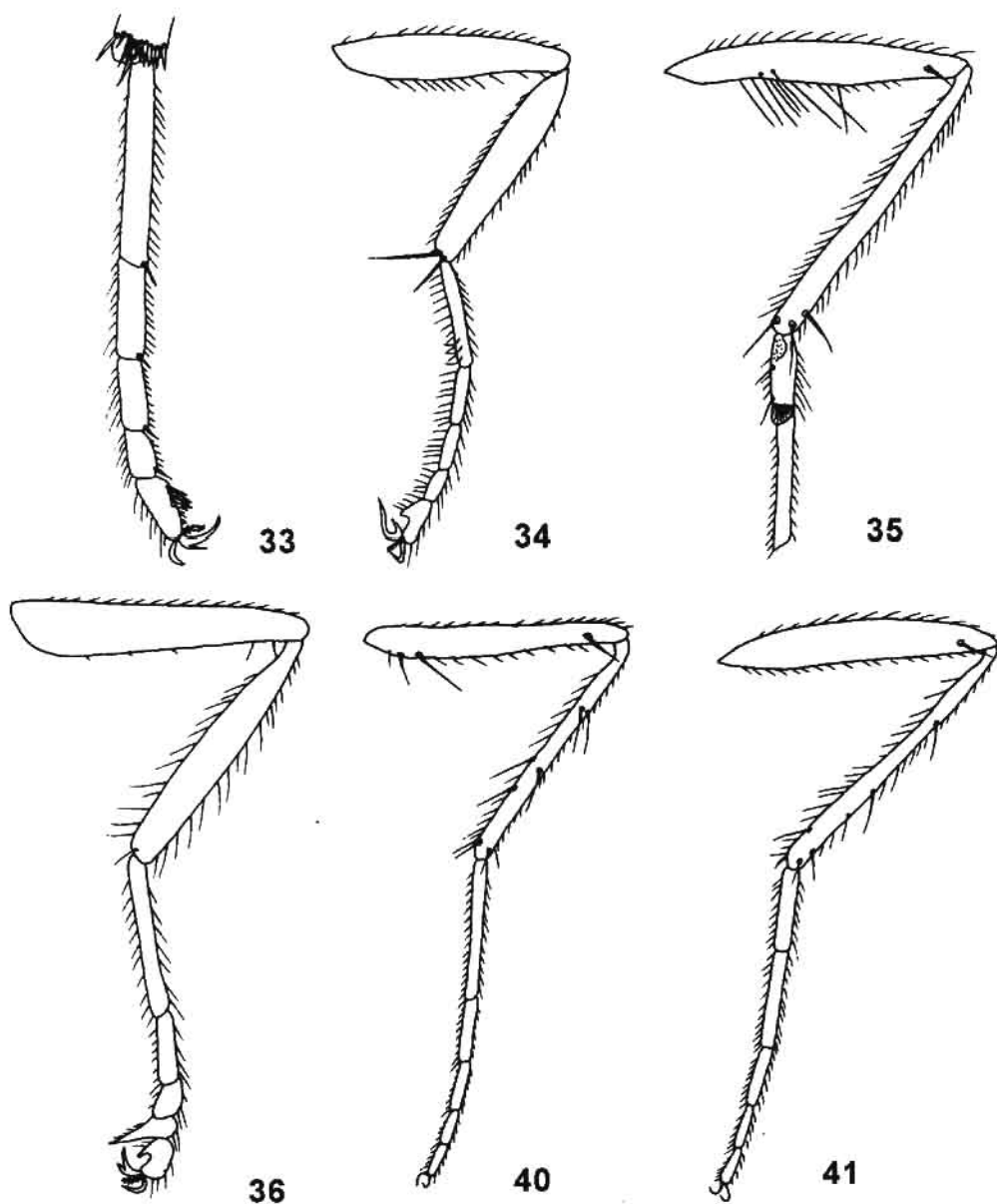


Figs 22—32. Antenna.

