# A revision of the genus *Paratoxopoda* DUDA (Diptera, Sepsidae)

by A.L. OZEROV

#### **Abstract**

The species of the genus Paratoxopoda are revised. A key to species, diagnostic characters for the genus and species, and illustrations are given. Ten new species are described: P. angolica sp.n., P. barbata sp.n., P. dudai sp.n., P. frontalis sp.n., P. glabra sp.n., P. magna sp.n., P. rufithorax sp.n., P. similis sp.n., P. tenebrica sp.n., P. zuskai sp.n. P. akuminambili VANSCHUYTBROECK, P. akuminamoya VANSCHUYTBROECK, P. amonane VANSCHUYTBROECK, P. asaba VANSCHUYTBROECK, P. asita VANSCHUYTBROECK, P. kilinderensis Vanschuytbroeck, P. saegeri Vanschuyt-BROECK, P. straeleni VANSCHUYTBROECK are redescribed. Lectotypes and paralectotypes are designated for P. fasciventris (BEZZI), P. flavitarsis DUDA and P. nigritarsis DUDA. The following new synonyms are established: amonane Vanschuytbroeck, 1961 = kilinderensis Vanschuytbroeck, 1961; asaba Vanschuytbroeck, 1961 = pelengensis VANSCHUYTBROECK, 1963; depilis (WALKER, 1849) = fasciventris (BEZZI, 1920), akumi VANSCHUYTBROECK, 1961, bombiensis Vanschuytbroeck, 1963, saskai Soós, 1964; flavitarsis DUDA, 1926 = akuminatanu VANSCHUYTBROECK, 1961; intermedia DUDA, 1926 = babalwakitakaensis VANSCHUYTBROECK, 1963; tricolor (WALKER, 1849) = nigritarsis Duda, 1926, varicoxa Curran, 1929, ambili (VANSCHUYTBROECK, 1961), akuminainne VANSCHUYTBROECK, 1961; villicoxa DUDA, 1926 = ruwenzoriensis VANSCHUYT-BROECK, 1963.

Key-words: Diptera; Sepsidae; Paratoxopoda; Revision.

The genus *Paratoxopoda* was described by O. DUDA in 1926 and together with the genus *Toxopoda* MACQUART was included in the subfamily Toxopodinae (DUDA, 1926a). Two other genera were subsequently described into this subfamily: *Platytoxopoda* CURRAN (1929) and *Afrotoxopoda* VANSCHUYTBROECK (1961).

The genus *Platytoxopoda* was not well founded and its species of have been transferred to the genus *Toxopoda* (OZEROV, 1991). The name *Afrotoxopoda* is now correctly considered to be a synonym of *Paratoxopoda* (ZUSKA, 1980).

Species of the genus *Paratoxopoda* are restricted to the African continent, and this may be one reason why they have been so poorly studied.

The first two species now recognized as belonging to the genus *Paratoxopoda* were described by WALKER (1849). It was not until 1920 that a third species was described by BEZZI. In all there are 27 described species (ZUSKA, 1980)\*. There include two species originally described as species of *Sepsis* FALLÉN (WALKER, 1849) three species as *Toxopoda* (BEZZI, 1920; VANSCHUYTBROECK, 1961, 1963a) one species as *Afrotoxopoda* (VANSCHUYTBROECK, 1961, and the rest as *Paratoxopoda* (DUDA, 1926a, 1926b; VANSCHUYTBROECK, 1961, 1963a, 1963b; SOÓS, 1964).

No information is available on the biology and ecology of any *Paratoxopoda* species.

The following abbreviations are used for the museums and collections where material is located:

AMNH – American Museum of Natural History, New York

BMNH – British Museum (Natural History), London
 IRSNB – Institut Royal des Sciences Naturelles de Belgique, Bruxelles

 MCSN – Museo Civico di Storia Naturale, Milano
 MNHU – Museum für Naturkunde an der Humboldt-Universität, Berlin

MRAC – Musée Royal de l'Afrique Centrale, Tervuren

NHMZ - National History Museum, Bulawayo

TAU - Tel-Aviv University, Tel-AvivUSNM - United States National Museum,Washington

ZMUM – Zoological Museum, Moscow State University, Moscow

Commonly used geographic names are abbreviated as follows:

P.N.A. - Albert National Park P.N.G. - Garamba National Park P.N.U. - Upemba National Park

Terminology follows MCALPINE (1981).

<sup>(\*)</sup> Nemopoda nuceria SÉGUY, 1933, remains in the genus Toxopoda (OZEROV, 1991).

### Genus Paratoxopoda Duda, 1926

Paratoxopoda DUDA, 1926a: 29 (type-species: Sepsis depilis WALKER, 1849: 1001).

Afrotoxopoda VANSCHUYTBROECK, 1961: 27 (typespecies: Afrotoxopoda ambili VANSCHUYTBROECK, 1961: 28).

# Description:

Medium-sized species, usually with a dark coloured body. Head somewhat flattened dorsoventrally. Frons smooth, with a shallow longitudinal furrow, shining, weakly narrowed below. The length of the frons equal to or rather greater than its width. Face matt, delicately shagreened, weakly protruding in central part. Lower edge of face protruding forwards beyond the eyes, but no further than profrons. Gena with row of genal setae. 2 or 3 vibrissae. Occiput delicately shagreened. Flagellomere 1 slightly flattened laterally, narrowed to the apex, 2-3 times as long as wide. Arista bare. Chaetotaxy of head: 1 or, 1 oc, 1poc, 1 i vt. Thorax delicately shagreened. Proepisternum with hairs in lower part. Proepimeron above fore coxa bare or with 2-3 very short hairs. Posterior part of anepisternum with light bristly hairs. Notopleuron bare or with bristly hairs as on an episternum. Upper part of katepisternum below anepimeron with short hairs. Posteroventral area of thorax (behind and above hind coxae) sclerotised, forming a post-coxal bridge. Postalar wall with some hairs in upper part. Chaetotaxy of thorax: 1-2 npl, 1 spal, 1 pal, 1-2 dc, 1 anepst, 1 ap sctl. Mid femur curved at middle, with a row of short setae in basal half of anterior surface and with thin bristly-hairs posterodorsally. Mid tibia with 0-4  $\nu$  and posteriorly with a row of setae. Femur of hind leg anteroventrally with several short setae, which can often only be clearly seen in apical third. Hind tibia with 1-4 av and 1 ad near apex. Wing (fig. 69) hyaline or slightly darkened. Basal costal and costal cells mostly dark. Costal vein between R<sub>2+3</sub> and R<sub>4+5</sub> 2.5 times as long as than the distance between  $R_{4+5}$  and M.  $A_1 + CuA_2$  almost reaching wing-margin. Alula without microtrichiae, with hairs on the margin. Margins of upper and lower calypters with long hairs. Abdomen delicately shagreened, without pruinosity, slightly constricted after segment 1+2. Male: middle of tergite 1 + 2 with a row of long pale hairs, forming a circle; tergites 3 and 4 almost equal in length as are tergites 5 and 6; tergite 3 about twice as long as tergite 5; surstyli symmetrical. Female: tergites 3 and 4 almost equal in length; tergite 5 rather shorter than tergite 3; tergite 6 very narrow, often almost wholly covered by tergite 5.

# Key to species of Paratoxopoda

1.	setae	2
	Scutum with two pair of dorsocentral setae	8

2. Male: middle and hind trochanters with long dense hairs which are as long as the hairs on posterodorsal surface of middle femora. Gena with dense hairs besides the row of genal setae (fig. 21). Posterolateral margin of abdominal tergite 5, epandrium and surstylus as in figs. 22-24 ...... 7 P. barbata sp.n. (female unkwown) Male: middle and hind trochanters bare, or with a few hairs which are shorter than the hairs on posterodorsal surface of middle femora. Gena without hairs, with only the row 3. Middle tibia with 1-2 setae on ventral surface. Middle femur without anteroventral and posteroventral setae ...... 4 Middle tibia without ventral setae. Middle femur in basal half with rows of long anteroventral and posteroventral setae. Posterolateral margin of abdominal tergite 5, epandrium and surstylus as in figs. 50-51 ...... 17. P. pilifemorata Soós (female unknown) 4. Middle tibia with one seta on ventral surface .... 5 Middle tibia with two setae on ventral surface. Posterolateral margin of abdominal tergite 5, epandrium and surstylus as in figs. 55-57 ...... 19. P. saegeri VANSCHUYTBROECK 5. Width of gena less than the width of flagellomere 1. Surstylus broadened axe-like at apex (fig. 46). Posterolateral margin of abdominal tergite 5 as in fig. 44 ...... 15. P. kilinderensis (VANSCHUYTBROECK) Width of gena slightly more or equal to the width of flagellomere 1. Surstylus bifid at tip (figs. 13, 14, 59-61, 69, 80) ...... 6 6. Epandrium and surstylus as in figs. 13, 14. Length of lower fork of surstylus approximately equal to width of base of surstylus (abbreviations as in fig. 61). Posterolateral margin of abdominal tergite 5 as in fig. 12 ..... 4. P. angolica sp.n.

Length of lower fork of surstylus 1.5-2.0 times as long as width of base of surstylus (figs. 60,

7. Epandrium and surstylus as in figs. 79, 80.  Width of lower fork of surstylus less than quarter of its length. Posterolateral margin of abdominal tergite 5 as in fig. 78	12. Hind tibia with 2-3 anteroventral setae. Frons noticeably projecting forwards beyond eyes. Postocellar setae situated on a line joining posterior margin of eyes (fig. 36). Orbital seta very weak, sometimes indistinguishable. Wing slightly darkened. Male: posterolateral margin of abdominal tergite 5, epandrium and surstylus as in figs. 37-39  12. P. frontalis sp.n.  Hind tibia with one anteroventral seta at mid-
8. Mesonotum brick-red, with a broad black longitudinal stripe along middle. Mesopleuron wholly brick-red. Apex of wing milky. Male: first and second tarsomeres of fore leg with a row of long hairs on dorsal surface; epandrium and surstylus as in figs. 53, 54	dle. Frons not projecting forwards beyond eyes. Postocellar setae shifted noticeably forwards and not situated on a line joining posterior margin of eyes (fig. 68). Orbital seta short, but strong. Wing hyaline. Male: posterolateral margin of abdominal tergite 5, epandrium and surstylus as in figs. 18-20
Mesonotum and mesopleuron black. Apex of wing not milky. Male: first and second tarsomeres of fore leg without long hairs on dorsal surface	13. Middle tibia with 0-1 ventral seta
9. Notopleuron with only the posterior seta, but if the anterior seta is present then it is very short, fine and hair-like. Male: posterolateral margin of abdominal tergite 5 without setae and hairs. Epandrium and surstylus as in figs. 40, 41	14. All femora near base of ventral surface with a long straight hair or with a short straight seta (figs. 1,8)
Notopleuron always with two setae; the anterior one may be shorter, but not weaker, than the posterior one	hair (fig. 1). Among the circle of setae at tip of middle tibia there are very strong posteroventral and anteroventral setae. Ventral surface of hind trochanter only with short erect hairs. Male: posterolateral margin of abdominal tergite 5, epandrium and surstylus
10. Fore coxa with 2-3 short anterodorsal setae near apex (figs. 73, 74). Male: fore coxa with long, dense, curly hairs (fig. 74); posterolateral margin of abdominal tergite 5, epandrium and surstylus as in figs. 75-77. Female: hairs on fore coxa straight, shorter than in male (fig. 73)	as in figs. 2-4
11. Fore coxa with a strong anteroventral preapical seta	16. Hind tibia with three anteroventral setae. Notopleuron bare or with several hairs which are obviously shorter than the hairs on anepisternum. Male: posterolateral margin of abdominal tergite 5, epandrium and surstylus as in figs. 65-67 22. P. tenebrica sp.n.

