

## A review of the Afrotropical species of *Poecilosomella* Duda (Diptera, Sphaeroceridae)

by L. PAPP, Budapest

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**Abstract** – The circumtropical genus *Poecilosomella* DUDA is redefined (incl. features of genitalia). *P. amaudi* sp. n. (Zaire) and *P. capensis* sp. n. (South Africa) are described. *P. upembana* (VANSCHUYTBROECK, 1959), *P. tinia* (VANSCHUYTBROECK, 1950), *P. melania* (VANSCHUYTBROECK, 1950) and *P. melanoides* (RICHARDS, 1980) are junior synonyms of *P. giraffa* (RICHARDS, 1938), *P. niveipes* (VANSCHUYTBROECK, 1950) is a junior synonym of *P. picturaris* (RICHARDS, 1938); each new synonymization is based on the study of types. The name of *Poecilosomella mirabilis* VANSCHUYTBROECK, 1951 is reinstated, not being a junior primary homonym. A key is provided for the Afrotropical species. With 28 figures.

This circumtropical genus comprises about 30 species, incl. one very common species in Africa (*P. angulata*) as well as in the Oriental areas (*P. punctipennis*). The species were originally distributed in the Old World tropics but *P. angulata* (THOMSON) was introduced to the New World.

A list of the known species was published by DEEMING (1964) who later described several Oriental species from Nepal. VANSCHUYTBROECK (1950, 1950a, 1959b) described seven species from Central Africa but it is obvious that he did not know RICHARDS' (1938) paper, and in addition, he apparently not waste time on comparisons of his descriptions with type-specimens described formerly by himself. One species each was described by HACKMAN (1965, 1967) in two papers from the Afrotropical Region.

No modern revision of *Poecilosomella* has hitherto been made. RICHARDS' (1980) contribution in the Catalogue of Afrotropical Diptera is a mere compilation of the existing literature (e.g. the erroneous reports of VANSCHUYTBROECK on *P. punctipennis*, an Oriental species, were repeated there, though DEEMING (1964) had left out – I am convinced, purposefully – Afrotropical localities for it when listing the species of the world).

Nearly one thousand (948 ex.) specimens of 12 Afrotropical species were studied in the course of present work (only a 13th one was not seen); not all of the species were identified by type-specimens but any synonymization was always based on a comparison of types. Any text in handwriting is given in quotation mark. My aim was to quote all labels of the type-specimens as accurately as possible: the labels are numbered downwards, their measures, colour te. are given in square brackets.

This paper will be followed by another one on the Oriental species. A delimitation of the genus is given below but this will probably be modified and supplemented by the features found in the Oriental species. We can say in advance that it seems possible that

ROHÁČEK'S (1982) hypothesis on the relegation of *Poecilosomella* to the *Spelobia* genera-group is justifiable indeed (female spermathecae, presence of spectacles-shaped sclerite, rather complex distiphallus, simple postgonite, presence or absence of ejaculatory apodeme etc., cf. ROHÁČEK 1982, 1983).

\* \* \*

**Acknowledgements** – This study would not have been possible without loan of materials from the following institutions and individuals: British Museum (Natural History) (BMNH), London, BRIAN R. PITKIN; Biosystematics Research Centre, Ottawa, Ontario (BRC), HERB J. TESKEY; California Academy of Sciences (CAS), PAUL H. ARNAUD, Jr.; Institut royal des Sciences naturelles de Belgique, Bruxelles (IRSN), P. GROOTAERT; Musée royal de l'Afrique centrale, Tervuren (MRAC), ELAINE DE CONINCK; Natal Museum, Pietermaritzburg (NMSA); Zoological Department, University of Tel Aviv (UTA), AMMON FREIDBERG; Zoologisches Museum, Humboldt Universität, Berlin (ZMB), HUBERT SCHUMANN. I especially thank DRS DE CONINCK, GROOTAERT and PITKIN, who showed great patience towards my delay in sending back type-specimens of their institutions.

#### POECILOSOMELLA DUDA, 1925

DUDA, 1925: Arch. Naturgesch., 90A (1924) (11): 78 (as subgenus of *Leptocera* — OLIVIER, 1813) – Type-species: *Copromyza punctipennis* WIEDEMANN, 1824: Analecta Ent.: 59 (subsequent des. RICHARDS, 1930: Proc. zool. Soc. Lond. 1930: 268)

*Poecilosomella* DUDA, 1920: Zool. Jb. Syst. 43: 435. Nomen nudum (without type-species nor included species) Gender: feminine.

**Diagnosis** (based on its type-species and features of the Afrotropical species, to be supplemented when revising Oriental species) – Head chaetotaxy: *occi* weak to very long, in some species also *occe* distinct, postoculars in 1 row, *vte*, *vti* long and thick, *oc* long or shorter but never thin, 1-2 *ors*, 2-5 *ifr* (never long, usually short and thin). Pedicel short, without a long bristle, scape with a wreath of moderately long and thin bristles. First flagellomere various, simple or conical, normal or covered with long dense cilia, arista long with short to moderately long but not dense cilia. Vibrissae always long and thick, *pm* short and thin, several short and thin (sometimes also 1 thicker and long) genal bristles present. Thoracic chaetotaxy: 1 *h*, 1-2 *np* (if 2, posterior one may be regarded as *prsut*), 1 prealar (anterior intraalar), 1 *sa* on a small callus, 1 *pa*, 2 intraalar (the posterior one may be regarded as postalar), 2 *dc*, (anterior pair weak in some species), 0-1 *prsc*, 2 *sc*. In several species a supracoxal is distinct. Katepisternum with 1 characteristic bristle pair or/and several short to moderately long katepisternal hairs. 8-10 rows of more or less unarranged *acmi*. Disc of scutellum bare. In males fore and mid tibia (and in some species also fore 1st to 5th tarsomeres) with long dense hairs posteriorly (and ventrally). Middle tibia with several *ad*-s and *pd*-s in males ventral side with a *va* and/or a row of short black bristles, in females *va* always present. Costal vein without long thick bristles. Wing venation similar to that of the other genera of Limosinini but there is a colourless vein appendage („false vein”) from base of anal vein to the direction of lower edge of discal cell (i.e. more or less closing anal cell) and another coloured vein appendage of cubital vein emerging at the level of *Rs* fork towards apex of anal vein. Anal vein sinuate. Alula large with rounded apex. Abdominal terga with long lateromarginal bristles (Fig. 23) in both sexes, in a part of species *T1* + 2 with thin sclerotization medially. Sterna comparatively large quadratic (in *pictitarsis* very wide, Fig. 23). *S5* simple (Fig. 24) or with marginal processes (Fig. 18). Male *S6* crescentic, in a majority of species mainly ventral, partly lateral on the left side of abdomen with a complex structure in its ventral part (e.g. Fig. 18). *S7* dorsal, not much wider than perianthrium, only a small part in lateral position. Perianthrium with several long bristles. Subanal plate distinct, with (Fig. 6) or without (Fig. 14) processes. Male cerci

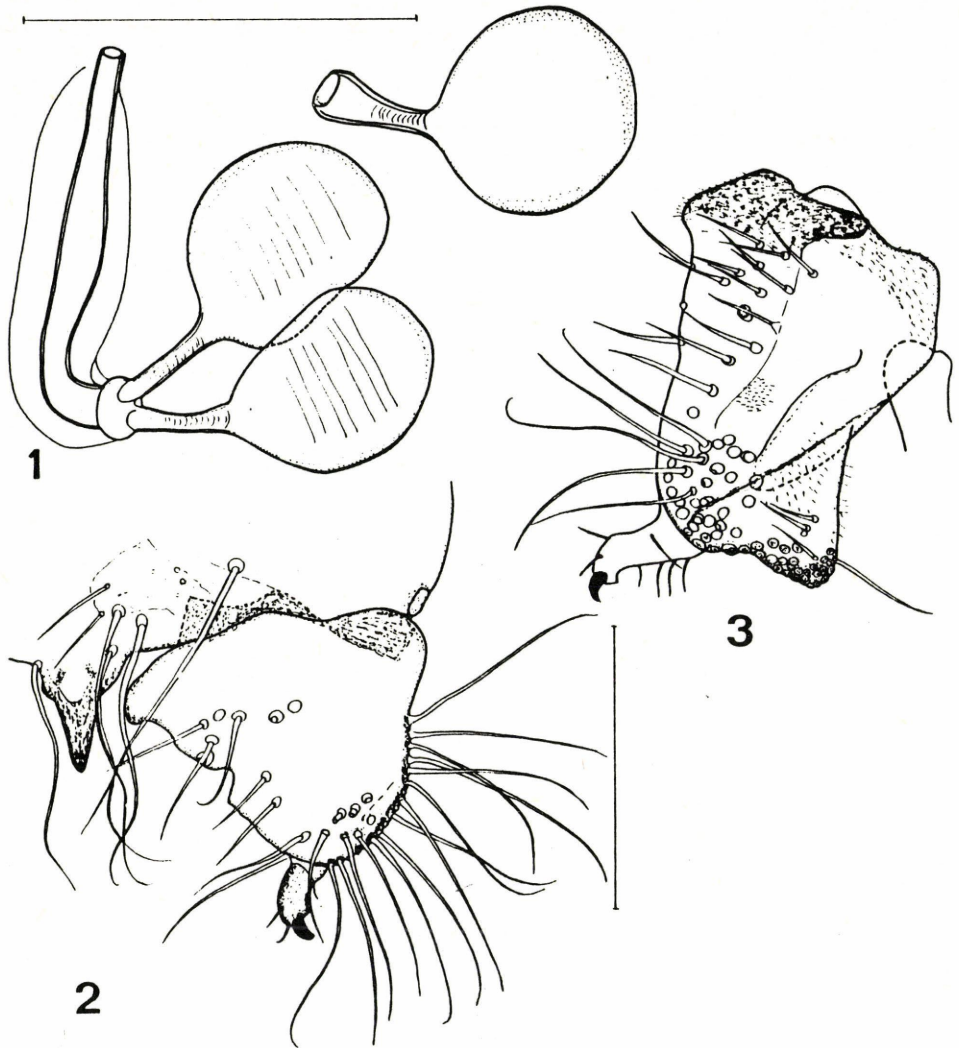
comparatively large though weakly chitinized. Aedeagal apodeme and hypandrium short (Fig. 28). Distiphallus short, of an intricate form (Figs 3, 7, 15, 22, 28). Postgonite rather simple (Figs 4, 7, 15, 20, 28), never long, without long bristles. No epiphallus. No ejaculatory apodeme (e.g. Fig. 15) or only a small ejaculatory apodeme present (Fig. 28). Gonostyli complex (Figs 2, 5, 8, 16, 17, 19, 25-27), bi- or trilobed. Male subanal plates joined more or less firmly with phallosome. Female 78 bipartite or lateral parts connected dorsally, cerci simple, spermathecae (Figs 1, 10, 11) spherical, terminal part of ducts long (Figs 10, 11) or short (Fig. 1). Spermathecae comparatively small. Spectacles-shaped sclerites present (at least in some species).