22, *Peloropectes acuticornis* (Oldenberg, 1916); 23, *P. matilei* Grichanov, spec. nov.; 24, *P. decembris* Grichanov, spec. nov.; 25, *P. tsacasi* Grichanov, spec. nov.; 26, *P. comorensis* Grichanov, spec. nov.; 27, *Micromorphus maraisi* Grichanov, spec. nov.; 28, *Teuchophorus caprici* Grichanov, spec. nov.; 29, *Olegonegrobocia longicauda* Grichanov, spec. nov.; 30, *O. daugeroni* Grichanov, spec. nov.; 31, *O. couturieri* Grichanov, spec. nov.; 32, *O. barkaloci* Grichanov, 1995.

21 : 34 : 29 : 16 : 3 : 3 : 3 : 5. Mid femur with low ventral eminence at basal fifth, bearing 2 unequal golden-brownish thick setae, the longest seta 2 times longer than diameter of femur; mid femur with shallow posterior excavation just beyond eminence, 1 strong anterior, 1 fine posteroventral subapical setae. Mid tibia slightly thickened in second and distal fourth, with rather deep anteroventral excavation in 3rd quarter; mid tibia with a pair of very strong antero- and postero-dorsal setae at basal 1/3, row of 5—6 posteroventral setae before middle, 1 subapical antero-dorsal, short row of 4—5 short subapical anterior setae, of which one distal seta slightly thick-

ened; 1 very short and 1 very long thick ventral setae at distal fifth; the thick seta 1/3 as long as tibia; mid tibia also with 1 long anteroventral subapical seta and 2 simple apical setae. Mid tarsus with basitarsus having 1 strong basoventral seta; 1—4th segments with short weak apicoventral spinules and elongate dorsal setulae. Length ratio of mid coxa to femur to tibia to tarsus (segments from first to fifth), 16 : 45 : 40 : 18 : 10 : 8 : 6 : 6. Hind femur with 1 anterior subapical seta and 2 ventral rows of dark cilia in distal 3/5, at least as long as diameter of femur; somewhat elongate dorsal setulae gradually decreasing in length towards apex. Hind tibia inconspicuously



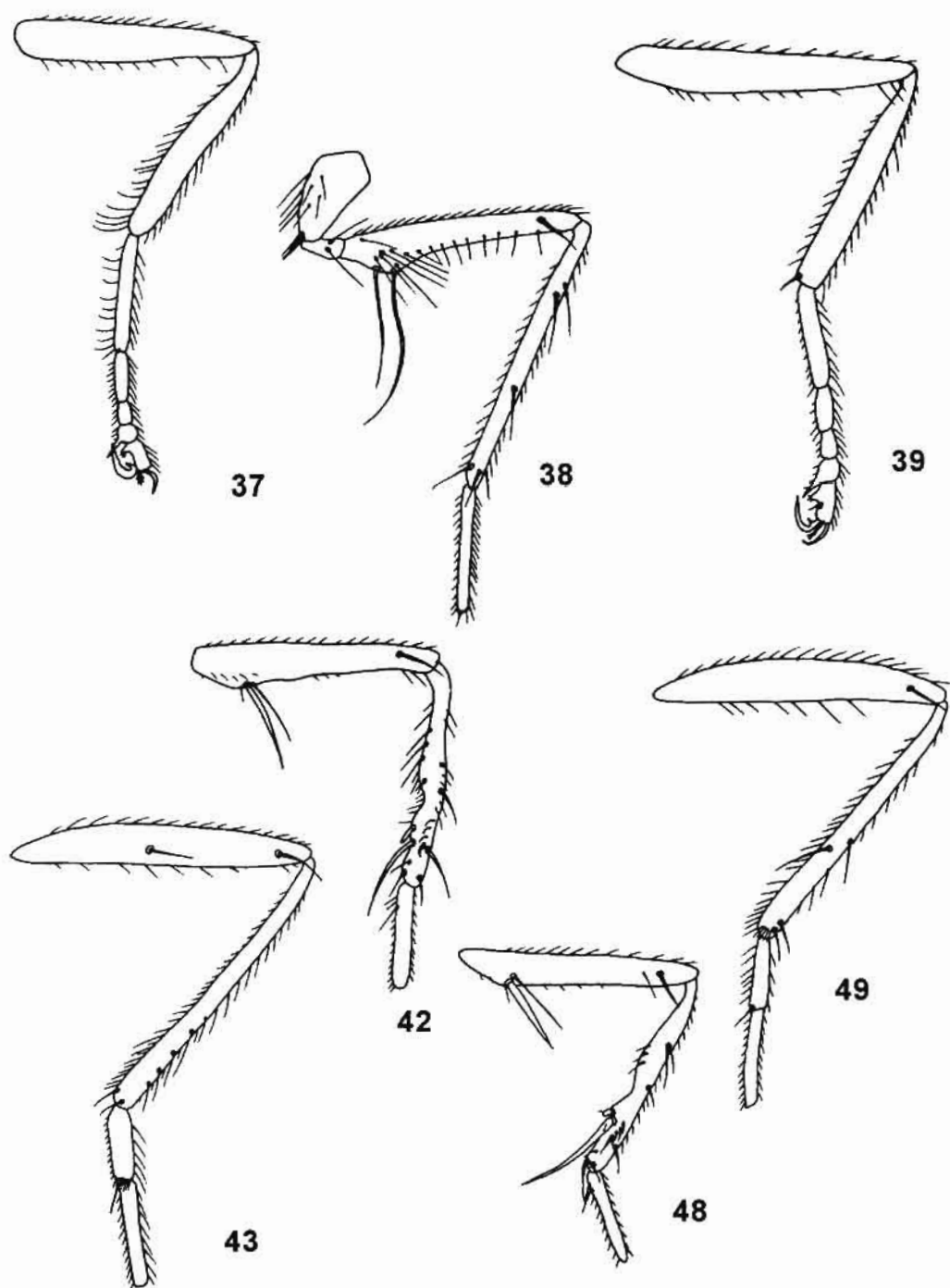
Figs 33—36, 40, 41.