Hind tibia with one anteroventral seta dle. Notopleuron as a rule with lor hairs similar to those on anepisternun posterolateral margin of abdominal tepandrium and surstylus as in figs. 2	ng dense n. Male: ergite 5, 27-29	. Upper part of surstylus curved dorsally almost at a right-angle (fig. 64). Anterior notopleural seta half as long as posterior one. Abdomen with a strong violet tinge. Posterolateral margin of abdominal tergite 5 as in fig. 62
17. Male: fore tarsus yellow; tip of for expanded club-like, on posterior side groups of strongly flattened setae (the epandrium and surstylus as in figs. Female: first tarsomere and basal second tarsomere of fore leg dark	with two fig. 33); 34, 35. half of	Upper part of surstylus straight, not bent dorsally (figs. 6, 32, 43, 72). As a rule, anterior notopleural seta only slightly shorter than posterior one
apical half of second tarsomere, third and fifth tarsomeres white	l, fourth 22	. Surstylus very thin and long (figs. 31, 32, 71, 72)
Tarsomeres of fore leg in both sexe Male fore tibia without flattened set		Surstylus more stout and short (figs. 6, 7, 42, 43)
18. Male: surstylus on inner surface with broad projection near base (figs. 16, Posterolateral margin of abdominal with 3-4 short and stout setae (fig. 1	a a short , 17). tergite 5 15) CHUYTBROECK ithout a , 31, 42,	Surstylus, distally of the sharp tubercle, with the inner surface straight; tip of surstylus rather narrowed (figs. 31, 32). Posterolateral margin of abdominal tergite 5 as in fig. 30
48, 63, 71). Setae on posterolateral mabdominal tergite 5 as a rule longer a ner (figs. 5, 30, 47, 62, 70)	nd thin-	margin of abdominal tergite 5 as in fig. 70
19. Surstylus short and strongly con laterally in apical part (figs. 26, 49)	npressed	. Tip of surstylus laterally flattened, with spines along edge (figs. 6, 7). Fore femora with weakly distinct rows of anteroventral and posterolventral setae 2. P. akuminamoya VANSCHUYTBROECK
Surstylus cylindrical and more slender (43, 64, 72)		Tip of surstylus not flattened, with a small tubercle on the inside (figs. 42, 43). Fore femora with distinct rows of short anteroven-
20. Surstylus on inner surface with small projection at middle (fig. 25). Upper surstylus oval in lateral view (fig. 26)	part of	tral and posteroventral setae
8. <i>P. crassij</i> (fem	forceps DUDA ale unknown)	4 <sup>6</sup>
Surstylus on inner surface without a pre (fig. 48). Upper part of surstylus relateral view (fig. 49) 16. P. (fem.	ound in	

# 1. *Paratoxopoda akuminambili* VANSCHUYTBROECK, 1961 Figs. 1-4

Paratoxopoda akuminambili VANSCHUYTBROECK, 1961: 62

### Diagnosis:

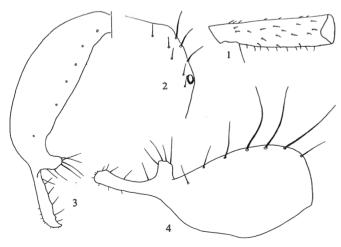
Two dorsocentral setae. Base of all femora ventrally with one long straight hair (fig. 1). Middle tibia with 0-1 ventral setae in apical quarter. Among the circle of setae at tip of middle tibia there are very strong posteroventral and anteroventral setae. Hind tibia with one anteroventral seta at middle. Posterolateral margin of abdominal tergite 5 of male with several short setae and fine hairs (fig. 2). Surstylus thin and stick-like, with a short dorsal projection near base inside (figs. 3,4).

# Redescription:

Frons, face and gena dark brown. Length of frons approximately equal to its width. Width of gena approximately equal to width of flagellomere 1. Occiput black, shining. Antenna dark brown. Flagellomere 1 2.5 times as long as wide.

Mesonotum and lateral pleural sclerites black, shining, with a violet tinge. Proepimeron above fore coxa with 2-3 short hairs. Notopleuron with sparse short hairs, which are shorter than those on an episternum. Scutellum velvety-black. Chaetotaxy of thorax: 2 npl, 1 spal, 1 pal, 2 dc, 1 anepst, 1 ap sctl.

Legs black. Fore coxa with strong anterodorsal and anteroventral setae near apex. All femora of male with a long straight hair on ventral surface near base. Female also with a similar but shorter hair. Posterior surface of middle trochanter bare. Middle tibia with one ventral seta in apical quarter, absent in several specimens. With very strong posteroventral and anteroventral setae in the cir-



Figs 1-4 - P. akuminambili: 1 - basal half of male fore femur; 2 - lateral margin of abdominal tergite 5 of male; 3 - epandrium and surstylus, posterior view; 4 - epandrium and surstylus, lateral view.

cle of setae at tip of middle tibia. Ventral surface of hind trochanter with short erect hairs. Hind tibia with one anteroventral seta at middle.

Wing hyaline, with pale brown veins. Upper and lower calypters and their margins blackish. Haltere yellowish. Abdomen black, shining, with a violet tinge. Male: posterolateral margin of tergite 5 with several short setae and fine hairs (fig. 2). Surstylus thin, stick-like, near base of inner surface with a short dorsal projection (figs. 3, 4). Length of body: 3.7-5.5 mm. Length of wing: 3.0-4.1 mm.

#### Distribution:

Zaire.

#### Specimens examined:

TYPE: holotype of *P. akuminambili* male, "Congo Belge, P.N.G., Miss. H. DE SAEGER, II/fd/17, 5.IX.1951, Réc. H. DE SAEGER, 2379" (MRAC). OTHER SPECIMENS: *Zaire*: 21 males, 3 females P.N.G., II/fd/17, 5.IX.1951, H. DE SAEGER, 2379 (IRSNB), 4 males, P.N.G., I/o/2, 6.XI.1950, H. DE SAEGER, 936 (MRAC); male, P.N.G. Mabanga, 23.IX.1952, H. DE SAEGER, 4069 (MRAC); male, P.N.G., Mpaza/9, 23.1.1952, H. DE SAEGER, 3076 (MRAC); 3 males, P.N.G., I/c/I, 24.11.1950, G. DEMOULIN, 217 (MRAC); male, P.N.U.; Gorges de la Pelenge, 1500m, 19.VI.1947, G.F. WITTE, 516a (IRSNB); male, Rutshuru, 26.IV.1936, L. LIPPENS, 103 (MRAC).

#### Note:

Males of *P. akuminambili* can also be recognized by the genitalia figures given by VANSCHUYTBROECK (1961, figs. 36-37).

# 2. Paratoxopoda akuminamoya VANSCHUYTBROECK, 1961 Figs. 5-7

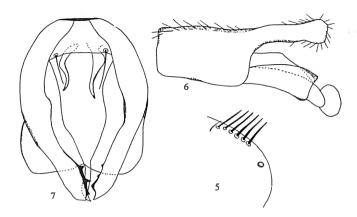
Paratoxopoda akuminomoya (sic!) VANSCHUYTBROECK, 1961: 60

### Diagnosis:

Two dorsocentral setae. Middle tibia with 2-3 ventral setae. Hind tibia with 2-3 anteroventral setae. Posterolateral margin of abdominal tergite 5 of male with a row of 6-7 setae, approximately equal in size (fig. 5). Surstylus stick-like, flattened laterally of tip, with spines on margin (figs. 6, 7).

# Redescription:

Frons brown, its length almost equal to its width. Face and gena red-brown. Width of gena less than width of flagellomere 1. Occiput black, shining, with a dark blue tinge. Postgena with 1-2 hair-like setae. Antenna dark brown, posterior margin of flagellomere 1 brick-red. Flagellomere 1 2.5 times as long as wide.



Figs 5-7 - P. akuminamoya: 5 - lateral margin of abdominal tergite 5 of male; 6 - epandrium and surstyli, posterior view; 7 - epandrium and surstylus, lateral view.

Mesonotum and lateral pleural sclerites black, slightly shining, with a dark blue tinge. Proepimeron above fore coxa bare. Notopleuron with a few short hairs which are shorter than those on an episternum. Scutellum black with weak greyish pollen. Chaetotaxy of thorax: 2 npl, 1 spal, 1 pal, 2 dc, 1 anepst, 1 ap sctl.

Legs black. Fore coxa at apex with strong anterodorsal and anteroventral setae. Posterior surface of middle trochanter bare. Middle tibia with 2-3 ventral setae. Ventral surface of hind trochanter with short hairs. Hind tibia with 2-3 anteroventral setae.

Wing hyaline, with pale brown veins. Upper and lower calypters and their margins blackish.

Abdomen black, shining, with a dark blue tinge. Posterolateral margin of tergite 5 of male with a row of 6-7 subequal setae (fig. 5). Surstylus stick-like, its tip flattened laterally, with spines on margin (figs. 6, 7). Female unknown.

# Distribution:

Zaire.

#### Specimens examined:

TYPE: holotype of *P. akuminamoya* male, "Congo Belge, P.N.G., Miss. H. DE SAEGER, I/o/2, 6.XI. 1950, Réc. H. DE SAEGER, 936" (MRAC).

ADDITIONAL SPECIMEN: male, "P.N.G., I/o/2, 6.XI.1950, H. DE SAEGER, 936" (IRSNB).

### Note:

The name of this species *P. akuminamoya* is given only once in the original description, where it is spelled as "akuminomoya". This spelling is also given in the Catalogue of the Diptera of the Afrotropical Region (ZUSKA, 1980). However, this spelling is an error. The label of the holotype has "akuminamoya", clearly written in VANSCHUYTBROECK'S hand-writing. This spelling is given in the explanations of the figures and in the list of species (VANSCHUYTBROECK, 1961: figs. 33, 34; p.

78). As first reviser, I here will select the spelling "akuminamoya" for this species.

Examination of the holotype of *P. akuminamoya* showed that the figures of genitalia given by VANSCHUYTBROECK (1961, figs. 33, 34) can be used to identify males of this species. I had hoped to make more accurate figures from one of this paratypes, bud found that only one of the male paratypes belongs to *P. akuminamoya* and the rest of them to other species of *Paratoxopoda*. Unfortunately, the genitalia were badly positioned on the slide and inappropriate for drawing. For this reason, I have re-drawn VANSCHUYTBROECK'S figures.

# 3. Paratoxopoda amonane VANSCHUYTBROECK, 1961 Figs. 8-11.

Paratoxopoda amonane VANSCHUYTBROECK, 1961: 51. Paratoxopoda kilinderensis VANSCHUYTBROECK, 1963: 111-syn. nov.