**Poecilosomella angulata** (THOMSON, 1869) (Fig. 1)

THOMSON, 1869: *Kongliga svenska Fregatten...*: 602 (*Limosina*) – Type-locality: „Brasil”.

Material studied – COLUMBIA: 1 ♂ (HNHM): Sierra S. Lorenzo, 1912. III., ÚJHELYI, „Poecilosomella angulata Th ♂” det. DR. O. DUDA; BRASIL: 1 ♂, 2 ♀ (HNHM): Para, Belem, E. HORVÁTH, 1930; PARAGUAY: 1 ♀ (HNHM): Asunción, 905., VEZÉNYI, „Poecilosomella angulata Th ♀”, det. DR. O. DUDA; U.S.A.: 1 ♀ (HNHM from S.A. Marshall): Florida: Collier co., Sominole St. Pk.; ST. LUCIA (Antilles): 57 ♂, 1 ♀ (HNHM): Vieux Port, Mt. Tourney, Castries, Vigie, Anse La Raye, Micoud, Troumasée Estate, 8 to 18. VII. 1980, S. & L. MAHUNKA (Nos 7, 18, 19, 67, 71, 76, 77); CANARY IS.: 1 ♂ (coll. Univ. La Laguna, Tenerife): Gran Canaria, Arguineguin, 22. 9. 1973, M. BÁEZ; ETHIOPIA: 6 ♂, 11 ♀ (HNHM): Abyssinia, KOVÁCS – MARAKÓ, 1912. III., „P. angulata Th ♂/♀” det. DR. O. DUDA; 1 ♂, 2 ♀ (HNHM): *ibid.*, Tshertsher, 1911. X.; 24 ♂, 25 ♀ (HNHM): Addis Abeba, Akaki River, 29. IX. 1980, A. DEMETER; 2 ♂ (CAS); Shashemawe, 8-VII-1973, VICTOR O. DEMASI; 1 ♂ (CAS): Sidamo Province, Dilla, 38°18' W 6°24' N, 4000 m, 25-III-1974, VICTOR O. DEMASI; GHANA: 1 ♀ (HNHM): Damongo, 13.8.1971, No. 478, S. ENDRÓDY-Y.; P.R. CONGO: 1 ♀ (HNHM): ORSTOM Park, 19.XI.1963, No. 214, S. ENDRÓDY-Y.; NIGERIA: 73 ♂, 143 ♀ (HNHM): Yankari Game Reserve, Bauchi State, nr Wikki, 3. to 15. 8.1978, A. DEMETER (Nos 1, 13, 14, 19, 21, 22, 24); 1 ♂ (CAS): Lagos, Ebute-Metta, Bot. Gardens, 19-IV-1929, C. B. PHILIP, 361; ZAIRE: 12 ♂, 11 ♀ (CAS): B. Congo, E. S. ROSS & R. E. LEECH coll., 7 mi. NW of Jadotville, I-27-58, 1350 m; 8 ♂ (CAS): *ibid.*, Thysville, VII-31-1957; 1 ♂, 1 ♀ (CAS): *ibid.*, 7 mi. SE of Thysville, VII-31-1957; 1 ♀ (CAS): Kolo, 20 mi. SE of Thysville, VII-31-57; 1 ♂, 2 ♀ (CAS): Munowe, Park Upemba, I-19-58, 1300 m; 4 ♂, 5 ♀ (CAS): Lwiro River, 47 km N Bukavu, 1950 m, XII-15-57; 1 ♀ (MRAC): Elisabethville, IV-1949, H. BEQUAERT; 1 ♂, 2 ♀ (MRAC): N. Lac Kivu: Rwankwi, 15-II-1952, J. V. LEROY; 1 ♀ (MRAC): Kivu: Nyabikoro (Rutshuru), XI-1956, K. BAETEN; 1 ♀ (MRAC): Uele, Bayenga, terr. Wamba, 810 m, 20-VIII-1956, R. CASTELAIN; 23 ♂, 28 ♀ (MRAC, 1/1 HNHM): P[arc] N[ational] G[aramba], Miss. H. De Saeger, Anie, Mabanga, Degedwa, Pidigala, Morubia, etc., Nos 800, 802, 1639, 1916, 2338, 2379, 2471, 2780, 2814, 2924, 3149, 3416, 3358, 3499, 3720, 3843, 4103; UGANDA: 3 ♀ (CAS): 16 mi. NW of Bushenyi, XII-6-57, 1450 m, E. S. ROSS & R. E. LEECH; 1 ♂ (BRC): Rwashamaire, SW Uganda, Jan.1-15. 1973, 1200 m, H. FALKE; 1 ♂ (BRC): Budongo Forest, nr Lake Albert, Mar 20-31, 1972, 915 m, H. Falke; 2 ♀ (BRC): Ruenzori, Bulandi Bwanba, Apr 2, 1975, forest, E. BALLYETAGARA; KENYA: 1 ♀ (CAS): Karen Alt., 5800 ft, 16-21.I.1970, M. E. IRWIN & E. S. ROSS; 2 ♂, 1 ♀ (UTA): Lake Barigo, 25.VIII.83, A. FREIDBERG; 1 ♂, 1 ♀ (UTA): West Pokot, Chepareria, 4-5.XI.83, A. FREIDBERG; 2 ♀ (UTA): Kakamega Forest, 8-9.XI.83, A. Freidberg; 2 ♀ (UTA): 30 km N Kakamega (forest), 23.XI.1986, A. FREIDBERG; 1 ♂, 3 ♀ (UTA): 15 km SW Kericho, 16.XI.1986, A. FREIDBERG; TANZANIA: 1 ♀ (CAS): 3 mi. S of Kipembawe, 5400 feet, 28-I-1970, M. E. IRWIN & E. S. ROSS; 3 ♂, 9 ♀ (HNHM): Africa or., KATONA [= K. KITTENBERGER], Kibosho, 1600 m, 1904. IX. 1-8., or, Moschi, 1905. VII., or Arusha-Ju, 1905.XI., „Ph. angulata Th ♂/♀”, det. DR. O. DUDA; GABON: 4 ♂, 1 ♀ (CAS): Pointe Noire, VII-16-57, E.S. ROSS & R. E. LEECH; BURUNDI: 4 ♂, 1 ♀ (CAS): Urundi, 6 mi N of Rumonge, I-7-58, 780 m, E. S. ROSS & R. E. LEECH; MALAWI: 1 ♀ (CAS): Nyasa, Mkuwazi, Hill forest, 11 mi. S of Nkata Bay, 590 m, II-22-58, E. S. ROSS & R. E. LEECH; ANGOLA: 3 ♀ (CAS): Qulienda, elev. 770 m, V-31-58, E. S. ROSS & R. E. LEECH; SOUTH AFRICA: 1 ♀ (HNHMB): óserdó, 1978.V.12., S. ENDRÓDY-YOUNGA; 16 ♂, 27 ♀ (CAS): Cape Province, Storms Rivier, elev. 200 m, IV-20-58, E. S. ROSS & R. E. LEECH; 1 ♂ (UTA): Natal, 10 km NE Drummond, 18.IX.83, A. FREIDBERG; 1 ♂, 2 ♀ (NMSA): Transvaal, n. Kruger National Park, Pafuri, 22°27'S 31°17'E, I, 5-Aug 1978, L. BRAACK, ex Impala carcass; MADAGASCAR: 6 ♀ (HNHM): Madagascar, Sikora; 9 ♂, 10 ♀ (MRAC, 1/1 HNHM): Madagascar, Dr. H. SCHOUTEDEN – Total 582 ex.

Hitherto known distribution: „Brazil, Cape Verde Is, E. Afr., Ethiopia, Madagascar, sthn Afr., Togo, New Guinea, Neotrop. Reg.” (RICHARDS 1980: 621); its occurrence in New Guinea is highly questionable; actually there are no reliable data from the Oriental Region nor from the Pacific. Its original range was



Figs 1-3. — 1. *Poecilosomella angulata* (THOMSON): spermathecae. — Figs 2-3. *P. araudi* sp. n. ( $\delta$ , paratype): 2 = gonostylus and subanal plate, caudal view, 3 = gonostylus laterally. — Scales: Fig. 1 = 0.1 mm, Figs 2-3 = 0.2 mm

probably all tropical Africa. Most of the specimens collected by my colleague DR. ANDRÁS DEMETER in Nigeria, were caught on baboon droppings. On the other hand, it seems not so abundant on dung of large ungulates. Consequently, it is possible that it was transported to South America (and later towards North America) by commerce, i.e. by slave-trader ships some hundreds of years ago.

**Poecilosomella arnaudi sp. n. (Figs 2-5)**

Measurements in mm: body length 2.45 (holotype), 1.90-2.71 ( $\delta\delta$  paratypes), 2.08-2.92 ( $\eta\eta$  paratypes) wing length 2.52 (holotype), 2.00-2.71 ( $\delta\delta$  paratypes), 2.17-3.00 ( $\eta\eta$  paratypes), wing width 1.15, 0.86-1.21 and 0.90-1.24, respectively.