33, *Peloropeodes acuticornis* (Oldenberg, 1916), fore tarsus; 34, 35, *Peloropeodes matilei* Grichanov, spec. nov.: 34, fore leg, 35, hind leg; 36, *Peloropeodes decembris* Grichanov, spec. nov., fore leg; 40, 41, *Teuchophorus caprivi* Grichanov, spec. nov.: 40, mid leg, 41, hind leg.

thickening from base towards apex, with 1 dorsal at distal 1/3, anteroventral row of long cilia along entire length, 4 times longer than diameter of tibia, 1 subapical dorsal seta, 2—3 simple apical setae. Hind basitarsus with very small basal denticle posteriorly, directed towards apex of hind tibia. 1—5th tarsomeres with elongate dorsal setulae along entire length. Length ratio of hind coxa to femur

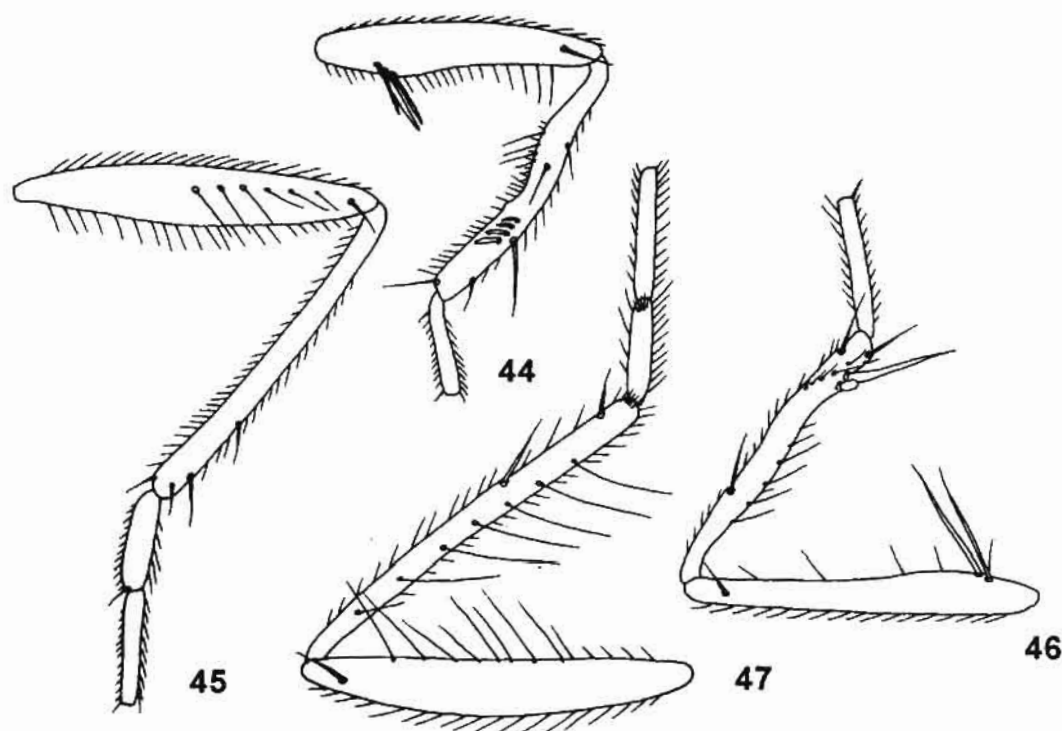
to tibia to tarsus (segments from first to fifth), 13 : 50 : 53 : 14 : 16 : 12 : 9 : 7.