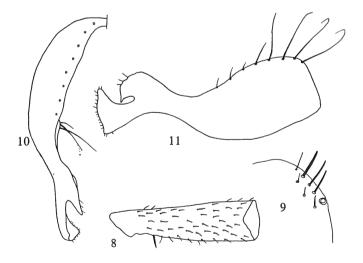
[Junior secondary homonym of *Toxopoda kilinderensis* VANSCHUYTBROECK, 1963: 105, now assigned to *Paratoxopoda*].

# Diagnosis:

Two dorsocentral setae. Base of all femora with one short straight seta ventrally (fig. 8). Middle tibia with one ventral seta. Hind tibia with one anteroventral seta at middle. Posterolateral margin of abdominal tergite 5 of male with several hairs and three strong setae (fig. 9). Surstylus flattened laterally, with a beak-like curved projection at middle. Tip of surstylus widened sickle-like (figs. 10, 11).

#### Redescription:

Frons brown to almost black, its length almost equal to its width. Face light brown to dark brown. Gena brown



Figs 8-11 - P. amonane: 8 - basal half of male fore femur; 9 - lateral margin of abdominal tergite 5 of male; 10 - epandrium and surstylus, posterior view; 11 - epandrium and surstylus, lateral view.

or dark brown. Genal width slightly narrower than or equal to, width of flagellomere 1. Occiput black, shining. Antenna brown or dark brown, base of flagellomere 1 brick-red inside. Flagellomere 1 2.5-3 times as long as wide.

Mesonotum and lateral pleural sclerites black, shining, with a slight violet tinge. Proepimeron above fore coxa with 2-3 short hairs. Notopleuron with pale erect hairs, as dense and as long as those on an episternum. Scutellum velvety-black. Chaetotaxy of thorax: 2 npl, 1 spal, 1 pal, 2 dc, 1 anepst, 1 ap sctl.

Legs dark brown or black. Fore coxa with strong anterodorsal and anteroventral setae near apex. Posterior surface of middle trochanter in male with spinules seta near base (fig. 8). Ventral surface of hind trochanter with short erect hairs and with several short spinules. Hind tibia with one anteroventral seta at middle.

Wing hyaline, with brown veins. Upper and lower calypters white, with white margins. Haltere yellow. Abdomen black, shining, with a weak violet tinge. Male: posterolateral margin of tergite 5 with several hairs and three strong setae (fig. 9). Surstylus flattened laterally with a beak-like curved projection at centre. Tip of surstylus widened sickle-like (figs. 10, 11).

Length of body: 5.3-6.8 mm. Length of wing: 3.8-4.4 mm.

#### Distribution:

Nigeria, Zaire, Uganda, Kenya, Zimbabwe, Republic of South Africa.

# Specimens examined:

TYPE: holotype of *P. kilinderensis* male, "Congo Belge, P.N.A., Massif Ruwenzori, riv. Butahu, 1520 m, affl. Semliki, 19.VI.1957, P. VANSCHUYTBROECK, VS-54a" (MRAC).

OTHER SPECIMENS: Nigeria: male, Samaru, 8-15.IX.1970, P.H. WARD (BMNH); Zaire: female, P.N.A., Massif Ruwenzori, Mont Mutungu, 2600 m, 16.XI.1957, P. VANSCHUYTBROECK, VS-230a (IRSNB); Uganda: male, Bunyoro, Budongo Forest, VII.1952, VAN SOMEREN (BMNH); Kenya: 5 males, 1 female, Namanga, X.1950, VAN SOMEREN (BMNH); 2 males, Garita R., Suk., VII.1949, VAN SOMEREN (BMNH); Zimbabwe: male, Bulawayo, 26.X.1913 (NHMZ); female, Ultali, 1969 (NHMZ); Republic of South Africa: male, Botshabelo, Nr. Middleburg, 4000 ft, H.A. Junod (BMNH); male, 3 females, Natal, Weenen, XI.1929, H.P. Thomasset (BMNH); female, Natal, Willow Grange, 6.III.1914, R.C. Wroughton (BMNH).

# Note:

I have not examined the holotype of *P. amonane*, but have determined the species from the clear illustrations of the genitalia given by VANSCHUYTBROECK (1961, figs. 27, 28).

Paratoxopoda kilinderensis VANSCHUYTBROECK (1963: 111) is a junior secondary homonym of Toxopoda kilinderensis VANSCHUYTBROECK (1963: 105). The lat-

ter species was described in the genus *Toxopoda* but was correctly transferred to *Paratoxopoda* by ZUSKA (1980). Because *Paratoxopoda kilinderensis* is also a junior synonym of *Paratoxopoda amonane* VANSCHUYT-BROECK, it does not require a replacement name.

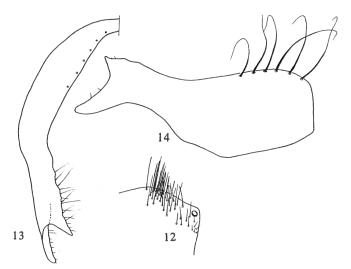
# 4. Paratoxopoda angolica sp. n. Figs. 12-14.

### Diagnosis:

One dorsocentral seta. Middle tibia with one ventral seta in basal third. Hind tibia with one anteroventral seta at middle. Male: posterolateral margin of abdominal tergite 5 with fine hairs (fig. 12). Surstylus with two forks: length of lower fork approximately equal to length of base of surstylus (fig. 14). Female: abdominal tergite 3 with a narrow yellow band.

#### Description:

Frons dark brown, its length approximately equal to its width. Face dark brown. Gena brown. Genal width little more than width of flagellomere 1. Antenna dark brown, often with base of flagellomere 1 brick-red on inside. Flagellomere 1 2.0-2.2 times as long as wide. Mesonotum and lateral pleural sclerites black, shining, with a weak dark-blue tinge. Proepimeron above fore coxa with several pale hairs. Posterior part of notopleuron and anepisternum with pale, erect, subequal hairs. Scutellum black, with grey pollen. Chaetotaxy of thorax: 2 npl, 1 spal, 1 pal, 1 dc, 1 anepst, 1 ap sctl. Legs dark brown, almost black. Fore coxa with few hairs, with strong anterodorsal and anteroventral setae near apex. Fore femora with very short decumbent hairs. Posterior surface of middle trochanter with short erect hairs. Middle tibia with one ventral seta in basal third. Ventral surface of hind trochanter with short erect hairs. Hind tibia with one anteroventral seta at middle.



Figs 12-14 - P. angolica: 12 - lateral margin of abdominal tergite 5 of male; 13 - epandrium and surstylus posterior view; 14 - epandrium and surstylus, lateral view.

Wing hyaline, with brown veins. Upper and lower calypters and their margins white. Haltere yellow. Abdomen black, with a weak dark blue tinge. Tergite 3 of female with a very narrow yellow band on posterior margin. Posterolateral margin of tergite 5 in male with

margin. Posterolateral margin of tergite 5 in male with group of long dense hairs (fig. 12). Surstylus with two forks: length of lower fork approximately equal to basal width of surstylus (fig. 14).

Length of body: 5.9-6.6 mm. Length of wing: 4.0-4.9 mm.

# Distribution:

Angola.

# Type material:

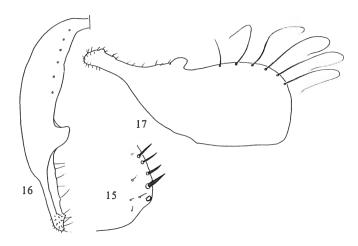
Holotype: male, "Angola, Benguella, F.C. Wellman" (USNM). Paratypes: 6 males, 2 females, same locality, F.C. Wellman, 1908-138 (USNM, BMNH, ZMUM).

# 5. *Paratoxopoda asaba* VANSCHUYTBROECK, 1961 Figs. 15-17.

Paratoxopoda asaba VANSCHUYTBROECK, 1961: 49. Paratoxopoda pelengensis VANSCHUYTBROECK, 1963: 19 - syn. nov.

### Diagnosis:

Two dorsocentral setae. Middle tibia with 3 ventral setae in apical half. Hind tibia with 3 anteroventral setae. Male: posterolateral margin of abdominal tergite 5 with 3-4 short spine-like setae (fig. 15). Surstylus with a short broad projection on inner surface near base (figs. 16-17).



Figs 15-17 - P. asaba: 15 - lateral margin of abdominal tergite 5 of male; 16 - epandrium and surstylus, posterior view; 17 - epandrium and surstylus, lateral view.

# Redescription:

Frons red-brown, its length approximately equal to its width. Face and gena pale brown. Genal width less than width of flagellomere 1. Postgena with two hair-like setae. Occiput black, shining, with a dark blue tinge. Antenna brown, base of flagellomere 1 pale brown or brick-red. Flagellomere 1 2.5 times as long as wide. Mesonotum and lateral pleural sclerites black, shining, with dark blue tinge. Proepimeron above fore coxa with 2-3 short hairs. Notopleuron with hairs which are usually shorter than those on anepisternum. Scutellum black, with greyish pollen. Chaetotaxy of thorax: 2 npl, 1 spal, 1 pal, 2 dc, 1 anepst, 1 ap sctl.

Legs black, more seldom dark brown. Middle and hind trochanters and coxae as a rule paler than other parts of legs. Fore coxa with strong anterodorsal and anteroventral setae near apex. Posterior surface of middle trochanter bare. Ventral surface of hind trochanter with a few pale hairs. Middle tibia with 3 ventral setae in apical part. Hind tibia with 3 anteroventral setae.

Wing hyaline, with light brown veins. Upper calypter white or blackish, with white or darkened margin. Lower calypter and margin dark. Haltere yellow or dark brown. Abdomen black, shining, with a strong violet tinge. Syntergite 1 + 2 and in female base of tergite 3 often partly or completely red-brown. Male: posterolateral margin of tergite 5 with 3-4 short spine-like setae (fig. 15). Surstylus with a short broad projection on inner surface near base (figs. 16, 17).

Length of body: 7.5-8.2 mm. Length of wing: 5.6-7.0 mm.

## Distribution:

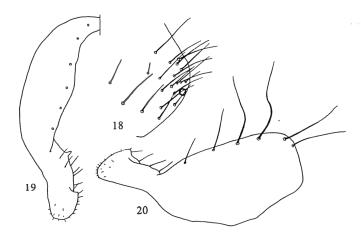
Zaire, Uganda, Kenya.

#### Specimens examined:

TYPE: holotype of P. asaba — male, "Congo Belge, P.N.G., Miss. H. DE SAEGER, I/o/2, 6.XI.1950, Réc. H. DE SAEGER, 936" (MRAC); holotype of P. pelengensis - male, "Congo Belge, P.N.U., Manoï bif. Lupiala, 890 m, 6-15.VI.1948, Miss. G.F. DE WITTE, 1697a" (MRAC). OTHER SPECIMENS: Zaire: male, Massif Ruwenzori, riv. Katanleko affl. Butahu, 1995 m, 23.V.1958, P. VANSCHUYTBROECK, VS-397 (MRAC); 4 males, 1 female, Massif Ruwenzori, Vallee Mont Mulungu, 2600 m, 28.XI.1958, P. VANSCHUYTBROECK, VS-252a (MRAC); female, Massif Ruwenzori, Kyandolire, 1750 m, Camp des Gardes, 3.XII.1957, P. VANSCHUYTBROECK, VS-249 (MRAC); female, P.N.A., Massif Ruwenzori, riv. Butahu, 1520 m, affl. Semliki, 19.VI.1957, P. VANSCHUYTBROECK, VS-54a (MRAC); Uganda: male, Dwoli, 13.XII.1929, H. HARGREAVES (BMNH); male, Ruwenzori Range, Kilembe, 4500 ft, XII.1934-I.1935, F.W. EDWARDS (BMNH); Kenya: female, Bwamba, 7-8.1946, VAN SOMEREN (BMNH).