Description – Thorax and abdomen dark brown, mesonotum with silvery spots in sagittal line, in the *dc* lines, behind humeral callus and around base of characteristic bristles.

Ocellar bristles moderately long, *occi* rather long, *vte*, *vti* strong, 2 exclinate *ors* (posterior pair slightly reclinate), 3 (rarely 4) pairs of *ifr*. Antennae reddish yellow, 1st flagellomere with diffuse dark spots on both sides. Frons light reddish brown or reddish yellow, orbital plates, ocellar triangle together with vertex dark. Facial plate and genae reddish yellow, former shining. Vibrissae strong, peristomals comparatively short and thin, several short proclinate genal bristles.

Thoracic chaetotaxy as in related species; ca. 4 slightly proclinate katepisternal bristles. Femora dark brown, ochreous apically, basic colour of tibiae yellow to reddish yellow with wide dark brown rings both in the proximal and distal third (proximal rings more or less faded on fore tibia). Tarsi yellow, 5th tarsomeres dark brown, 1st, 2nd and 4th tarsomeres of hind tarsi dark dorsally (at least partly so). Armature of male middle tibia: no ventral bristles, *va* rather long but comparatively thin and parallel with 1st tarsomere, *ad-s*: one very long at proximal 2/5 and at distal 5/6, a more anterolateral very strong bristle at distal 2/3; *pd-s*: one moderately long at distal 4/5, 2-3 short and thin bristles in middle third, some short and thin *ad-s* in proximal third. Wings unicolourous, light brownish, a dark spot each on apex of *R2+3* and on costal vein just distally to apex of *R1*, base of *R4+5* and *R2+3* (*Rs*) dark, other veins ochreous. Ratio of second and third costal sections: 0.615 mm vs. 0.846 mm, 0.718 mm vs. 0.885 mm, i.e. 0.73-0.81. Ratio of intracrossvein section of M to hind crossvein: 1.07-1.16. Halteres light yellow.

Periandrium with a pair of long bristles and several shorter bristles, subanal plate sagittally with a long sclerotized process (two processes merged) and with some long bristles (Fig. 2). Distiphallus with a long central filament (Fig. 3), phallosophore ventrally with dense long hairs. Postgonite angulately curved (Fig. 4), less wide than that of *capensis*. Gonostylus (Fig. 5) with a wide anterior lobe and with a ventromedial digitate lobe, latter bears a short thick tooth apically.

Holotype male: B CONGO [Zaire]: Thysville, VII-31-1957 – E. S. ROSS & R. E. LEECH collectors (CAS Type No. 16041). – Paratypes: 54  $\delta$ , 16  $\eta$  (37  $\delta$ , 11  $\eta$  CAS, 17  $\delta$ , 5  $\eta$  HNHM): same data as for the holotype.

*P. arnaudi* sp. n. is related to *P. capensis* sp. n. and *P. longecostata* (DUDA). The differences in body features are given in the key, but there are distinct differences also in the subanal plate, gonostylus, postgonite and distiphallus.

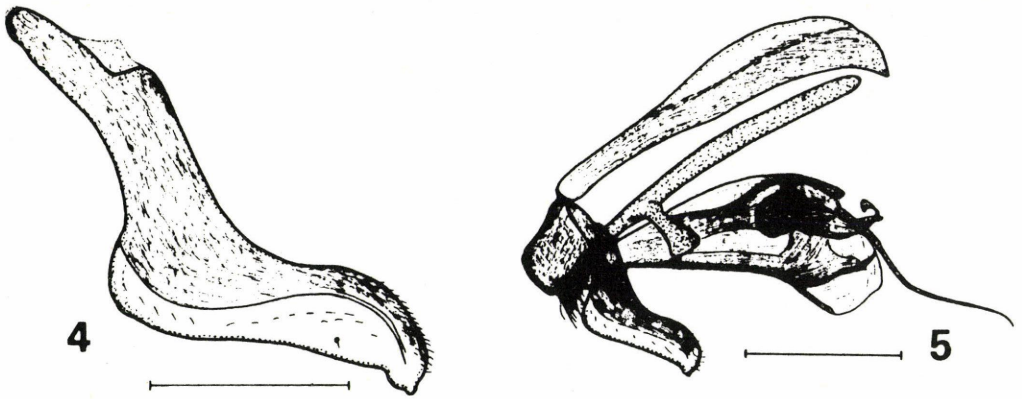
I dedicate this new species to DR. PAUL H. ARNAUD, JR., whom I am grateful to for repeated shipments of invaluable material from his institution.

**Poecilosomella capensis sp. n. (Figs 6-13)**

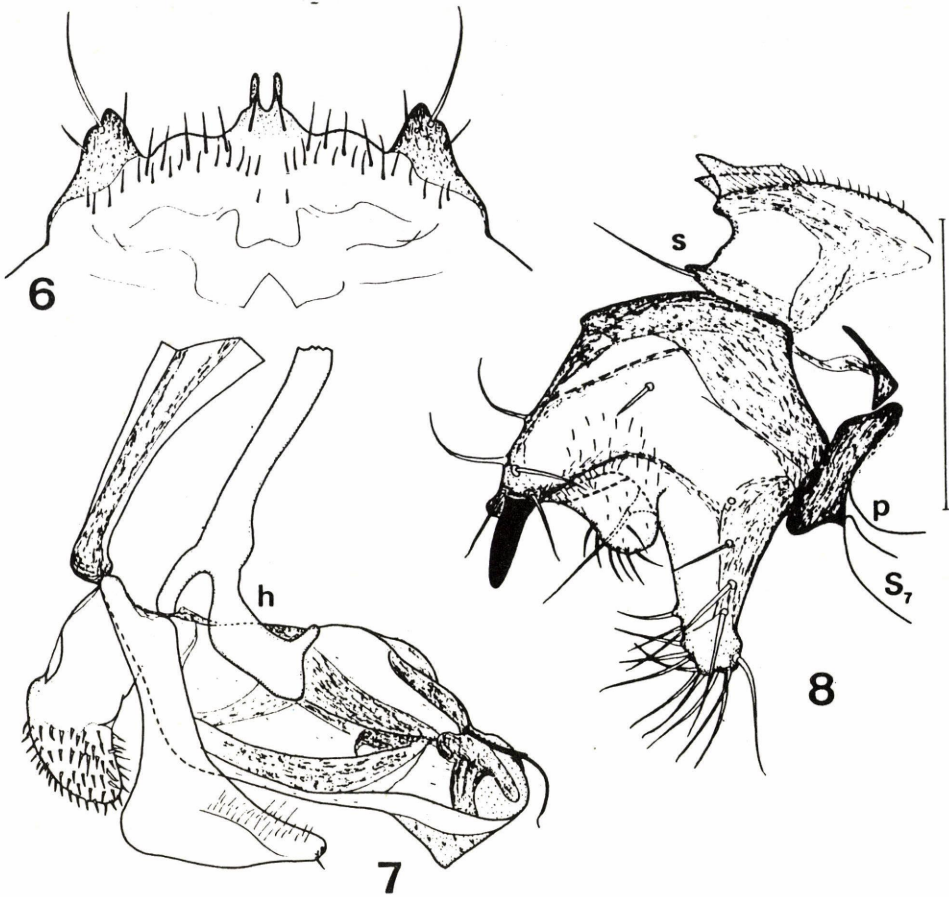
Measurements in mm: body length 2.55 (holotype), 2.46-2.92 ( $\delta\delta$  paratypes), 2.29-2.96 ( $\eta\eta$  paratypes), wing length 2.72 (holotype), 2.46-2.92 ( $\delta\delta$  paratypes), 2.38-2.95 ( $\eta\eta$  paratypes), wing width 1.18, 0.98-1.22, 0.98-1.24.

Description – Body and legs as those of *arnaudi* sp. n. but dark alar spots bigger, frons darker (reddish brown), antennae reddish brown or light brown.

Five pairs or short but distinct *ifr*. Head chaetotaxy similar to that of *arnaudi* but bristles thicker, usually 1 very strong upcurving genal bristle present.



Figs 4-5. *Poecilosomella araudi* sp. n. (♂, paratype): 4 = postgonite laterally, 5 = aedeagal complex laterally.  
— Scales Fig. 4 = 1.1 mm, Fig. 5 = 0.2 mm



Figs 6-8. *Poecilosomella capensis* sp. n. ( $\delta$ , paratype): 6 = subanal plate, caudal view, 7 = aedeagal complex laterally, 8 = gonostylus and subanal plate, inner (lateral) view. — Scale: Figs 6-8 = 0.2 mm. Abbreviations: h = hypandrium, p = periandrium, s = subanal plate, S7 = 7th sternite

Thoracic chaetotaxy as in its related species, i.e. 1 *h*, 1 *np*, 1 prealar (anterior intraalar), 1 *sa*, 1 *pa*, 2 *ia*, 2 *dc*, 2 *sc* pairs. One moderately long but rather thick katapisternal bristle posteriorly and 1-2 more anterior katapisternal hairs.

Male middle tibia with a very short *va*, armature of tibia similar to that of *arnaudi* but *pd*-s in middle third and *ad*-s in proximal third longer and much thicker. Fore and middle tarsi yellow (reddish yellow), 5th tarsomeres dark, hind tarsi with 1st, 2nd, 4th and 5th tarsomeres dark (at least dorsally).

Wings light brownish, except for alar base proximal to humeral vein and areas of alar spots, veins ochreous. Costa basally and at apex of *R1*, *Rs* fork and apical part of *R2+3* usually with a short vein appendage. Ratio of second and third costal sections 1.06 to 1.415, in absolute values 0.66-0.744 mm and 0.526-0.628 mm. Intracrossvein section of *M* 0.179-0.218 mm, hind crossvein 0.171-0.180 mm, ratio 1.00-1.21.

Male subanal plate (and periandrium) with a pair of blunt lateral processes, subanal plate medially with a pair of dentate processes (Fig. 6). Distiphallus (Fig. 7) rather robust, its thread-like process much shorter than in *arnaudi*. Postgonite (Fig. 7) wide, more angulate than that of *arnaudi*. Phallopore oblong ventrally and covered with thick and comparatively long setae. Gonostylus (Fig. 8) trilobed, ventral (ventromedial) process with a long and blunt tooth, medial lobe hardly sclerotized, upper lobe rather long with moderately long bristles.