Wing greyish, almost hyaline, veins light-brown. Costa simple. Ratio of part of costa between R_{2+3} and R_{4+5} to that between R_{4+5} and M_{1+2} , 25 : 12. R_{2+3} straight; R_{4+5} and M_{1+2} gently convex anteriorly, parallel in distal half. Ratio of apical to basal part of M_{1+2} , 65 : 35. Ratio of $m-cu$ to maximal



Figs 37—39, 42, 43, 48, 49.

37, 38, *Peloropecodes tsacasi* Grichanov, spec. nov.: 37, fore leg, 38, mid leg; 39, *P. comorensis* Grichanov, spec. nov., fore leg; 42, 43, *Olegonegrobocia longicauda* Grichanov, spec. nov.: 42, mid leg, 43, hind leg; 48, 49, *O. barkalovi* Grichanov, 1995: 48, mid leg, 49, hind leg.

Figs 44—46. *Olegonegrobocia* sp.

44, 45, *O. daugeroni* Grichanov, spec. nov.: 44, mid leg, 45, hind leg; 46, 47, *O. couturieri* Grichanov, spec. nov.: 46, mid leg, 47, hind leg.

distance between R_{1+5} and M_{1+2} to apical part of CuA_1 , 10 : 10 : 20. Crossvein $m-cu$ not weaker than adjacent longitudinal veins, slightly convex, almost perpendicular to longitudinal wing axis, forming right angle with CuA_1 . Posterior wing margin with elongate hairs, at least 2 times longer than costal setulae. Anal lobe long and narrow, poorly developed, without sclerotisation on distal margin. Lower calypter brown, with black cilia. Halter brown.

Abdomen black, with black hairs and short marginal setae, cylindrical; 2—4th sternites brown. 5—6th sternites reduced, membranous; 6th tergite as long as 5th; 7th tergite asymmetrical, very small, mostly membranous, lying at proximal margin of 8th segment, fused with 8th tergite. 8th segment left basolateral in position. Hypopygium dark brown, as long as 2—5th tergites combined. Epandrium large, with mostly left basoventral foramen. Hypandrium brown, long, massive; aedeagus trilobate. A row of several long epandrial setae distally. One pair of short symmetrical surstyli; surstylus brown, cleft at extreme apex, with sev-

eral ventral and distal setae as figured. Cercus brown, short, with narrow apex, densely haired.

Female unknown.

Length (mm): body 1.4, antenna 0.6, wing 1.6/0.6, hypopygium 0.6.

Distribution. Ivory Coast.