# Note:

Males of *P. asaba* can be identified using the genitalia figures given by VANSCHUYTBROECK (1961, fig. 25).



Figs 18-20 - P. asita: 18 - lateral margin of abdominal tergite 5 of male; 19 - epandrium and surstylus, posterior view; 20 - epandrium and surstylus, lateral view.

# 6. *Paratoxopoda asita* VANSCHUYTBROECK, 1961 Figs. 18-20.

Paratoxopoda asita VANSCHUYTBROECK, 1961: 47.

#### Diagnosis:

Two dorsocentral setae. Fore coxa near apex with a strong anterodorsal seta and a weak anteroventral seta. Hind tibia with one anteroventral seta at middle. Posterolateral margin of abdominal tergite 5 of male with numerous long setae (fig. 18). Surstylus as in figs. 19, 20.

# Redescription:

Frons dark brown, its length almost equal to its width. Face brown. Gena dark brown, its width less than that of flagellomere 1. Occiput black, shining. Antenna dark brown. Flagellomere 1 2.5 times as long as wide.

Mesonotum and lateral pleural sclerites black, weakly shining, with a dark-blue tinge. Proepimeron above fore coxa bare. Notopleuron with pale erect hairs which are shorter than those on an episternum. Scutellum black, with grey pollen. Chaetotaxy of thorax: 2 npl, 1 spal, 1 pal, 2 dc, 1 anepst, 1 ap sctl.

Legs black. Fore coxa near apex with a strong anterodorsal seta and a weak anteroventral seta. Posterior half of middle trochanter bare; other parts of middle legs of holotype missing. Ventral surface of hind trochanter with long erect hairs which are approximately as long as the hairs on anepisternum. Hind tibia with one anteroventral seta at middle.

Wing hyaline, with brown veins. Upper and lower calypters and their margins strongly darkened. Haltere dark yellow.

Abdomen black, shining, with a dark blue tinge. Posterolateral margin of tergite 5 of male with numerous long setae (fig. 18). Surstylus as in figs. 19,20. Length of body: 4.9 mm. Length of wing: 3.5 mm.

Female unknown.

Distribution:

Zaire.

Specimens examined:

TYPE: holotype of *P. asita* — male, "Congo Belge, P.N.G., Miss. H. De Saeger, I/o/2, 6.XI.1950, Rec. H. De SAEGER, 936" (MRAC).

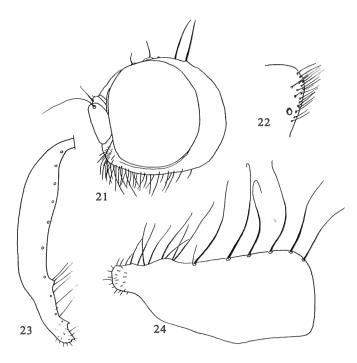
# 7. *Paratoxopoda barbata* sp. n. Figs. 21-24.

## Diagnosis:

Lower part of gena with dense hairs in the row of genal setae (fig. 21). One dorsocentral seta. Middle and hind trochanters with long dense hairs which are as long as the hairs on posterodorsal surface of middle femora. Middle tibia with one ventral seta in basal third. Hind tibia with one anteroventral seta at middle. Male: posterolateral margin of abdominal tergite 5 with small group of short hairs (fig. 22). Surstylus short, blunt (figs. 23, 24).

# Description:

Frons dark brown, its length approximately equal to its width. Face dark brown. Gena brown, weakly shining, with dense hairs in the row of genal setae (fig. 21). Vibrissae not distinct from the genal setae. Width of gena approximately equal to width of flagellomere 1. Occiput black, shining. Antenna brown. Flagellomere 1 hardly twice as long as wide.



Figs 21-24 - P. barbata: 21 - male head, lateral view; 22 - lateral margin of abdominal tergite 5 of male; 23 - epandrium and surstylus, posterior view; 24 - epandrium and surstylus, lateral view.

Mesonotum and lateral pleural sclerites black, shining, with a dark blue tinge. Proepimeron above fore coxa with 2-3 very short hairs. Posterior half of an episternum with pale erect hairs. Notopleuron with several hairs. Scutellum black, with grey pollen. Chaetotaxy of thorax: 2 npl, 1 spal, 1 pal, 1 dc, 1 anepst, 1 ap sctl.

Legs brown to black. Fore coxa with strong anterodorsal and anteroventral setae near apex. Fore femora with very short decumbent hairs. Middle and hind trochanters with long dense hairs which are as long as the hairs on posterodorsal surface of middle femora. Middle tibia with one anteroventral seta in basal third. Hind tibia with one anteroventral seta at middle.

Wing hyaline, with brown veins. Upper calypter white with white margin or, like the lower calypter, darkened with a dark brown margin. Haltere dirty yellow.

Abdomen black, weakly shining, with a dark blue tinge. Male: posterolateral margin of tergite 5 with a small group of short hairs (fig. 22). Epandrium and surstylus as in figs. 23, 24.

Length of body: 5.0-5.3 mm. Length of wing: 3.7-4.0 mm.

### Distribution:

Zaire.

# Type material:

Holotype: male, "Congo Belge, P.N.U., Gorges de la Pelenge, 1500 m, 21-31.V.1947, G.F. DE WITTE, 428a" (MRAC). Paratypes: 74 males, 1 female, same locality, 21.V.-21.VI.1947, G.F. DE WITTE, 428a, 443a, 468a, 516a (IRSINB, MRAC, ZMUM); 2 males, P.N.U., Munoï bif. Lupiala, 890 m, 15-24.VI.1948, G.F. DE WITTE, 1719a (IRSNB); 3 males, P.N.A., Massif Ruwenzori, Mont Mulungu, 2600 m, 27.XI.1957, P. VANSCHUYTBROECK, VS-240, 230a, 156 (IRSNB, MRAC, ZMUM).

# 8. Paratoxopoda crassiforceps DUDA, 1926 Figs. 25, 26.

Paratoxopoda crassiforceps DUDA, 1926: 32.

### Diagnosis:

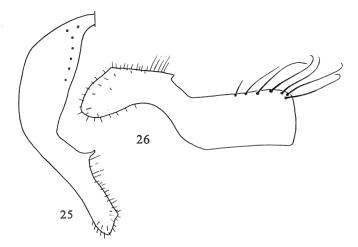
Two dorsocentral setae. Middle tibia with 4 ventral setae. Hind tibia with 3-4 anteroventral setae. Male: posterolateral margin of abdominal tergite 5 with long strong setae. Surstylus strongly flattened laterally in basal half, with a small projection at middle of inner side; upper part oval in lateral view (figs. 25, 26).

## Distribution:

Cameroun.

### Specimens examined:

TYPE: holotype of *P. crassiforceps* — male, "S. Kamerun, Lolodorf, 18.2.1895, L. CONRADT" (MNHU).



Figs 25-26 - P. crassiforceps: 25 - epandrium and surstylus, posterior view; 26 - epandrium and surstylus, lateral view.

#### Note:

This species is known only from this single specimen (the holotype).

# 9. *Paratoxopoda depilis* (WALKER, 1849) Figs. 27-29.

Sepsis depilis Walker, 1849: 1001.
Toxopoda fasciventris Bezzi, 1920: 57 - syn. nov.

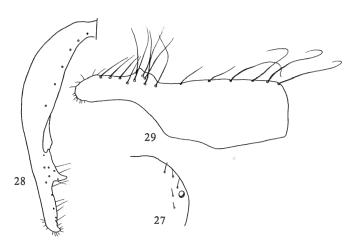
Paratoxopoda akumi VANSCHUYTBROECK, 1961: 53 - syn. nov.

Paratoxopoda bombiensis VANSCHUYTBROECK, 1963: 112 - syn. nov.

Paratoxopoda saskai Soós, 1964: 454 - syn. nov.

# Diagnosis:

Two dorsocentral setae. Notopleuron with long dense hairs as on an episternum. Middle tibia with one ventral



Figs 27-29 - P. depilis: 27 - lateral margin of abdominal tergite 5 of male; 28 - epandrium and surstylus, posterior view; 29 - epandrium and surstylus, lateral view.

seta. Hind tibia with one anteroventral seta at middle. Male: posterolateral margin of abdominal tergite 5 with several fine hairs (fig. 27). Surstylus short, flattened laterally, with a small pointed projection on inner surface near base (figs. 28, 29). Female: posterior margin of abdominal tergite 3 and often anterior margin of tergite 4, orange-yellow.

# Distribution:

Ethiopia, Sierra Leone, Zaire, Uganda, Kenya, Zimbabwe, Republic of South Africa.

# Specimens examined:

TYPE: holotype of S. depilis — female, "Sierra Leone, Morgan, 42, 31" (BMNH); lectotype of T. fasciventris (present designation) — male, "Pretoria, 24.5.15, H.K. MUNRO" (MCSN); holotype of P. akumi — male, "Congo Belge, P.N.G., Miss. H. DE SAEGER, Pp K/60/d/8, 18.II.1951, Réc. H. DE SAEGER, 2924" (MRAC); holotype of P. bombiensis — male, "Congo Belge, P.N.A., Massif Ruwenzori, riv. Bombi, 1700 m, af. Butahu, ex. P.N.A., 23.VI.1958, P. VANSCHUYT-BROECK, VS-362" (MRAC). OTHER SPECIMENS: Ethiopia: female, Harrar Prov., 2.X.1920 (AMNH); Zaire: male, P.N.U., Gorges de la Pelenge, 1500 m, 19.V.1947, G.F. DE WITTE, 524a (IRSNB); Uganda: 5 males, 1 female, Impenetrable Forest, SW Uganda, 27.I.1972, A. FREIDBERG (TAU); Kenya: 2 males, 4 females, Namanga, X.1956, VAN SOMEREN (BMNH); 2 males, 6 females, Ngong, 1956, VAN SOMEREN (BMNH); male, female, Sebit Morum River, 26.XI.1986, A. FREIDBERG (TAU); 2 males, 3 females, Garita R., Suk. 749, VAN SOMEREN (BMNH); Zimbabwe: 2 males, Bulawayo, Mishabezi Valley, Matoros, 28.II.1965 (NHMZ); 3 males, 1 female, P.A. BUXTON (BMNH); 2 females, Gwelo, 14.VI.1972, T.W. STENHOUSE (NHMZ); male, 1.VI.1944, R.H.R. STEVENSON (NHMZ); male, Umtali, 1969 (NHMZ); male, female, Victoria, XI.1932, A. CUTHBERTSON (AMNH); male, female, Balla-Balla, III.1931, A. CUTHBERTSON (AMNH); Republic of South Africa: male, Natal, Kloof, 1500 ft, IX.1926, R.E. TURNER (BMNH).