Female *T8* bipartite (Fig. 9), *S8* weakly sclerotized, mediocaudally with 3-4 short bristles. Cerci with two long and one shorter bristles. Spermathecae (Figs 10, 11) globular, sclerotized terminal part of the ducts rather long with scale-like short setulae. Eggs (Fig. 12) unique, chorion with hexagonal sculpture, extremely long spiracular processes (Fig. 13).

Holotype male: South Africa: Cape Province, Stroms Rivier, elev. 200 m, IV-20-58. E. S. ROSS & R. E. LEECH collectors (CAS Type No. 16042). - Paratypes: 42♂, 16♀ (27♂, 11♀ CAS, 15♂, 5♀ HNHM); same data as for the holotype.

*P. capensis* sp. n. belongs to the *longecostata* species-group. Its body is slightly bigger, the vein appendage of the *R2+3* vein is conspicuous, the features of the male genitalia are all very characteristic.

#### *Poecilomella giraffa* (RICHARDS, 1938) (Figs 18-22)

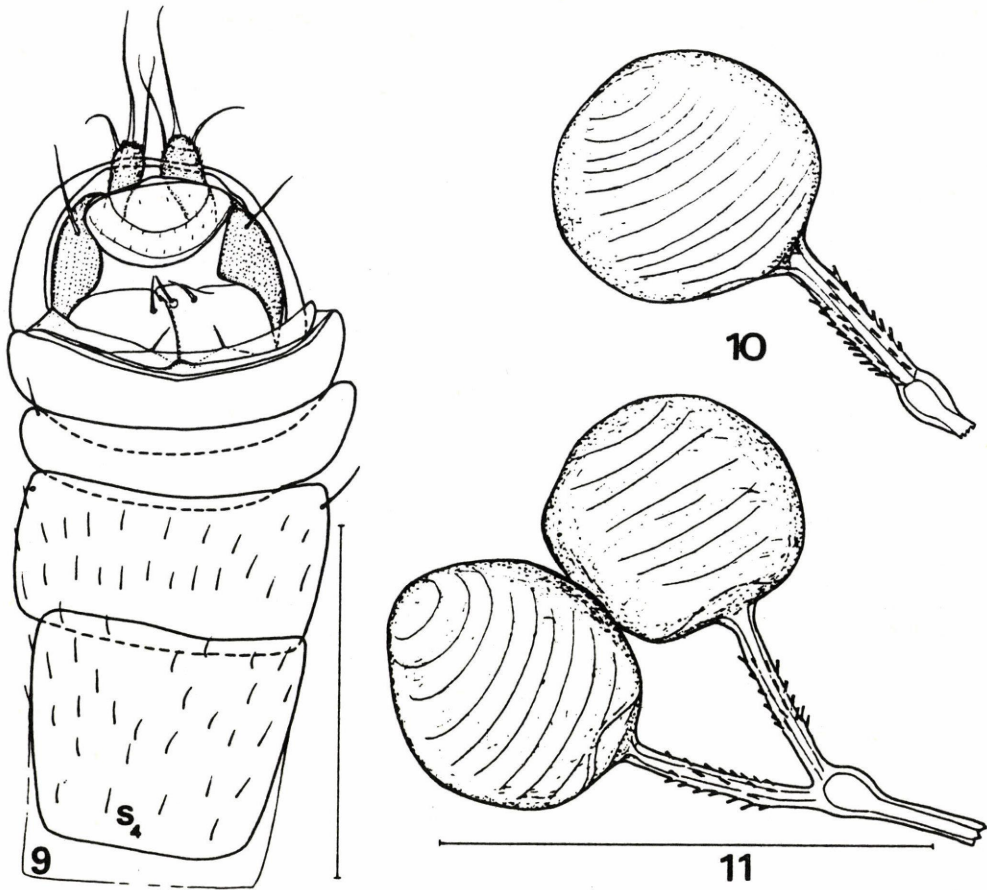
RICHARDS, 1938: Mém. Mus. Hist. nat. Paris, N. S., 8: 390 (*Leptocera* [*Poecilomella*]) - Original type-data: p. 391: „Type ♀ E. side of Mount Elgon, Suam Fishing hut, 2,400 m., March - Allotype ♂ with the same data. - Paratypes ....”

Paratypes 1 ♂, 2 ♀ (BMNH, conspecific specimens): 1 ♂ [6mm ø round, yellow bordered] Paratype; 2/ [10x9 mm, dirty white, printed] Abyssinia, Mt. Chillalo, forest, circa 9,000 ft., 13.XI.1926. Dr. H. Scott; 3/ [8x3.5 mm, upside down, printed] Brit. Mus. 1927-127.; 4/ [13.5x3.5, dirty white, printed] By shifting humus under trees; 5/ [27.5x10.5 mm, dirty white card with RICHARDS' handwriting] „Leptocera (*Poecilomella*) *giraffa* ♂ Paratype”; Intact specimen, minutia pinned and staged into a 13x7 mm dusty brown plastic celluloid film; 1 ♀ : labels 1 and 3 as above; 2/ [15x7.5 mm] *ibid.*, 14.XI.1926; 4/ [23x9.5 mm, with RICHARDS' handwriting] „Leptocera *giraffa* ♀ paratype”; intact specimen, pinned as the ♂ paratype: 1 ♀ : labels 1 and 3 as above: 2/ [14x7 mm, white, printed] Abyssinia: Djem-Djem Forest, 8000-9000 ft., 21-29.IX.1926., Dr. H. Scott; 4/ [26.5 mm, dirty white card with RICHARDS' handwriting] „Leptocera *giraffa* ♀ Parat.”; scutellar bristles broken off. Measurements in mm: body length 2.33 / ♂, 2.50, 2.58, wing length 2.17 / ♂, 2.46, 2.62, wing width 0.95 (♂), 1.06, 1.12.

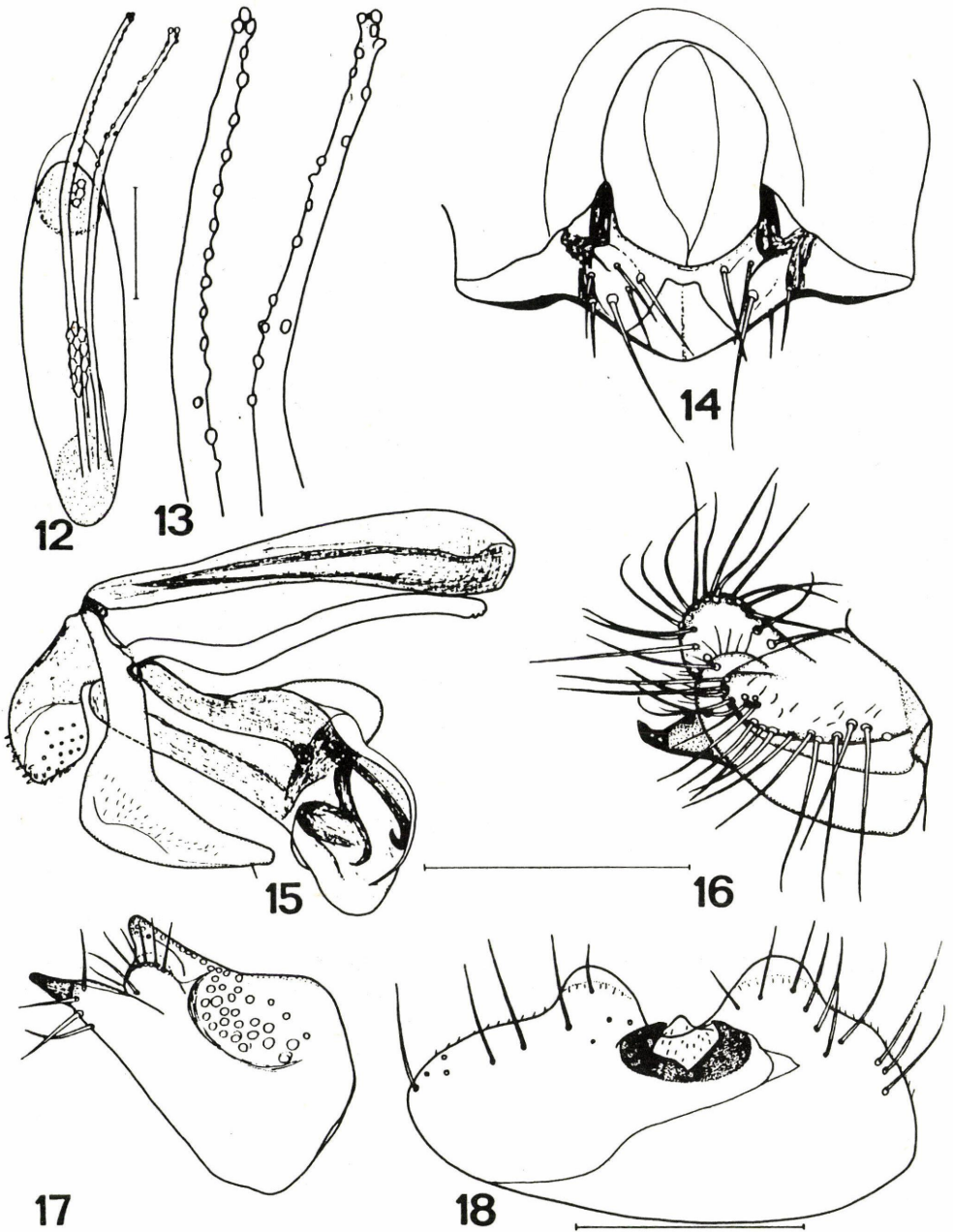
*Limosina* (*Poecilomella*) *melania* VANSCHUYTBROECK, 1950: Bull. Inst.r. Sci. nat. Belg., 26/25: 16, a junior synonym of *P. giraffa* (RICHARDS, 1938).