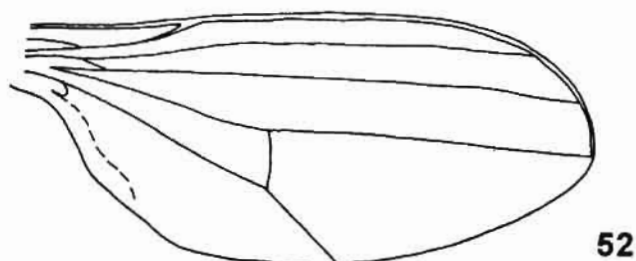
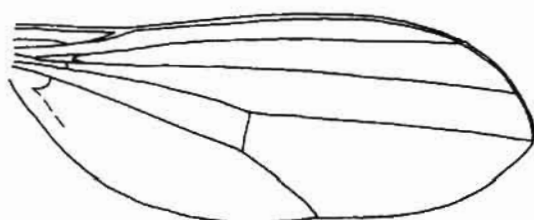
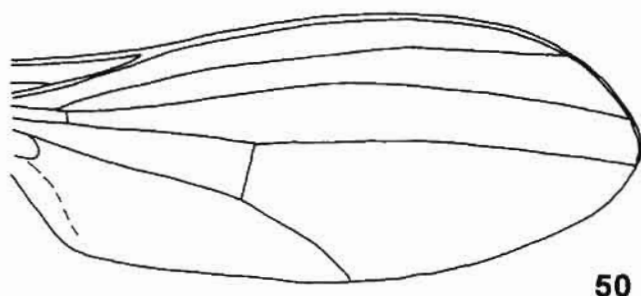
Etymology. The species is named for the French dipterologist, Dr. G. Couturier.

Diagnosis. *O. couturieri* differs from known species in having practically simple wing and long anteroventral cilia on hind tibia. Hypopygium is somewhat similar to that in *O. zlobini* Grichanov, 1995.

***Olegonegrobocia barkalovi* Grichanov, 1995**
(Figs 32, 48, 49, 60)

Additional records. 1 ♂, Congo Belge, P.N.G., Miss. De Saeger, Makpe/8, 5-XI-1951, H. De Saeger, 2718 [RMCA]; 1 ♂, Côte d'Ivoire, Loc. Dabadougou, Date: 16.XI.1974, G. Couturier / O.R.S.T.O.M. / bord marigot [NHMP].

Distribution. Uganda; Congo (Kinshasa), Ivory Coast (!).



Figs 50—52. *Peloropecodes* sp., wing.

50, *P. acuticornis* (Oldenberg, 1916); 51, *P. matilei* Grichanov, spec. nov.; 52, *P. decembris* Grichanov, spec. nov.

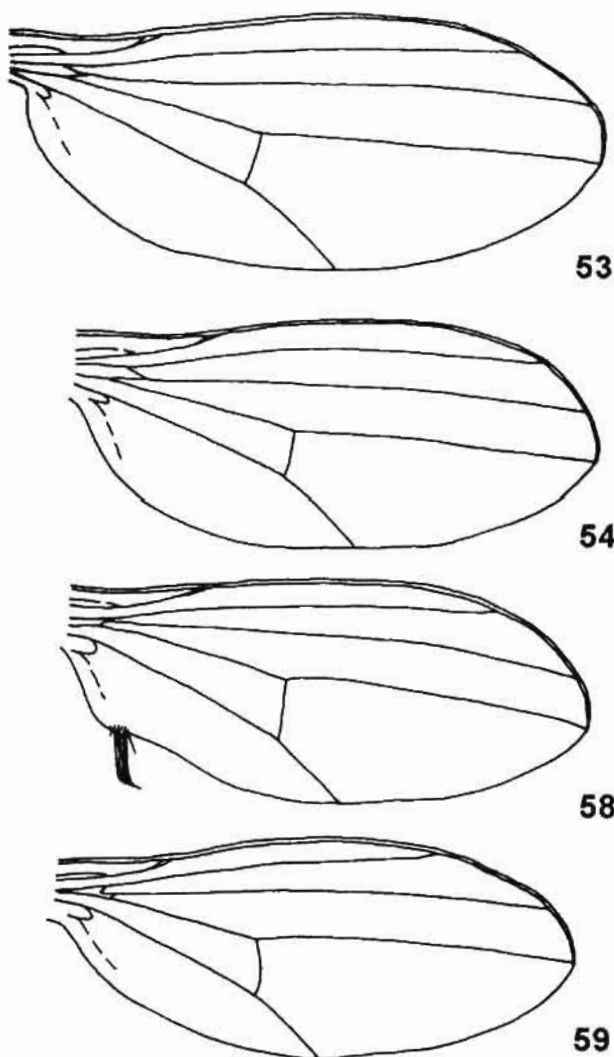
Remark. See diagnosis of *O. longicauda*. Males examined have concealed aedeagus. Specimens of the species have been also found among paratypes of *Thrypticus minutulus* Vanschuytbroeck, 1951 [RINS and RMCA], although the holotype of the latter species is a female of *Acropsilus* sp. (Grichanov, in preparation).