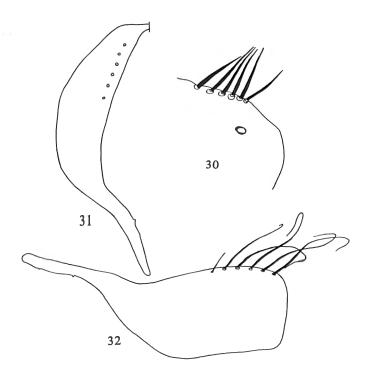
#### Note:

The holotype of *P. saskai* was not examined. However, Soos' description of this species was very detailed and it was not difficult to identify it as *P. depilis*. A complete description of *P. depilis* was given by BEZZI (1920) under the name of *P. fasciventris*.

# 10. *Paratoxopoda dudai* sp. n. Figs. 30-32.

# Diagnosis:

Two dorsocentral setae. Middle tibia with 3-4 ventral setae in apical third. Hind tibia with 3-4 anteroventral setae. Male: posterolateral margin of abdominal tergite 5 with a row of 5-6 strong setae (fig. 30). Surstylus stick-



Figs 30-32 - P. dudai: 30 - lateral margin of abdominal tergite 5 of male; 31 - epandrium and surstylus, posterior view; 32 - epandrium and surstylus, lateral view.

like, slightly curved, pointed at apex, running straight to tip beyond the small projection near base of inner surface (figs. 31, 32).

## Description:

Frons red-brown, its length equal to its width. Face and gena red-brown. Genal width less than width of flagellomere 1. Occiput black, shining. Antenna red-brown, anterior margin of flagellomere 1 darkened. Flagellomere 1 2.5 times as long as wide.

Mesonotum and lateral pleural sclerites black, weakly shining, with a dull violet tinge. Proepimeron above fore coxa with several short hairs. Notopleuron bare or with several very short hairs. Scutellum black, with goldenbrown pollen. Chaetotaxy of thorax: 2 npl (anterior one half as long as posterior one), 1 spal, 1 pal, 2 dc, 1 anepst, 1 ap sctl.

Legs dark brown. Coxae, basal half of middle femora and hind femora yellow. Fore coxa with short decumbent hairs, with strong anterodorsal and anteroventral setae near apex. Posterior surface of middle trochanter bare. Middle tibia with 2-3 ventral setae in apical third. Ventral surface of hind trochanter with short erect hairs. Hind tibia with 3-4 anteroventral setae.

Wing hyaline, with dark brown veins. Upper and lower calypters and their margins strongly darkened.

Abdomen black, weakly shining. Syntergite 1+2 and lateral margins of tergite 3 red-brown. Male: posterolateral margin of tergite 5 with 5-6 setae (fig. 30). Epandrium and surstylus as in figs. 31, 32.

Length of body: 8.1 mm. Length of wing: 5.2 mm.

Distribution:
Cameroun, Zaire.

### Type material:

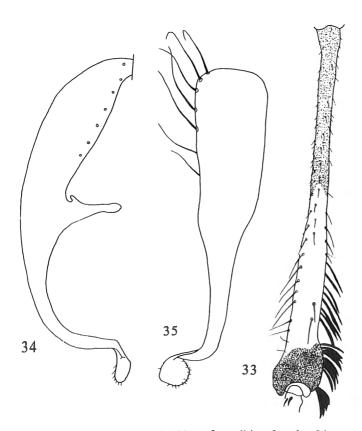
Holotype: male, "S. Kamerun, Lolodorf, L. CONRADT S." (MNHU). Paratypes: male, female, Zaire: Kasai: Dekese, Itunda, XII.1959, F.J. FRANÇOIS (MRAC, ZMUM).

# 11. *Paratoxopoda flavitarsis* DUDA, 1926 Figs. 33-35.

Paratoxopoda flavitarsis DUDA, 1926a: 32. Paratoxopoda akuminatanu VANSCHUYTBROECK, 1961: 71 - syn. nov.

### Diagnosis:

Two dorsocentral setae. Middle tibia with 3-4 ventral setae. Hind tibia with 3-4 anteroventral setae. Male: basal half of fore tibia dark brown. Fore tibia pale brown in lower expanded part, with rows of hair-like setae along anteroventral, posteroventral and dorsal lines. Tip of fore tibia expanded club-like, on posterior side with two groups of strongly flattened setae (fig. 33). Fore tarsus yellow. Middle coxa on posterior side with a row of short setae. Posterolateral margin of abdominal tergite 5 of male with a group of setae, among which 2-3 are very strong. Surstylus curved, pincer-like, thin, strongly flat-



Figs 33-35 - P. flavitarsis: 33 - fore tibia of male; 34 - epandrium and surstylus, posterior view; 35 - epandrium and surstylus, lateral view.

tened laterally at apex, with a short projection on inner surface near base (figs. 34, 35). Female: fore tibia dark brown in basal part, pale brown in apical part. Fore leg with first tarsomere and the basal half of second tarsomere dark brown, apical half of second tarsomere, third, fourth and fifth tarsomeres white.

### Distribution:

Cameroun, Zaire, Kenya.

# Specimens examined:

TYPE: lectotype of *P. flavitarsis* (present designation) — female, "N. Kamerun, Johann-Albrechtshöhe, 8/11-95, L. CONRADT S.G." (MNHU); holotype of *P. akuminatanu* — male, "Congo Belge, P.N.G., Miss. H. DE SAEGER, Mpaza/9, 23.I.1952, H. DE SAEGER, 3076" (MRAC). ADDITIONAL SPECIMEN: female, Kenya, Bwamba, 7-8.1946, VAN SOMEREN (BMNH).

#### Note:

A brief description was given by DUDA (1926 a, b). A detailed description of the male of *P. flavitarsis* was given by VANSCHUYTBROECK (1961) under the name of *P. akuminatanu*.

# 12. *Paratoxopoda frontalis* sp. n. Figs. 36-39.

#### Diagnosis:

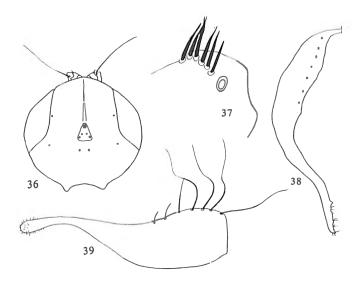
Frons projecting forwards beyond eyes, its length greater than its width. Orbital seta very weak, sometimes indistinct. Postocellar setae situated on a line joining the posterior margin of the eyes (fig. 36). Fore coxa with a strong anterodorsal seta, and anteroventral setae absent or very weak. Middle tibia with one ventral seta. Hind tibia with 2-3 anteroventral setae. Wings slightly darkened. Male: posterolateral margin of abdominal tergite 5 with 6 very strong setae (fig. 39). Surstylus sticklike, long, with a small swelling at apex (figs. 38, 39).

#### Description:

Frons dark brown, conspicuously projecting forwards beyond eyes. Orbital seta very weak, sometimes indistinct. Postocellar setae situated on a line joining posterior margin of eyes (fig. 36). Face and gena dark brown. Genal width greater than that of flagellomere 1. Occiput black, shining. Postgena with one short hair-like seta. Antenna dark brown. Flagellomere 1 2.5 times as long as wide.

Mesonotum and lateral pleural sclerites black, slightly shining. Proepimeron above fore coxa with several short pale hairs. Notopleuron with a few short hairs which are very much shorter than those on anepisternum. Scutellum black, with weak greyish pollen. Chaetotaxy of thorax: 2 npl, 1 spal, 1 pal, 2 dc, 1 anepst, 1 ap sctl.

Legs black. Fore coxa with very short decumbent hairs, with a strong anterodorsal seta near apex. Anteroventral seta on fore coxa absent or very weak. Fore femora with



Figs 36-39 - P. frontalis: 36 - male head, dorsal view (poc - postocellar setae); 37 - lateral margin of abdominal tergite 5 of male; 38 - epandrium and surstylus, posterior view; 39 - epandrium and surstylus, lateral view.

decumbent hairs. Posterior surface of middle trochanter without hairs. Middle tibia with one ventral seta, which is sometimes absent. Ventral surface of hind trochanter with short erect hairs. Hind tibia with 2-3 anteroventral setae.

Wing slightly darkened, mostly at apex. Veins black. Upper and lower calypters and their margins strongly darkened, almost black, but several specimens with a white upper calypter with a white margin. Haltere strongly darkened, almost black.

Abdomen black, weakly shining. Syntergite 1+2 and lateral margin of tergite 3 red-brown. Male: posterolateral margin of tergite 5 with 6 very strong setae (fig. 37). Epandrium and surstylus as in figs. 38, 39.

Length of body: 5.6-8.9 mm. Length of wing: 4.4-6.8 mm.

# Distribution: Kenya.

Type material:

Holotype: male, "Kenya, 15 km SW Kericho, 16.XI.1986, A. FREIDBERG" (TAU). Paratypes: 3 males, 15 females, same locality, A. FREIDBERG, I. Susman (TAU, ZMUM).

# 13. *Paratoxopoda glabra* sp. n. Figs. 40, 41.

# Diagnosis:

Notopleuron bare, without hairs. Only posterior notopleural seta present; anterior notopleural seta, if present, very short and fine. Two dorsocentral setae present. Middle tibia with 2-3 ventral setae. Hind tibia with 2-3

anteroventral setae. Male: posterolateral margin of abdominal tergite 5 without setae or hairs. Surstylus short and broad (figs. 40, 41).

# Description:

Frons dark brown, its length approximately equal to its width. Orbital seta very weak. Face, gena and antenna dark yellow to dark brown. Genal width less than width of flagellomere 1. Occiput black, shining. Flagellomere 1 twice as long as wide.

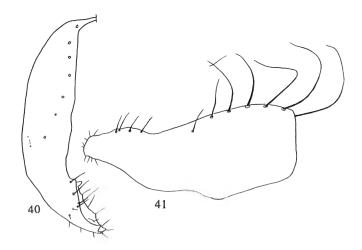
Mesonotum and lateral pleural sclerites black or dark brown, slightly shining, with a hardly noticeable violet tinge. Proepimeron and notopleuron bare. Scutellum black or dark brown, with weak greyish pollen. Chaetotaxy of thorax: only posterior notopleural seta present (if anterior one is present, then it is short and fine like a hair), 1 spal, 1 pal, 2 dc, 1 anepst, 1 ap sctl. Legs black. Fore coxa with very short decumbent hairs, with strong anterodorsal ans anteroventral setae near apex. Posterior surface of middle trochanter with short erect hairs. Hind tibia with 2-3 anteroventral setae. Wing hyaline, with brown veins. Upper and lower calypters darkened, with black margins. Haltere dark. Abdomen black, weakly shining. Male: posterolateral margin of tergite 5 without setae or hairs. Epandrium and surstylus as in figs. 40, 41.

Length of body: 4.6-4.9 mm. Length of wing: 3.6-3.8 mm.