Holotype male (IRSN): 1/ Boma-Km. 31 vers Tshela, 3-XI-1948, P. Vanschuytbroeck; 2/ P. Vanschuytbroeck det. 1950. „*Poecilomella melania* n.sp.”; 3/ [fleshy] TYPE; 4/ cf. Bull. Inst. Sc. Nat. Belg., „T.XXVI, n° 25” 1950, p. 16; 5/ R. I. Sc. Nat. Belg., I. G. 17315; right arista lost, otherwise in a good state of preservation.

Paratypes 2 ♂, 1 ♀ (IRSN), 1 ♀ (HNHM, through exchange): 1/ Mateba (fle), 3-II-1949, P. Vanschuytbroeck; 2/ P. Vanschuytbroeck det. 1950. „*Poecilomella melania* Vanschuytb.”; 3/ [red] Paratype; labels 4 and 5 as above; 2 ♂ (IRSN, HNHM): 1/ Loango, 9-XI-1948, P. Vanschuytbroeck; labels 2-5 as for the above paratypes; 1 ♂ (IRSN): 1/ Tshikay, 21-V-1948, P. Vanschuytbroeck; labels 2-5 as above. The paratypes are slightly to strongly damaged (legs or their parts lost, wings damaged, thoracic and head bristles lost, arista or antenna lost).



Figs 9-11. *Poecilosomella capensis* sp. n. (♀, paratype): 9 = abdominal sclerites ventrally, 10 = unpaired spermatheca, 11 = paired spermathecae. — Scales: Fig. 9 = 0.5 mm, Figs 10-11 = 0.1 mm. Abbreviation: S<sub>4</sub> = 4th sternite



Figs 12-18. — Figs 12-13. *Poecilosomella capensis* sp. n. (♀, paratype): 12 = egg, 13 = spiracles in higher magnification. — Figs 14-17. *P. longecostata* (DUDA) (♂, paralectotype): 14 = subanal plate, caudal view, 15 = aedeagal complex laterally, 16 = gonostylus laterally, 17 = gonostylus caudally. — Fig. 18. *P. giraffa* (RICHARDS), male 5th abdominal sternite. — Scales: Fig. 12 = 0.2 mm, Figs 13-17 = 0.2 mm, Fig. 18 = 0.2 mm

*Leptocera (Poecilosomella) melanioides* RICHARDS, 1980: Cat. Afrotrop. Dipt.: 621, as „nom. n.” for *Limosina (Poecilosomella) melania* VANSCHUYTBROECK, 1950, a junior primary homonym of *Limosina melania* HALIDAY, 1836 (now in the genus *Trachypopella*). A junior synonym of *P. giraffa* (RICHARDS, 1938).

*Limosina (Poecilosomella) tincta* VANSCHUYTBROECK, 1950: Ann. Mus. Congo belge, (8), 5: 30, a junior synonym of *P. giraffa* (RICHARDS, 1938).

Holotype male (MRAC): 1/ [red] Holotype; 2/ MUSÉE DU CONGO, P. N. A[lbert]: gite – 1933, Nyiragongo, 2300 m, Dr. De Wulf; 3/ [fleshy] Holotype; 4/ P. Vanschuytbroeck det., 1950 „Poecilosomella tincta n.sp.”; in poor condition: head separated and glued on the polyporus bricklet below the specimen, antennae lost, fore legs lost, left middle tarsi lost.

Paratype male (IRSN): 1/ Ruanda-Urundi: Bururi, X-1948, François; 2/ R. DET. 5664 „9” [or] „G”; 3/ P. Vanschuytbroeck det., 1950 „Poecilosomella tincta n.sp.”; 4/ [red] Paratype; 5/ „cf. Ann. Mus. Congo Ser 8”, Vol.5-1950, pp.30-31.”; 6/ R. I.Sc.Nat. Belg., I.G. „18395”; in poor condition, right wing almost entirely lost, head bristles and left wing damaged.

*Limosina (Poecilosomella) upembana* VANSCHUYTBROECK, 1959: Explor. Parc natn. Upemba, 57: 53, a junior synonym of *P. giraffa* (RICHARDS, 1938).

Holotype male (MRAC): 1/ [13x8 mm, red] HOLOTYPUS; 2/ [10x7 mm, fleshy] TYPE; 3/ Congo belge, P. N. U[pemba], Mukana (1.810 m.), 22-23. IV.-1949, Mis.G.F. de Witte, 2550a; 4/ COLL.MUS.CONGO (ex coll.I.P.N.C.B.); 5/ [32x12.5 mm white] P. Vanschuytbroeck det., 19 „Poecilosomella upembana n.sp.” minutia pinned and staged in a polyporus bricklet, right hind leg lost, otherwise in a good state of preservation.

Paratypes 1 ♀ (MRAC): 1/ PARATYPUS; 2/ Paratype; 3/ Congo belge: P. N. U[pemba], Lusinga (1.760 m), 22.-IV-1949, Mis. G. F. de Witte, 2529a; label 4 as above; 5/ [21x8.5 mm, white] P. Vanschuytbroeck det., 1958, *Poecilosomella „upembana n.sp.”*; 1 ♀ (MRAC): *ibid.*, 27-IV-2-V-1949, 2588a; this specimen is a poor state of preservation: middle and hind tarsi, right hind tibia lost, wings and thoracic bristles damaged; 1 ♀ (IRSN): 1/ Congo belge: P. N. U[pemba], Mukana/Lusinga (1.810 m.), 22-23.IV-1949, Mis.G.F. de Witte, 2550a; 2/ [red] Paratype; 3/ P. Vanschuytbroeck det., 1958, *Poecilosomella „upembana n.sp.”*; right middle tibia and tarsi lost.

Material other than types: 1 ♂ (HNHM): TANZANIA, Meru, 1979. II-III., leg. EÓRY & SIPOS; 1 ♀ (UTA): KENYA: 30 km N Kakamega (forest), 23.XI.1986, A. FREIDBERG; 2 ♂, 1 ♀ (HNHM): BR. CAMEROONS, Cameroons Mt.: Buea Slope, V.13-17.49, B. MALKIN – Elevation 4500-6000 ft.; 1 ♂, 2 ♀ (IRSN): P. N. U[pemba], Lusinga (1760 m.), 22-III-1947, Mis.G.F. DE WITTE, 95a; P. VANSCHUYTBROECK det., 1958, *Poecilosomella „tincta VANSCH.”*; 1 ♂ (IRSN): *ibid.*, *R. Mubale* (1480 m.), 10-V-1947, 356a. – Total 25 ex.

Distribution: „Kenya; Ethiopia, Zaire” (RICHARDS, 1980: 621); Burundi (published for *tincta*), Cameroon (new), Tanzania (new); a widespread though uncommon species.

*P. giraffa* (RICHARDS) is one of the most conspicuous species of the Afrotropical *Poecilosomella*, that is why some drawings have been made on its male genitalia: S5 with a pair of wide and blunt processes (Fig. 18), ventral part of S6 complex with a pair of teeth, gonostylus merged with periandrium (Fig. 19), aedeagal apodeme (Fig. 21) comparatively high though not very long, postgonite (Fig. 20) sharp pointed, apical part strongly chitinized, postgonite rather short, distiphallus (Fig. 22) short, bulbous.

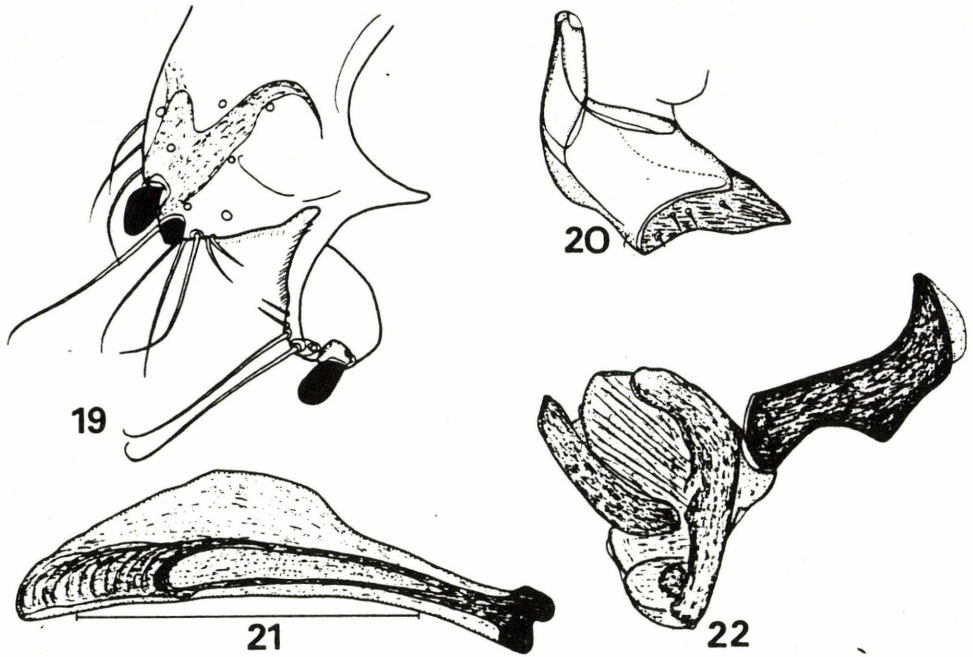
#### *Poecilosomella hyalipennis* HACKMAN, 1965

HACKMAN, 1965: S. Afr. Anim Life, 11: 498 – Original type-data: p. 498: [South Africa] „Cape Prov.: Grahamstown, 2.X.1957, 1 ♂, paratype, leg. B. STUCKENBERG. – Bainkloof E of Wellington, 2000 ft., 4-5.X.1959, 1 ♂ holotype, leg. B. STUCKENBERG. The types are in the Natal Museum, Pietermaritzburg.”

Material studied: 1 ♂, 1 ♀ (HNHM): Ethiopia, Addis Abeba, Akaki River – 13, 29.IX.1980, leg. DEMETER.

This species is similar to *P. pallidimana* differing in colour of wing (see key below) and in some details of the male genitalia (HACKMAN 1965: Fig. 23 vs. Fig. 24 for *pallidimana*).