Discussion

The subfamily Sympycninae as a whole has the following discriminative features. Middle and hind femora bearing distinct anterior subapical seta (in contrast to Medeterinae, Rhamphiinae, most of Neurigoninae and Diaphorinae); posterior cross-vein (*m-cu*) not longer than distal part of *CuA*₁

(contrary to Hydrophorinae); scape bare above (in contrast to Dolichopodinae); *M*₁₊₂ without fork (in contrast to Sciapodinae); 7th abdominal segment in male usually very small. At the same time, representatives of Sympycninae are remarkably variable, and any character of subfamily rank could be found in genera of at least one of the other subfamilies.

The species of the four genera discussed above share the following characters (they are not repeated usually in species descriptions). Antenna slightly longer than head height. The scape is small, bare, vase-like, with slightly projecting inner apex. Arista dorsal. Palpus and proboscis short, haired; palpus with one black seta. Pseudotracheae symmetrically sclerotised. One strong vertical seta, half as long as head height; 2 strong ocellar setae



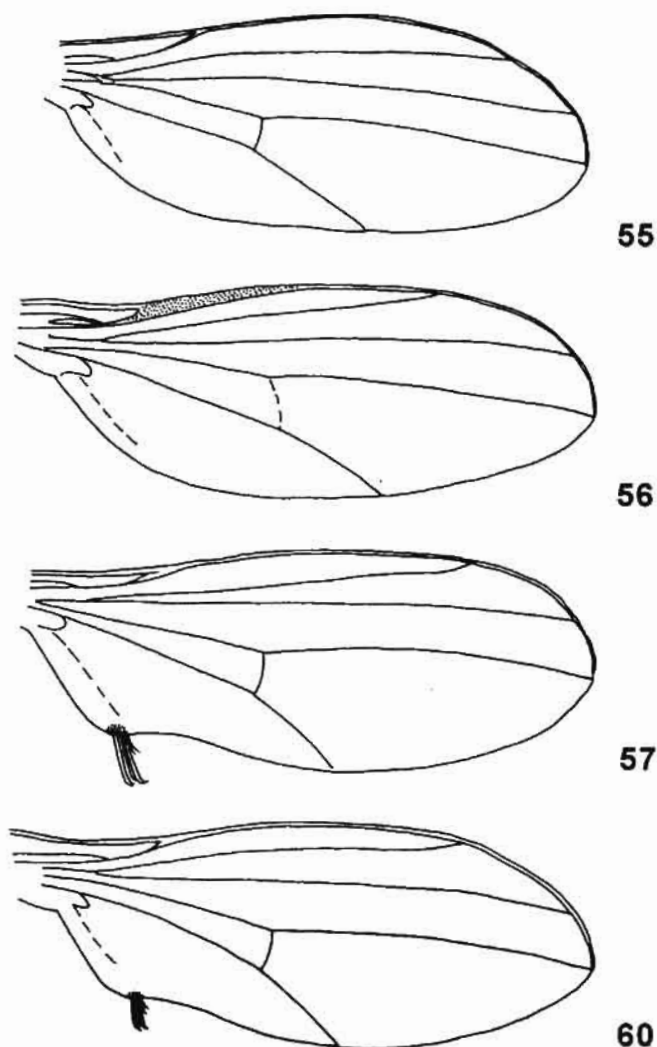
Figs 53—54, 58—59. Wing.