# Distribution: Uganda.

#### *Note:*

As I got to known from Dr. A.C. PONT, F.W. EDWARDS collected in the Namwamba Valley in December 1934-January 1935. Alt. 6500 ft refers to Kyanjoke Camp, forest zone, 2-4 and 13-14 January 1935.



Figs 40-41 - P. glabra: 40 - epandrium and surstylus, posterior view; 41 - epandrium and surstylus, lateral view.

# Type material:

Holotype: male, "Uganda, Ruwenzori Range, Namwamba Valley, 6500 ft., F.W. EDWARDS, B.M. 1935-203" (BMNH). Paratype: female, data as holotype (BMNH).

# 14. *Paratoxopoda intermedia* DUDA, 1926 Figs. 42, 43.

Paratoxopoda intermedia DUDA, 1926a: 32. Paratoxopoda babalwakitakaensis VANSCHUYTBROECK, 1963: 110 - syn. nov.

# Diagnosis:

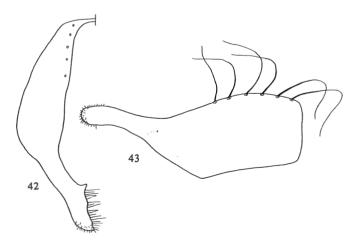
Two dorsocentral setae. Fore femora with distinct rows of short anteroventral and posteroventral setae. Middle tibia with two ventral setae. Hind tibia with 3-4 anteroventral setae. Male: posterolateral margin of abdominal tergite 5 with a row of strong setae. Surstylus stick-like, comparatively stout (figs. 42, 43).

### Distribution:

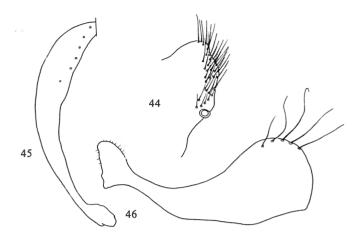
Cameroun, Zaire, Uganda.

# Specimens examined:

TYPE: holotype of *P. intermedia* — male, "N. Kamerun, Johann-Albrechtshöhe, 23/4-96, L. CONRADT S.G." (MNHU); holotype of *P. babalwakitakaensis* — male, "Congo Belge, P.N.A., Massif Ruwenzori, Kalonge, 1860 m, riv. Babalwakitaka, affl. dr. Butahu, 30.XI.1957, P. VANSCHUYTBROECK, VS-243" (MRAC). OTHER SPECIMENS: *Zaire*: male, 2 females, Avakubi, 27°31'E, 1°20'N (AMNH); Uganda: female, Budongo Forest, Unyoro, 3400 ft, 11-15.XII.1911, S.A. NEAVE (BMNH).



Figs 42-43 - P. intermedia: 42 - epandrium and surstylus, posterior view; 43 - epandrium and surstylus lateral view.



Figs 44-46 - P. kilinderensis: 44 - lateral margin of abdominal tergite 5 of male; 45 - epandrium and surstylus, posterior view; 46 - epandrium and surstylus, lateral view.

# 15. Paratoxopoda kilinderensis (VANSCHUYTBROECK, 1963) Figs. 44-46.

Toxopoda kilinderensis VANSCHUYTBROECK, 1963: 105.

## Diagnosis:

Genal width less than that of flagellomere 1. One dorsocentral seta present. Middle tibia with one ventral seta. Hind tibia with 0-1 anteroventral seta at middle. Male: posterolateral margin of abdominal tergite 5 with dense hairs distally of the spiracle (fig. 44). Surstylus long, sticklike, flattened laterally at apex, semicircular in lateral view (figs. 45, 46).

# Redescription:

Frons brown, its length approximately equal to its width, Face light brown or brown. Gena light to dark brown. Genal width less than that of flagellomere 1. Occiput black, shining. Antenna pale brown, brick-red or dark brown. Base of flagellomere 1 usually paler along inner edge than on other parts. Flagellomere 1 usually 2.0-2.5 times as long as wide.

Mesonotum and lateral pleural sclerites black, shining, with a violet tinge. Proepimeron above fore coxa with several very short hairs. Notopleuron with pale erect hairs, more sparse than on an episternum. Scutellum black, with grey pollen. Chaetotaxy of thorax: 2 npl, 1 spal, 1 pal, 1 dc, 1 anepst, 1 ap sctl.

Legs black. Fore coxa with short decumbent hairs, with strong anterodorsal and anteroventral setae near apex. Posterior surface of middle trochanter bare. Middle tibia with one ventral seta in apical quarter. Ventral surface of hind trochanter with short erect hairs. Hind tibia with 0-1 anteroventral seta at middle.

Wing hyaline, with pale brown veins. Upper and lower calypters and their margins white or brown. Haltere yellow.

Abdomen black, shining, with a violet tinge. Male: posterolateral margin of tergite 5 with dense hairs distally of the spiracle (fig. 44). Surstylus long, stick-like, flattened laterally at apex, and semicircular in lateral view (figs. 45, 46).

Length of body: 4.6-5.1 mm. Length of wing: 3.2-3.6 mm.

#### Distribution:

Zaire.

# Specimens examined:

TYPE: holotype of *T. kilinderensis* — male, "Congo Belge, P.N.A., Massif Ruwenzori, Camp Kilindere, rive g. riv. Ruanoli, 2900 m, 13.IX.1957, P. VANSCHUYT-BROECK, VS-156 (MRAC). OTHER SPECIMENS: *Zaire*: 51 males, 4 females, P.N.U., Gorges de la Pelenge, 1500 m, 21.V.-21.VI.1947, G.F. DE WITTE, 428a, 434a, 443a, 521a, 524 (IRSNB, MRAC).

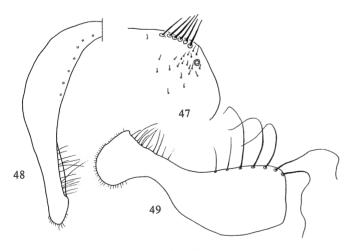
### Note:

This species was first described in the genus *Toxopoda*. After transferring it to the genus *Paratoxopoda*, it becomes a senior secondary homonym. However, the junior secondary homonym (VANSCHUYTBROECK, 1963: 111) is a junior synonym of *P. amonane* VANSCHUYTBROECK (see under *P. amonane*).

# 16. *Paratoxopoda magna* sp. n. Figs. 47-49.

# Diagnosis:

Two dorsocentral setae. Middle tibia with 3-4 ventral setae in apical half. Hind tibia with 2-4 anteroventral setae. Posterolateral margin of abdominal tergite 5 of male with 6 strong setae (fig. 47). Surstylus short, with apex flattened laterally, circular in lateral view (figs. 48, 49).



Figs 47-49 — P. magna: 47 — lateral margin of abdominal tergite 5 of male; 48 — epandrium and surstylus, posterior view; 49 — epandrium and surstylus, lateral view.

### Description:

Frons dark brown, its length approximately equal to its width. Face and gena dark brown. Genal width less than or equal to width of flagellomere 1. Postgena with 1-2 hair-like setae. Occiput black, shining. Antenna dark brown with a brick-red tinge. Flagellomere 1 2.5 times as long as wide.

Mesonotum and lateral pleural sclerites black, weakly shining. Proepimeron above fore coxa with 2-3 short pale hairs. Notopleuron with a few very short hairs which are shorter than those on an episternum. Scutellum velvety-black. Chaetotaxy of thorax: 2 npl, 1 spal, 1 pal, 2 dc, 1 anepst, 1 ap sctl.

Legs dark brown. Fore coxa, all trochanters and hind femora dark yellow. Fore coxa with strong anterodorsal and anteroventral setae near apex. Posterior surface of middle trochanter bare. Middle tibia with 3-4 ventral setae in apical half. Ventral surface of hind trochanter with short erect hairs. Hind tibia with 2-4 anteroventral setae. Wing hyaline, with light brown veins. Upper and lower calypters dirty yellow, with dark margins. Haltere yellow. Abdomen weakly shining, dark yellow or dark brown, sometimes with large black spots. Posterolateral margin of tergite 5 of male with 6 strong setae (fig. 47). Epandrium and surstylus as in figs. 48, 49.

Length of body: 6.5-8.9 mm. Length of wing: 5.2-5.9 mm.

Female unknown.

# Distribution:

Uganda, Kenya.

### Type material:

Holotype: male, "Uganda, Bundibugio (Ruwenzori), 25.I.1972, A. FREIDBERG" (TAU). Paratypes: male, Kenya, Bwamba valley, July 1945, VAN SOMEREN (BMNH); male, data as holotype (ZMUM).

# 17. *Paratoxopoda pilifemorata* Soós, 1964 Figs. 50-52.

Paratoxopoda pilifemorata Soós, 1964: 451.

### Diagnosis:

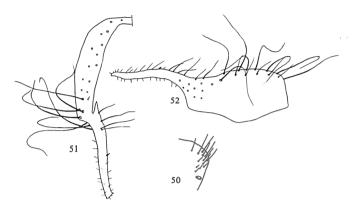
Male: Basal part of middle femora with rows of long straight anteroventral and posteroventral setae. Middle tibia without ventral setae. Hind tibia with 0-1 anteroventral seta. Posterolateral margin of abdominal tergite 5 with a small group of hairs above spiracle (fig. 50). Surstylus stick-like, long, slightly sinuous, with a short spine at middle of inside edge (figs. 51, 52).

#### Distribution:

Tanzania, Zimbabwe.

#### Specimens examined:

TYPE: not seen. ADDITIONAL SPECIMEN: Zimbabwe: male, "Umtali, 1969" (NHMZ).



Figs 50-52 - P. pilifemorata: 50 - lateral margin of abdominal tergite 5 of male; 51 - epandrium and surstylus posterior view; 52 - epandrium and surstylus, lateral view.

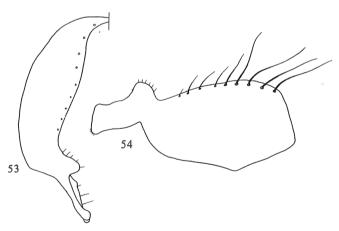
## Note:

P. pilifemorata was described from a single specimen from Tanzania. The description by Soós is very good. I have seen only one specimen of P. pilifemorata, from Zimbabwe. Unlike the holotype, it has a row of long hairs on the anteroventral surface of middle tibia in addition to those on the posteroventral surface. The right hind tibia of the holotype has one anteroventral seta. The specimen from Zimbabwe has no anteroventral seta on hind tibia. Female unknown.

# 18. *Paratoxopoda rufithorax* sp. n. Figs. 53, 54.

## Diagnosis:

Mesonotum brick-red with a broad black longitudinal stripe along middle. Lateral pleural sclerites brick-red. Two dorsocentral setae present. Apical half of middle



Figs 53-54 - P. rufithorax: 53 - epandrium and surstylus, posterior view; 54 - epandrium and surstylus, lateral view.

tibia with a row of strong ventral setae. Apical half of hind tibia with 4 anteroventral setae. Apex of wing white. Abdomen black, with a strong violet tinge. Male: first and second tarsomeres of fore leg with a row of long hairs on dorsal surface. Posterolateral margin of abdominal tergite 5 bare, without setae and hairs. Surstylus in lateral view trapezoidal in form, broad, blunt (figs. 53, 54). Female: posterior margin of abdominal tergite 3 yellow.