Distribution: „South Africa” (RICHARDS 1980: 621), Ethiopia (new).



Figs 19-22. *Poecilosomella giraffa* (RICHARDS) ( $\delta$ , paratype of *P. tincta* [VANSCHUYTBROECK]): 19 = gonostylus and ventral part of periandrium laterally, 20 = postgonite laterally, 21 = aedeagal apodeme laterally, 22 = aedeagus laterally. — Scale: Figs 19-22 = 0.2 mm

**Poecilosemella longecostata** (DUDA, 1925) (Figs 14-17)

DUDA, 1925: Arch. Naturgesch., 90A (1924) (11): 83, 92 (*Limosina* [*Poecilosemella*]) – Original type-data:

l.c.: p. 93: numerous syntypes (HNHM, ZMB, BMNH) from Ethiopia, Tanzania, Kenya, Togo and Nigeria.

Lectotype male (HNHM): 1/ Abyssinia, Kovács; 2/Tschertsher, 1911. X.; 3/ „P. longecostata ♂” [DUDA's handwriting], Det. Dr. O. Duda. Body length 2.29 mm, wings 2.29 mm, wings 2.38 x 1.07 mm; in a good state of preservation.

Paralectotypes 19♂, 3♀ (HNHM): labels as for the lectotype; 1♀ (HNHM): Abyssinia, Kovács – Dire-Daua, 1911.II.19.; 7♂, 8♀ (HNHM): Africa or., Katona [= K. Kittenberger] – Kibosho 1600 m [on the other side of label] „1904.IX.1-8.” – „P. longecostata ♂/♀” Det. Dr. O. Duda. Their body length: 1.85-2.33 mm. There are four syntypes from Kibosho and one syntype from Tschertsher in the Berlin Museum (ZMB); one additional male and female syntype each are preserved in Brussels (IRSN) with data as above, through an exchange of materials.

Material other than types: 6♂, 1♀ (CAS, 3♂ HNHM): KENYA: 25 mi NW Nakuru (Kisumu-Nak. Rd.), 2300 m, XI-28-1957 – E.S. ROSS & R. E. LEECH; 1♂, 2♀ (CAS, 1♀ HNHM): UGANDA: 16 mi. NW of Bushenyi, XII-6-57, 1450 m – E. S. ROSS & R.E. LEECH; 1♂ (CAS): B. CONGO: Lwiro River, 47 km N. Bukawu, 1950 m, XII-15-57. – E.S. ROSS & R.E. LEECH. – Total 57 ex.

Distribution: „Ethiopia & Kenya & Nigeria & Tanzania & Togo; South Africa, Zaire” (RICHARDS 1980: 621); Uganda (new).

**Poecilosemella lusingana** (VANSCHUYTBROECK, 1959)

VANSCHUYTBROECK, 1959: Explor. Parc natn. Upemba, 17: 56 (*Limosina* [*Poecilosemella*]).

Holotype male (MRAC): 1/ [red] Holotypus 2/ [pink] Type; 3/ Congo belge: P. N. U[pemba] Lusinga (1.760 m), 10-VI-1947, Mis. G.F. de Witte, 223a; 4/ COLL. MUS. CONGO (ex coll. I.P.N.C.B.); 5/ P. Vanschuytbroeck det., 19 „Poecilosemella lusingaensis nsp.” [„ensis” crossed out and „na” written above]. Body length 2.6 mm.

Paratype male (MRAC): 1/ [red] Paratypus; 2/ [red] Paratype; labels 3/ and 4/ as on holotype; 5/ P. Vanschuytbroeck det. 1958, „Poecilosemella lusingaensis n.sp.”. It is not conspecific with the holotype: body dark, mesonotum less shining, 2 *ors*, frons, face etc. not yellow, second costal section longer than third, fore first and 2nd tarsomere white (other tarsomeres broken down, one of the tarsomeres 3-5 glued to the pin). It is a species of the *pallidimana*-group (possibly new) but it is surely not conspecific with the holotype.

Paratype male (IRSN): Congo belge: P. N. U[pemba], Gorge de la Pelenge (1.150 m) 10-14-VI-1947, Mis. G.F. de Witte, 483a; 2/ [red] Paratype; 3/ P. Vanschuytbroeck det. 1958, Poecilosemella „lusingaensis n.sp.”. Conspecific with the holotype.

Material other than types: P.R. CONGO: 2♂, 4♀ (HNHM): Congo Brazzaville, ORSTOM park, No. 572/575/694, 2/3/16. I. 1964, J. BALOGH & A. ZICSI; 1♂ (HNHM): Congo, Sibiti, IRHO, 2.XII.1963. No. 322, J. BALOGH & A. ZICSI; 1♀ (HNHM): Congo, Kindamba, Meya 12.XI.1963, No. 171, J. BALOGH & A. ZICSI; ZAIRE: 3♂, 1♀ (MRAC, 1♂ HNHM): Congo Belge, P. N. G[aramba], Miss. H. DE SAEGER, Pali/9, 22-III-1952, H. DE SAEGER, 3213, or, PpK.12/d/9, 2-I-1952, H. DE SAEGER, 2972, or, II/hc/8, 23-IV-1951, Réc. J. VERSCHUREN, 1590. – Total 15 ex.

Distribution: Zaire (RICHARDS 1980: 621), P.R. Congo (new).

**Poecilosemella maxima** (VANSCHUYTBROECK, 1950)

VANSCHUYTBROECK, 1950: Ann. Mus. Congo belge, 8/5: 28 (*Limosina* [*Poecilosemella*]) – Original type-data:

p. 29: „52 ex.: Holotype: ♂: Rutshuru, 20. II. 1936 (L. LIPPENS); Cotype ♀; Rutshuru, 20. II. 1936 (L. LIPPENS); Paratypes:...”

Holotype male (MRAC): 1/ [red] Holotypus ♂; 2/ COLL. MUS. CONGO, Rutshuru, 20-II-IV-36, L. Lippens, 90° [on the other side of this label] „15”; 3/ R. DET. 5662 A; 4/ „Holotypus”; 5/ P. Vanschuytbroeck det. 1950 „Poecilosemella ó maxima P. Schuyt” (minutia pinned into a polyporus bracket: left arista, most of the head bristles and thoracic bristles broken down, R2+3 without a vein appendage).

Paratypes: Allotypus: 1/ [red] Allotypus; 2nd label as above; 3/ R. DET. 5662 B; 4/ „Cotype”; 5/ „Poecilosemella angulata THOM. ♂ det. L. Papp, 1987; Other paratypes (with or without a vein appendage);

some of them damaged or severely damaged, e.g. all legs lost; their 1st label is always: [red] Paratypus): 9 ♂, 4 ♀ (MRAC): data same as for the holotype (3rd label with „5662C”, among them 3 ♂ belong to *P. angulata*); 1 ♂ (MRAC): Kasenyi, 15-VIII-1937, H.J. BRÉDO; 2 ♀ (MRAC): Terr. Rutshuru, 15-VII-1937, Miss. Prophylactique; 1 ♂ (MRAC): Rutshuru, 26-IV-36, L. Lippens, „100” (damaged, identity questionable); 6 ♂, 4 ♀ (MRAC): Rutshuru, 2-VI-36, L. Lippens, „179” (1 ♂: *P. angulata* Thoms.); 10 ♂, 6 ♀ (MRAC): Rutshuru, 24-IV to 29-V-36, L. Lippens, nos. 101, 118, 125, 127, 173, 175; 1 ♂, 1 ♀ (MRAC): Ruanda: Gite de Nkuli, 17-III-36, L. Lippens, „28”; 1 ♀ (HNHM): Rutshuru, 2-VI-36, L. Lippens, 179 – R. DET. 5662 C – *P. Vanschuytbroeck* det., 1950, „*Poecilomella maxima* Vansch.” – „cf. Ann. Mus. Congo, ser. 8° Vol. 5. 1950. pp. 28-29”.

Material other than types: CAMEROON: 1 ♂ (CAS): Br. Cameroons, Cameroons Mt.; Buea Slope, V.13-17.49., B. MALKIN, Elevation 6,000-7,000 ft.; NIGERIA: 2 ♂ (CAS): Lagos, Ebute-Metta, Bot. Gardens, 15-VII-1929, C.B. PHILIP; KENYA: 2 ♂, 2 ♀ (UTA, 1/1 HNHM): Kakamega Forest (or, 30 km N Kakamega), 8-9.XI.83, A. FREIDBERG, 23.XI.1986, I. SUSMAN; 2 ♂, 1 ♀ (UTA): Mt. Elgon Lodge, 1-6.XI.83, Malaise trap, A. FREIDBERG; 2 ♂, 4 ♀ (UTA, 1/2 HNHM): West Pokot, Chepareria, 4-5.XI.83, I. YAROM; ZAIRE: 1 ♂ (MRAC): Kivu, Burunga, XII-1925, DR. H. SCHOUTEDEN; 1 ♀ (MRAC): Haut-Uele, XI-1947, P.L.G. BENOIT; 4 ♂, 5 ♀ (MRAC, 2/1 HNHM): P. N. G[aramba], Miss. H. DE SAEGER, Makpe, etc., Nos 1639, 2383, 2718, 3081, 3161, 3842, 4040; 1 ♂ (MRAC): Coll. Mus. Congo, N. Lac Kivu: Rwankwi, 15-VI-1951, J.V. Leroy; 4 ♂, 4 ♀ (IRSN): Congo belge: P. N. U[pemba], Lusinga (1.760 m.), 7 to 16-IV-1947, Miss. G. F. DE WITTE, Nos 180a, 213a, 223a, 272a; 1 ♂ (IRSN): ibid., R. MUNTE (1.480 m.), 16-V-1947, 406a. – Total 85 ex.

Distribution: „Zaire; South Africa” (RICHARDS 1980: 621), Rwanda, Cameroon (new), Kenya (new), Nigeria (new).

Despite its large body, it is not easily identifiable; differentiating characteristics are summarized in the key.