53, *Peloropecodes tsacasi* Grichanov, spec. nov.; 54, *P. comorensis* Grichanov, spec. nov.; 58, *Olegonegrobocia daugeroni* Grichanov, spec. nov.; 59, *O. couturieri* Grichanov, spec. nov.

of the same length with additional pair of short hairs posteriorly. Postocular setae in one row. Mesonotum more or less distinctly flattened in front of scutellum, especially distinctly flattened in *Micromorphus*, although the flattening is not so wide as that in medeterine genera. Mesonotum with 1 humeral, 1 posthumeral, 2 notopleural, 1 presutural, 1 sutural, 2 intraalar and 1 supraalar setae. Scutellum with 2 strong setae, with or without (in *Micromorphus*) very short lateral hairs. Fore tibia without major setae. Hind coxa with 1 black external seta. Mid and hind femora

with 1 anterior subapical seta. 1st to 4th segments of mid tarsus with short apicoventral spinules. Hind basitarsus usually with very small basal tooth posteriorly directed towards apex of hind tibia. Wing costa with 2 strong bristles before humeral transversal vein; upper seta longer than lower. Anal lobe long and narrow; anal vein fold-like; alula undeveloped; anal angle obtuse or absent.

Despite the simple legs, *Micromorphus* has the most striking difference from the other genera examined. It has no acrostichals and lateral scutellar hairs; no basal denticle on hind basitarsus; dor-



Figs 55—57, 60. Wing.

55, *Micromorphus maraisi* Grichanov, spec. nov.; 56, *Teuchophorus caprici* Grichanov, spec. nov.; 57, *Olegonegrobovia longicauda* Grichanov, spec. nov.; 60, *O. barkalovi* Grichanov, 1995.

sal and ventral subapical setae on hind tibia are present; and distal part of Cu_1 is nearly 4 times longer than $m-cu$. *Micromorphus* shares with *Peloro-peodes* such characters as one strong and one hairlike intraalar setae, one strong propleural seta. Examined species of *Peloro-peodes* differ from species of other genera in presence of two rows of acrostichals and one long dorsal seta on antennal pedicel, asymmetrical claws on fore tarsus (male secondary sexual character, MSSC). *Peloro-peodes* and *Olegonegrobovia* have such common character as strong dorsal subapical seta on hind tibia. *Olegonegrobovia* species differ from others

in bare propleuron in addition to presence of strong setae at the end of anal wing lobe in almost all species (MSSC). Afrotropical species of *Teuchophorus* could be easily distinguished by presence of 2 rather than 1 postverticals, 3 propleural cilia, strong ventral subapical seta on hind tibia, slightly diverging rather than parallel wing veins R_{4+5} and M_{1+2} , strongly oblique crossvein $m-cu$ forming acute (ca. 60°) angle with Cu_1 , in addition to strongly thickened costal vein (MSSC). The last two genera differ from one another in many other MSSC, e.g., in *Teuchophorus* fore basitarsus is much shorter than 2—5th segments combined; 5, 6 and 7th ster-

nites present; 7th tergite is symmetrical, positioned basally to epandrium, not fused with 8th tergite; 8th segment is basodorsal in position; epandrium is small, with mostly middorsal foramen; aedeagus is simple; dorsal and ventral surstyli are separated from base; while in *Olegonegrobovia* fore basitarsus is longer than 2—5th segments combined; 5, 6 and 7th sternites are absent or membranous; 7th tergite is asymmetrical, positioned right-basolaterally, fused with 8th tergite in the middle of epandrium; 8th segment left-basolateral in position; epandrium is large, with mostly left basolateral foramen; aedeagus is trilobate; dorsal and ventral surstyli are fused almost to apex. *Teuchophorus* and *Olegonegrobovia* share such characters as uniseriate acrostichals and 2 pairs of strong intraalar setae.

The numerous sympycnine genera of the World are defined mainly on the base of male secondary sexual characters. I agree with an opinion of P. Grootaert and H. Meuffels (1997) that a thorough revision of the more than 50 genera of the Sympycninae is needed in order to redefine subfamily and its boundaries.

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