### Description.

Frons red-brown, its length approximately equal to its width. Face brick-red, matt. Gena red-brown, weakly shining. Genal width approximately equal to width of flagellomere 1. Postgena with 1-2 long hair-like setae. Occiput black, shining. Antenna red-brown. Flagellomere 1 weakly narrowing to apex, 2.5 times as long as wide. Mesonotum brick-red with a broad black longitudinal stripe along middle. Lateral pleural sclerites brick-red. Proepimeron above fore coxa with 2-3 short pale hairs. Notopleuron with pale erect hairs as long as those on anepisternum. Scutellum red-brown or brick-red, with thin greyish pollen. Chaetotaxy of thorax: 2 npl, 1 spal, 1 pal, 2 dc, 1 anepst, 1 ap sctl.

Legs black or dark brown. Fore coxa with a few short hairs, with strong anterodorsal and anteroventral setae near apex. Fore femora with very short decumbent hairs. First and second tarsomeres of male fore leg dorsally with a row of long hairs, these hairs absent in female. Posterior surface of middle trochanter with a few short hairs. Apical half of middle tibia with a row of ventral setae. Ventral surface of hind trochanter with fine erect hairs. Apical half of hind tibia with 4 anteroventral setae. Wing hyaline, with brown veins. Apex of wing white. Upper calypter and margin white; lower calypter strongly darkened, with a dark margin. Haltere yellow.

Abdomen black, with a strong violet tinge. Male: posterolateral margin of tergite 5 bare, without setae or hairs; epandrium and surstylus as in figs. 53, 54. Female: posterior margin of tergite 3 yellow.

Length of body: 5.1-7.2 mm. Length of wing: 3.8-5.1 mm.

# Distribution: Kenya.

# Type material:

Holotype: male, "Kenya, Hunter's Lodge, 150 km SE Nairobi, 18.VIII.1983, A. FREIDBERG" (TAU). Paratypes: 7 males, 4 females, Kenya: Masai Mara, Keekorok Lodge, 29-30.VIII.1983, A. FREIDBERG (TAUZMUM); female, Machakos, 6.II.1949, B.T. PARSONS (BMNH).

# 19. *Paratoxopoda saegeri* VANSCHUYTBROECK, 1961 Figs. 55-57.

Paratoxopoda saegeri VANSCHUYTBROECK, 1961: 24.

# Diagnosis:

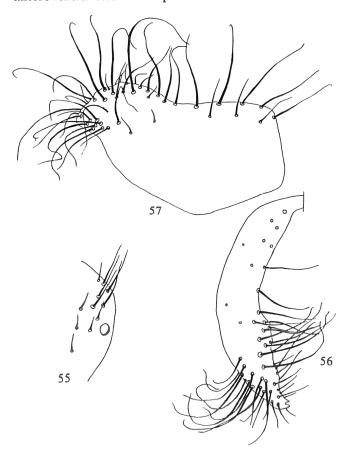
One dorsocentral seta. Middle tibia with 2 ventral setae in apical half. Hind tibia with one anteroventral seta at middle. Male: posterolateral margin of abdominal tergite 5 with 4-5 strong setae (fig. 55). Surstylus very short and stout, with many long setae and hairs (figs. 56, 57).

### Redescription:

Frons dark brown, its length approximately equal to its width. Face brown. Gena dark brown, its width approximately equal to width of flagellomere 1. Occiput black, shining. Antenna brown, paler along inside. Flagellomere 1 twice as long as wide.

Mesonotum and lateral pleural sclerites black, shining, with a weak violet tinge. Proepimeron above fore coxa with several short pale hairs. Notopleuron with pale erect hairs, but sparser than on an episternum. Scutellum black, with weak greyish pollen. Chaetotaxy of thorax: 2 npl, 1 spal, 1 pal, 1 dc, 1 anepst, 1 ap sctl.

Legs black. Fore coxa with strong anterodorsal and anteroventral setae near apex. Posterior surface of mid-



Figs 55-57 - P. saegeri: 55 - lateral margin of abdominal tergite 5 of male; 56 z epandrium and surstylus, posterior view; 57 - epandrium and surstylus, lateral view.

dle trochanter bare. Middle tibia with two ventral setae in apical half. Ventral surface of hind trochanter with few hairs. Hind tibia with one anteroventral seta at middle.

Wing hyaline, with pale brown veins. Upper and lower calypters and their margins almost black. Haltere dark yellow.

Abdomen black, shining, with a weak violet tinge. Syntergite 1+2, in addition to the circle of hairs around middle, with similar hairs on lateral sides of tergite apical of the circle. Male: posterolateral margin of tergite 5 with 4-5 strong setae (fig. 55). Surstylus very strong, short and stout with many long setae and hairs (figs. 56, 57). Length of body: 5.0 mm. Length of wing: 3.6 mm.

#### Distribution:

Zaire.

### Specimens examined:

TYPE: holotype of *T. saegeri* — male, "Congo Belge, P.N.G., Miss. H. DE SAEGER, I/o/2, 6.XI.1950, Réc. H. DE SAEGER, 936" (MRAC). ADDITIONAL SPECIMEN: *Zaire*: female, P.N.A., Massif Ruwenzori, Mont Mutungu, 2600 m, 16.XI.1957, P. VANSCHUYT-BROECK, VS-230a (IRSNB).

# 20. *Paratoxopoda similis* sp. n. Figs. 58-61.

### Diagnosis:

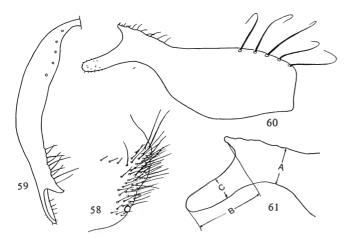
One dorsocentral seta. Middle tibia with one anteroventral seta in apical third. Hind tibia with one anteroventral seta at middle. Male: posterolateral margin of abdominal tergite 5 with many hairs (fig. 58). Surstylus with two forks; width of lowest fork more than quarter of its length (figs. 59-61).

# Description:

Frons and face brown or dark brown. Length of frons approximately equal to its width. Gena yellow or redbrown. Genal width approximately equal to width of flagellomere 1. Occiput black, shining. Antenna brown. Anterior margin of flagellomere 1 darkened. Flagellomere 1 2.5-3.0 times as long as wide.

Mesonotum and lateral pleural sclerites black, shining, with a dark blue tinge. Proepimeron above fore coxa with several short pale hairs, as on an episternum. Scutellum black, with grey pollen. Chaetotaxy of thorax: 2 npl, 1 spal, 1 pal, 1 dc, 1 anepst, 1 ap sctl.

Legs black. Fore coxa with a few short hairs, and with long anterodorsal and anteroventral setae near apex. Fore femora with very short, sparse, seta-like hairs, and with a row of very weak posteroventral and anteroventral setae. Posterior surface of middle trochanter bare. Middle tibia with one ventral seta in apical third. Ventral surface of hind trochanter with short erect hairs. Hind tibia with one anteroventral seta at middle.



Figs 58-61 - P. similis: lateral margin of abdominal tergite 5 of male; 59 - epandrium and surstylus, posterior view; 60 - epandrium and surstylus, lateral view; 61 - surstylus, lateral view (A - width of base, B - length of lower fork, C - width of lower fork).

Wing hyaline, with brown veins. Upper calypter and margin white; lower calypter and margin white or darkened. Haltere dirty yellow.

Abdomen black, shining, with a dark blue tinge. Syntergite 1+2 with a circle of hairs around middle, and very often with several similar hairs on lateral surface. Male: posterolateral margin of tergite 5 with many fine hairs (fig. 58). Surstylus with two forks. Width of lower fork more than quarter of its length (fig. 59, 60). Length of body: 4.8-6.5 mm. Length of wing: 3.7-4.2 mm,

#### Distribution:

Zaire, Burundi, Kenya.

# Type material:

Holotype: male, Zaire, "Mbaga" (AMNH). Paratypes: Zaire: female, "Mbaga" (AMNH); male, "Kasonsero" (ZMUM); male, P.N.U., Gorges de la Pelenge, 1500 m, 21-31.V.1947, G.F. DE WITTE, 428a (IRSNB); male, P.N.U., Muroï bif. Lupiala, 890 m, 15-24.VI.1948, G.F. DE WITTE, 1719a (IRSNB); male, P.N.A., Massif Ruwenzori, riv. Lusilube af. Semliki, 2085 m, 24.IV.1958, P. VANSCHUYTBROECK, VS-363 (MRAC); female, P.N.A., Massif Ruwenzori, Kyandolire, 1750 m, Camp des Gardes, 7.XII.1957, P. VANSCHUYTBROECK, VS-249 (MRAC); 2 males, 1 female, P.N.A., Secteur Tschiaberimu, riv. Mbulikerere, affl. dr. Talia N., 2720 m. 26-28. VIII. 1953, P. VANSCHUYTBROECK and V. HEN-DRICKX, 4999-5005 (MRAC, ZMUM); male, Rutshuru, 28.V.1936, L. LIPPENS (MRAC); male, N. Kivu: riv. Kabarazo, 12.V.1936, L. LIPPENS (MRAC); 4 males, Kivu: Katana, 1933, DE WULF (MRAC, ZMUM); Burundi: 3 males, 8 females, Rumonge, alt. 760 m. 25.XI.1948, F. FRANÇOIS (IRSNB, MRAC, ZMUM); Kenya: male, Bwamba Valley, July 1945, VAN SOMEREN (BMNH).

# 21. *Paratoxopoda straeleni* VANSCHUYTBROECK, 1961 Figs. 62-64.

Paratoxopoda straeleni VANSCHUYTBROECK, 1961: 44.

#### Diagnosis:

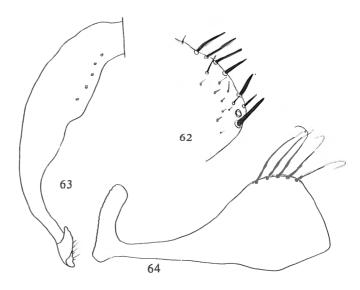
Anterior notopleural seta half as long as posterior one. Two dorsocentral setae present. Middle tibia with two ventral setae in apical quarter. Hind tibia with 3 anteroventral setae. Abdomen with a strong violet tinge. Male: posterolateral margin of abdominal tergite 5 with 6-8 seta-like hairs (fig. 62). Surstylus stick-like, its apex curved dorsally almost at right-angle (fig. 64).

# Redescription:

Frons brown or dark brown, its length approximately equal to its width. Face yellow or pale brown. Gena yellow. Genal width slightly less than width of flagellomere 1. Occiput black, shining. Antenna yellow or pale brown. Anterior margin of flagellomere 1 slightly darkened. Flagellomere 1 approximately 2.0-2.5 times as long as wide.

Mesonotum and lateral pleural sclerites black, shining, with a dark blue tinge. Proepimeron above fore coxa bare or with 2-3 short hairs. Scutellum black, with grey pollen. Chaetotaxy of thorax: 2 npl (anterior one half as long as posterior one), 1 spal, 1 pal, 2 dc, 1 anepst, 1 ap sctl. Legs dark brown. Fore coxa with very strong anterodorsal and anteroventral setae near apex. Posterior surface of middle trochanter bare. Middle tibia with two ventral setae in apical quarter. Ventral surface of hind trochanter with a few very short hairs. Hind tibia with 3 anteroventral setae.