#### *Poecilomella mirabilis* VANSCHUYTBROECK, 1951

VANSCHUYTBROECK, 1951: Bull. Inst. r. Sci. nat. belge, 27/41: 12 (under „Genre *Poecilomella* DUDA”, p. 12).

*Leptocera* (*Poecilomella*) *mirabiloides* RICHARDS, 1980: Cat. Afrotrop. Dipt.: 621, as „nom. n.” for „*mirabilis* VANSCHUYTBROECK, 1951: 12 (*Poecilomella*)”, a junior secondary homonym of *Limosina mirabilis* COLLIN, 1902, when both were in the genus *Leptocera*. Unnecessary new name.

Holotype female (IRSN): 1/ Congo-belge: Likete, 16-VI-1936, J. Ghesquière; 2/ R. Mus. Hist. Nat. Belg. 10482; 3/ *P. Vanschuytbroeck* det. 1951, „*Poecilomella mirabilis* sp.n.”; 4/ [fleshy] TYPE; 5/ cf. Bull. Inst. Sc. Nat. Belg., „T.XXVII, n° 41, 1951, p. 13”. The holotype is damaged, left tibia and tarsi lost and almost all head and thoracic bristles lost.

Material other than type: ZAIRE: 4 ♂, 2 ♀ (MRAC), 2 ♂, 1 ♀ (IRSN), 2 ♂, 2 ♀ (HNHM): Congo Belge, P. N. G[aramba], Miss. H. DE SAEGER, 26-V-1951 to 28-VII-1952, Nos 79, 1808, 2718, 2814, 3083, 3161, 3214, 3277, 3758, 3842; 1 ♂ (MRAC): Rwankwi, IV-1948, J.V. LEROY; 1 ♀ (MRAC): Tsuapa, Ikengo, 7/XII-1952, P. BASILEWSKY; SUDAN: 1 ♀ (MRAC): Tori/9, 20-III-1952, No. 3202; UGANDA: 2 ♂ (BRC, HNHM): Kayonza Forest, Kigezi Dist., 2135 M, May 1972, E. BABYETAGARA; 2 ♂, 1 ♀ (BRC, 1 ♀ HNHM): Impenetrable Forest, Ruhiza, Kigezi Dist., 1-10. VI.1972, 1220 m, E. BABYETAGARA. – Total 21 ex.

Distribution: Zaire (RICHARDS 1980: 621), Sudan (new), Uganda (new).

The extra crossvein between  $R_2+3$  and costa was regarded as its unique feature; however, I found some smaller specimens without this crossvein. It is closely related to *P. maxima*; the differentiating characters are summarized in the key, there are distinct differences also in the details of genitalia.

#### *Poecilomella multicolor* (RICHARDS, 1968)

RICHARDS, 1968: Ann. Natal Mus., 20: 100 (*Leptocera* [*Poecilomella*]); subsp. *pallidifemur* (RICHARDS, 1968): 1.c.: 104; subsp. *lamellata* (RICHARDS, 1968): 1.c.: 104.

The holotypes and a majority of paratypes are in the NMSA, some paratypes are in the BMNH spirit collection (B.R. PITKIN, pers. comm.).

Material studied: 1 (MRAC): Résidu de forêt, ombrophile, humus -I.R.S.A.C.-MUS. R.A.C.- S. Rhodesia: Melsetter, 1700 m, VII. 1960, N. LELEUP - „*Poecilosomella multicolor* RICH. ? = *pictitarsis* RICH.” det. L. PAPP, 1988; body length 2.00 mm, wing length 1.33 mm, i.e. brachypterous. 1 ♀ (MRAC): I.R.S.A.C.-MUS. CONGO, Ruanda: Forêt Rugege, 2100 m, III-1951, N. LELEUP (identification label as above); body length 2.00 mm, wing 1.71 x 0.74 mm.

One of the above females has dark colour on ventral part of pleurae, middle tibia entirely dark, mesonotum orange anteriorly, middle and hind legs yellow with dark rings. The other female has no darker but only yellow colour on pleurae, in contrast, its fore tibia and first tarsomere are entirely dark.

The necessity to compare the holotypes of *multicolor* and of *pictitarsis* emerged in the last phase of the present study but in any case, this comparison is obligatory in order to decide on their identity (i.e. a possible synonymization of *multicolor*).

#### *Poecilosomella pallidimana* (DUDA, 1925)

DUDA, 1925: Arch. Naturgesch., 90A(1924) (11): 82, 85 (*Leptocera* [*Poecilosomella*]).

Holotype male (HNHM): Abyssinia, KOVÁCS - MARAKO, 1912.III. - „*Poecilosomella pallidimana* ♂” [DUDA's handwriting] Det. Dr. O. Duda.

Material other than type: 1 ♀ (HNHM): Abyssinia, KOVÁCS - TSHERTSHER, 1911.X. - „*P. angulata* Th.” Det. DR. O. DUDA; 9 ♂, 1 ♀ (CAS, 3 ♂ HNHM): South Africa: Cape Province, Storms Rivier, elev. 200 m, IV-20-58 - E.S. ROSS & R.E. LEECH; 1 ♂ (CAS): Paarl, Cape Prov., S. AFRICA, X-16-49, MALKIN; 1 ♂, 2 ♀ (HNHM): South Africa ♂ serd ♂, 1978. V. 12, leg. ENDRÓDY-YOUNGA; 2 ♂ (HNHM): Uganda, 16 mi. NW of Bushenyi, XII-6-57, 1450 m - E. S. ROSS & R. E. LEECH; 1 ♂ (MRAC): région bocagère et zone des cultures - versant S. E. 1600-1700 m, COLL. MUS. CONGO, Tanganyika Terr.: Kilimanjaro, Marangu, 13/20-VII-1957, Mission Zoolog. I.R.S.A.C. en Afrique orientale (P. BASILEWSKY & N. LELEUP); 1 ♂ (MRAC): Congo Belge, P. N. G[aramba], Miss. H. DE SAEGER, II/c/17, 29-XI-1951, Réc. H. DE SAEGER, 2818; 2 ♂ (MRAC, HNHM): Coll. Mus. Congo, N. Lac Kivu: Rwankwi, 15-II-1952, J.V. LEROY - Total 22 ex.

Distribution: „Ethiopia; Madagascar, Rhodesia, South Africa, Zaire” (RICHARDS, 1980: 621); Uganda (new), Tanzania (new).

#### *Poecilosomella perinetica* (HACKMAN, 1967)

HACKMAN, 1967: Notul. ent., 47: 33 (*Leptocera* [*Poecilosomella*]).

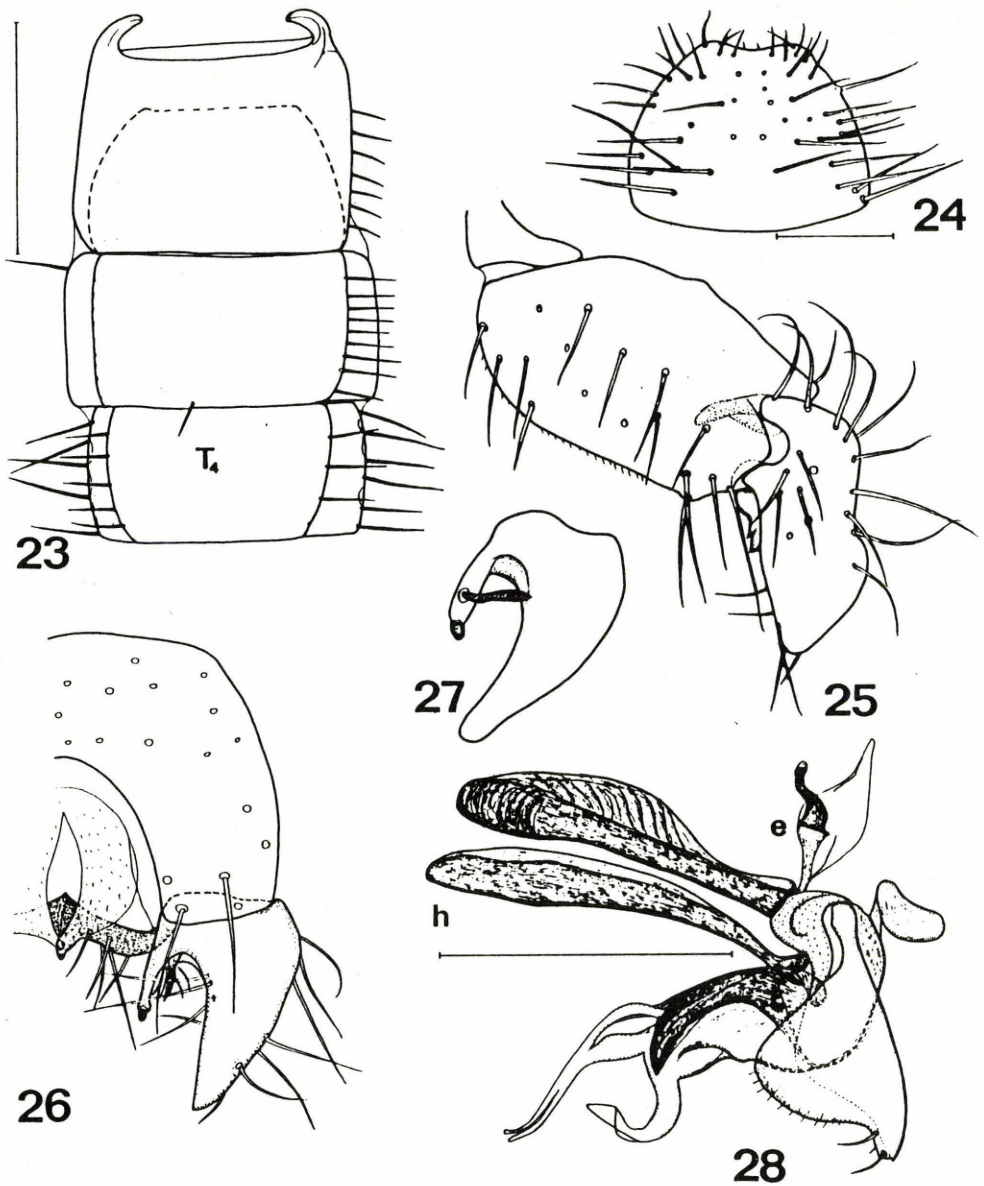
Described from Madagascar, the holotype male and paratypes (1 ♂, 1 ♀) are deposited in the collection of Nat. Hist. Mus. Basel (not studied).

#### *Poecilosomella pictitarsis* (RICHARDS, 1938) (Figs 23-28)

RICHARDS, 1938: Mém. Mus. Hist. nat. Paris, N.S., 8: 388 (*Leptocera* [*Poecilosomella*]) - Original type-data: p. 389: „Type ♀ Kenya, Marakwet, Campi Cherangani, 3.000 m., March. Allotype ♂ Kenya, E. side Mount Elgon, Suam fishing hut, 2.400 m. Paratypes 2 ♀ ♀ with same data as type.”

Paratype female (BMNH): 1/ [6 mm ♂ round, yellow bordered] Paratype; 2/ [12x5.5 mm, dirty white, printed] Pres. by O.W. Richards. B. M. 1935 - 160.; 3/ [8.5x3 mm dirty white, printed] MARS; 4/ [12x5.5 mm light greenish blue] MUSEUM de PARIS, Mission de l'Omo. C. ARAMBOUGH, P.A. CHAPPUIS & R. JEANNEL, 1932-33; 5/ [11.5x6 mm, dirty yellowish white, printed] KENYA, Campi Cherangani, MARAKWET, 3.000 m; 6/ [22x11.5 mm, dirty white with RICHARDS' handwriting] „*Leptocera pictitarsis* ♀ Paratype”. Abdomen downcurved, body length not precisely measurable, ca. 2.13 mm, wing 2.08 x 0.85 mm; minutia pinned into a kerria bricklet; left wing missing, probably used for taking photo (cf. RICHARDS 1938: Fig. 8).

*Limosina* (*Poecilosomella*) *niveipes* VANSCHUYTBROECK, 1950: Bull. Inst. Sci. nat. Belg., 26/25: 17, a junior synonym of *P. pictitarsis* (RICHARDS, 1938).



Figs 23-28. *Poecilosomella pictitarsis* (RICHARDS), ♂: 23 = preabdomen dorsally, 24 = 5th abdominal sternite, 25 = periandrium and gonostylus laterally, 26 = periandrium, subanal plate and gonostylus caudally (most of the periandrial and gonostylar bristles omitted), 27 = left gonostylus, inner (lateral) view, 28 = aedeagal complex laterally. Scales: Fig. 23 = 0.5 mm, Fig. 24 = 0.2 mm, Figs 25-28 = 0.2 mm. Abbreviations: h = hypandrium, e = ejaculatory apodeme, T<sub>4</sub> = 4th tergite

Holotype male (IRSN): 1/ Mateba (fle), 3-VI-1949, P. Vanschuytbroeck; 2/ P. Vanschuytbroeck det., 1950, „Poecilomella niveipes ♂ nsp.”; 3/ [fleshy] TYPE; 4/ cf. Bull. Inst. Sci. Nat. Belge, „T. XXVI, n° 23, 1950, p. 17”; 5/ R.I.Sc.Nat. Belg., I.G. 17315; nicely preserved.

Paratypes 2 ♀ (IRSN, HNHM): 1/ Boma – Km. 31 vers Tshela, 3-VI-1948, P. Vanschuytbroeck; 2/ P. Vanschuytbroeck”; 3/ [red] Paratype; 4/ cf. Bull. Inst. Sc. Nat. Belg., T. XXVI, n° 25, 1950, p. 17; 2♂ (IRSN, HNHM): 1/ Tshikay, 21-V-1948, P. Vanschuytbroeck; labels 2-4 as above; 1 ♀ (IRSN): 1/ Lukula, 19-24-VII-1948, P. Vanschuytbroeck; labels 2-4 as above; one of the Tshikay males without right wing and right middle leg, Lukula female with right wing damaged.

Distribution: „Kenya; South Africa” (RICHARDS 1980: 621), Zaire (published for *niveipes*).

This is a very characteristic species; body characteristics are summarized in the key but there are unique features also in male genitalia. The abdominal sterna 3 and 4 wider than terga 3 and 4 (Fig. 23) marginal and particularly lateromarginal bristles straight, long and rather thick. The male *S5* bears extremely long bristles (Fig 24), gonostylus (Figs 25, 26) is very large, bilobed with large lateral lobe, medial lobe is digitiform with a blunt tooth apically; gonostyli are not entirely symmetrical (Fig 27, vs. Fig. 26); aedeagal complex with a small ejaculatory apodeme (Fig. 28), aedeagal apodeme and hypandrium are rather short, distiphallus with a forked, soft dorsal process and an upcurving ventral process; postgonite short and much characteristic (Fig. 28, cf. Figs 20, 4, 7, 15).

#### KEY TO THE AFROTROPICAL POECILOSOMELLA SPECIES

- 1 (6) Costal vein produced beyond conjointment with *R4+5* on a section longer than four times *R4+5* width. Fore first tarsomere never white, tarsomeres 1-3 yellow, 4-5 dark brown (*longecostata*-group)
- 2 (3) Second costal section longer to much longer than third (ratio: 1.06 to 1.42). Terminal curvature of *R2+3* usually with a vein appendage. 5 *ifr*  
*capensis* sp. n.
- 3 (2) Second costal section shorter or only slightly longer than third (ratio: 0.845 to 1.025). Terminal curvature of *R2+3* without a vein appendage
- 4 (5) Five interfrontal pairs. Second costal section equal with third or slightly longer. Intracrossvein section of *M* slightly shorter or equal with hind crossvein. Smaller, 1.85-2.33 mm  
*longecostata* (DUDA)
- 5 (4) Three (rarely 4) pairs of interfrontals. Second costal section shorter than third. Intracrossvein section of *M* usually longer than hind crossvein. Bigger, 1.90-2.92 mm  
*arnaudi* sp. n.
- 6 (1) Costal vein terminates at conjointment with *R4+5*, or if extends a little beyond it, this is at most twice the width of *R4+5*. Colour of fore tarsi diverse, first tarsomere white in several species
- 7 (12) Wings with marbly dark and light colours (*giraffa*-group)
- 8 (9) Fore tarsomeres not white. Bigger, 2.3-2.6 mm  
*giraffa* (RICHARDS)
- 9 (8) Fore tarsomeres 2-5 white, basitarsus (1st tarsomere) dark (*P. pallidimana* may run here but its fore basitarsus is at least partly white)

- 10 (11) Dimorphic species, incl. brachypterous forms (? subspecies). Head and pleurae orange or mostly so. Smaller, 1.3-1.9 (2.0) mm  
**multicolor** (RICHARDS)
- 11 (10) Fully winged species. Head and pleurae darker, or, at least with some distinct dark markings. Bigger, 2.0-2.2 mm  
**pictitarsis** (RICHARDS)
- 12 (7) Alar plane unicolourous, or diffuse brown spots present over the base of  $R2+3$  and  $R4+5$  and apices of the radial veins
- 13 (14) Mesonotum brilliantly shining, frons, face, cheeks and gena light and shining yellow. Only 1 *ors*. Second costal section shorter than third. Fore tarsi yellow (*lusingana*-group)  
**lusingana** (VANSCHUYTBROECK)
- 14 (13) Mesonotum dusted, largely dark with silvery pattern. Frons mostly dusted
- 15 (20) Hind tibia black or dark brown (*pallidimana*-group)
- 16 (17) Fore basitarsus and tarsomeres 2-3 whitish yellow, 4th tarsomere slightly fuscous at apex, 5th tarsomere black dorsally and fuscous ventrally. Wings infuscated with paler areas, like in *pallidimana* (Madagascar, not seen)  
**perinetica** (HACKMAN)
- 17 (16) Fore basitarsus dark, at least at base, fore tarsi otherwise white.
- 18 (19) Wings clear, hyaline  
**hyalipennis** (HACKMAN)
- 19 (18) Wings infuscated with paler areas  
**pallidimana** (DUDA)
- 20 (15) Hind tibia bicolourous, i.e. dark with pale rings (*angulata*-group)
- 21 (22) Fore first tarsomere mostly dark brown. Female cerci yellow.  $R4+5$  and costal vein delineate an area similar to a blade of a knife, apex of  $R2+3$  without vein appendage. Smaller, 2.2-3.9 mm  
**angulata** (THOMPSON)
- 22 (21) All fore first tarsomere light. Female cerci usually darker.  $R4+5$  more strongly sinuate, apex of  $R2+3$  with or without a vein appendage. Bigger species, 2.7-5.0 mm.
- 23 (24) Only 1 reclinate and slightly inclinate *ors*. Male mid tibia and mid first tarsomere with very long pale hairs, tibia without strong perpendicular bristles, ventroapical comparatively thin, parallel with tarsomere. Male fore tarsus with hairs shorter than the diameter of tarsomeres. Wing with or (in smaller specimens) without an extra crossvein between costa and  $R2+3$ , latter angulately bent into costa and with a vein appendage (rarely missing).  $R4+5$  strongly sinuously bent. No long anterior bristles on male mid tibia or only one such bristle. Female frons shining yellow in its medial half (in a wide stripe to lunule)  
**mirabilis** VANSCHUYTBROECK
- 24 (23) Two *ors*: anterior pair exclinate and slightly proclinate, posterior pair reclinate. Male mid tibia with perpendicular stiff bristles ventrally but hairs not much longer than tibial diameter, ventroapical thicker. Fore tarsus with long hairs on posterior surface (much longer than the diameter of tarsomeres). Wing always without an extra crossvein between costa and  $R2+3$ , latter more or less parallel with costa and perpendicularly bent into costal

vein, with or without a vein appendage in its angle.  $R4+5$  less sinously bent. Male mid tibia anteriorly with 2 long bristles at about middle (only 1 in female). Female frons dull in its medial half, with a small shiny spot in front of the fore ocellus

**maxima** (VANSCHUYTBROECK)

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