Wing hyaline, with brown veins. Upper and lower calypters and their margins blackish. Haltere dark yellow,



Figs 62-64 - P. straeleni: 62 - lateral margin of abdominal tergite 5 of male; 63 - epandrium and surstylus, posterior view; 64 - epandrium and surstylus, lateral view.

Abdomen black, shining, with a strong violet tinge. Male: posterolateral margin of tergite 5 with 6-8 spine-like setae (fig. 62). Surstylus stick-like. Apical part of surstylus curved back almost at right-angle (figs. 63, 64). Length of body: 5.8-7.2 mm. Length of wing: 4.1-4.6 mm.

Distribution: Zaire, Uganda.

# Specimens examined:

TYPE: holotype of *P. straeleni* — male, "Congo Belge, P.N.G., Miss. H. DE SAEGER, I/o/2, 6.XI.1950, Réc. H. DE SAEGER, 936" (MRAC). OTHER SPECIMENS: *Uganda*: male, Mobutu River, c 4000', 20.I.1935, F.W. EDWARDS (BMNH); 2 males, Ruwenzori Range, Kilembe, 4500 ft, XII.1934-I.1935, F.W. EDWARDS" (BMNH).

#### Note:

Males of *P. straeleni* can be identified by using the genitalia figures given by VANSCHUYTBROECK (1961, figs. 21, 22).

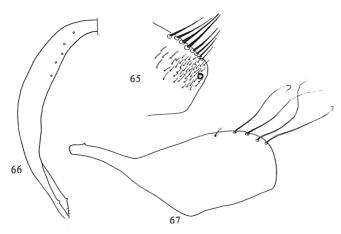
# 22. Paratoxopoda tenebrica sp. n. Figs. 65-67.

#### Diagnosis:

Two dorsocentral setae. Middle tibia with one ventral seta in apical third. Hind tibia with 3 anteroventral setae. Posterolateral margin of abdominal tergite 5 of male with a group of hairs and a row of 6-7 strong setae (fig. 65). Surstylus stick-like, moderately long (figs. 66, 67).

#### Description:

Frons, face and gena brown. Length of frons approximately equal to its width. Genal width approximately



Figs 65-67 - P. tenebrica: lateral margin of abdominal tergite 5 of male; 66 - epandrium and surstylus, posterior view; 67 - epandrium and surstylus, lateral view.

equal to that of flagellomere 1. Occiput black, shining. Antenna dark brown. Flagellomere 1 2.5-3.0 times as long as wide.

Mesonotum and lateral pleural sclerites black, shining, with a dark blue tinge. Proepimeron above fore coxa with several very short hairs. Notopleuron bare, or with several hairs which are shorter than those on an episternum. Scutellum velvety-black. Chaetotaxy of thorax: 2 npl, 1 spal, 1 pal, 2 dc, 1 anepst, 1 ap sctl.

Legs dark brown or black. Fore coxa with short hairs, with a strong anterodorsal and anteroventral setae near apex. Fore femora with very short decumbent hairs. Posterior surface of middle trochanter bare. Middle tibia with one ventral seta in apical third. Ventral surface of hind trochanter with short erect hairs. Hind tibia with 3 anteroventral setae.

Wing hyaline, with brown veins. Upper and lower calypters darkened, with dark margins. Haltere strongly darkened.

Abdomen black, shining, with a dark blue tinge. Posterolateral margin of tergite 5 of male with a group of hairs and a row of 6-7 strong setae (fig. 65). Epandrium and surstylus as in figs. 66, 67.

Length of body: 6.1-6.3 mm. Length of wing: 4.1-4.3 mm.

Female unknown.

# Distribution:

Sierra Leone.

# Type material:

Holotype: male, "Sierra Leone, Freetown, Kortright, Maj, F. SMITH" (BMNH). Paratype: male, same data (ZMUM).

# 23. Paratoxopoda tricolor (WALKER, 1849) Figs. 68-72.

Sepsis tricolor WALKER, 1849: 1001.

Paratoxopoda nigritarsis Duda, 1926a: 32 - syn. nov. Paratoxopoda varicoxa Curran, 1929: 8 - syn. nov. Afrotoxopoda ambili Vanschuytbroeck, 1961: 28 - syn. nov.

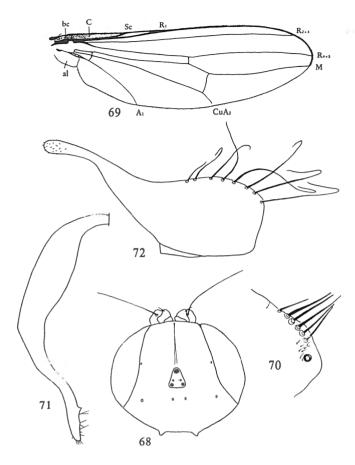
Paratoxopoda akuminainne VANSCHUYTBROECK, 1961: 70 - syn. nov.

# Diagnosis:

Two dorsocentral setae. Middle tibia with 3-4 ventral setae. Hind tibia with 2-3 anteroventral setae. Male: posterolateral margin of abdominal tergite 5 with a group of setae, among which there are 3-4 strong setae (fig. 70). Surstylus stick-like, slender, slightly concave along inner surface beyond a pointed projection, rounded of apex (figs. 71, 72).

#### Distribution:

Sierra Leone, Liberia, Cameroun, Zaire, Uganda.



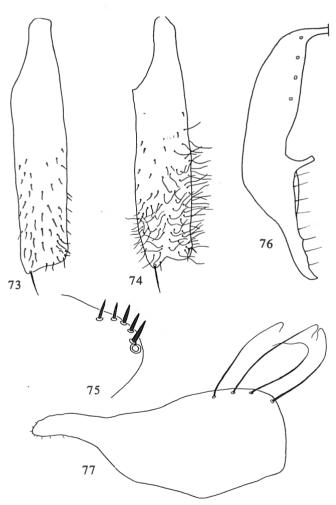
Figs 68-72 - P. tricolor: 68 - head, dorsal view (poc - postocelar setae); 69 - wing (bc - basal costal cell; C - costal cell; Sc - subcosta; R/1, R/2+3, R/4+5 - veins of radius; M - vein of media; A/1 - anal vein; CuA/2 - vein of cubitus; al - alula); 70 - lateral margin of abdominal tergite 5 of male; 71 - epandrium and surstylus, posterior view; 72 - epandrium and surstylus, lateral view.

# Specimens examined:

TYPE: holotype of S. tricolor — female, "Sierra Leone, Morgan, 42, 31" (BMNH); lectotype of P. nigritarsis (present designation) — male, "Westafrika: Uelleburg, VI.-VIII.08, TESSMANN S.G." (MNHU), paralectotypes of this species (present designation) — male, female, "N. Kamerun, Johann-Albrechtshöhe, III.96, L. CONRADT" (MNHU); holotype of P. varicoxa — female, "Nemeh Town, Liberia, Aug. 29-1926" (AMNH); holotype of A. ambili - male, "Congo Belge, P.N.G., Miss. H. DE SAEGER, I/o/2, 6.XI.1950, Réc. H. DE SAEGER, 936" (MRAC); holotype of P. akuminainne — male, "Congo Belge, P.N.G., Miss. H. DE SAEGER, I/o/2, 6.XI.1950, Réc. H. DE SAEGER, 936" (MRAC). OTHER SPECIMENS: Sierra Leone: male, Npala, 15.II.1940, F.A. SQUIRE (BMNH); male, Kortright, Freetown, Maj, F. SMITH (BMNH); female, Sirekuri, 15.IV.1912, J. SIMPSON (BMNH); Liberia: male, Bendu, Robertsport, I.IV.1943, F.M. SNYDER (AMNH); 2 males, 6 females, Memeh Town, 29. VIII. 1926 (AMNH); Zaire: 4 males, 1 female, Rutshuru, 3-13.XII.1937, J. GHESQUIÉRE (IRSNB); 8 males, P.N.A., Secteur Tshiaberimu, Riv. Mbulikere affl. dr. Talia N, 2700 m, 26-28.VIII.1953, P. VANSCHUYTBROECK, V. HENDRICKX, 4999-5005 (MRAC); *Uganda*: 2 males, 1 female, Bundibuqio (Ruwenzori), 25.I.1972, A. FREIDBERG (TAU); 2 males, 2 females, Impenetrable Forest, SW Uganda, 27.I.1972, A. FREIDBERG (TAU); male, Ruwenzori Range, Budibuqio, 3440 ft, 22.VIII.-3.IX.1952, D.S. FLETCHER (BMNH); male, Ruwenzori Range, Kilembe, 4500 ft, XII.1934-I.1935, F.W. EDWARDS (BMNH).

# 24. Paratoxopoda villicoxa DUDA, 1926 Figs. 73-77,

Paratoxopoda villicoxa DUDA, 1926a: 32. Paratoxopoda ruwenzoriensis VANSCHUYTBROECK, 1963: 106 - syn. nov.



Figs 73-77 - P. villicoxa: 73 - fore coxa of female, anterior view; 74 - fore coxa of male, anterior view; 75 - lateral margin of abdominal tergite 5 of male; 76 - epandrium and surstylus, posterior view; 77 - epandrium and surstylus, lateral view.

#### Diagnosis:

Fore coxa with 2-3 short anterodorsal setae near apex. Two dorsocentral setae present. Middle tibia with 2-3 ventral setae. Hind tibia with 3-4 anteroventral setae. Male: lower half of fore coxa with long curly hairs (fig. 74). Posterolateral margin of abdominal tergite 5 with short spinose setae distally of the spiracle (fig. 75). Surstylus short, with a small projection on inner surface near base (figs. 76, 77). Female: lower half of fore coxa with short erect hairs (fig. 73).

### Distribution:

Liberia, Ghana, Cameroun, Zaire, Kenya.

#### Specimens examined:

TYPE: holotype of *P. villicoxa* — male, "Kamerun, Jaunde-Stat., 800 m, Zenker S" (MNHU); holotype of *P. ruwenzoriensis* — male, "Congo Belge, P.N.A., Massif Ruwenzori, Mont Mulungu, 2600 m, 27.XI.1957, P. VANSCHUYTBROECK, VS-240" (MRAC). OTHER SPECIMENS: *Liberia*: female, Kpaine, 1400 ft, 7°10'N, 9°7'W, 10.VII.1953, W. PETERS, No 219 (BMNH); 2 males, 3 females, Memeh Town, 28.VIII.1926 (AMNH); *Ghana*: male, Gold Coast, 1911-65, W.P. Lowe (BMNH); *Zaire*: 2 males, 2 females, Avakubi, 27° 31'E, 1° 20'N (AMNH); *Kenya*: 2 males, 2 females, 15 km SW Kericho, 16.XI.1986; female, West Pokot, Chepareria, 25.XI.1983; 12 males, 6 females, Kakamega Forest, 8-9.XI.1983, A. FREIDBERG (TAU, ZMUM); female, Katmosi, II.1949, VAN SOMEREN (BMNH).

# 25 *Paratoxopoda zuskai* sp. n. Figs. 78-80.

# Diagnosis:

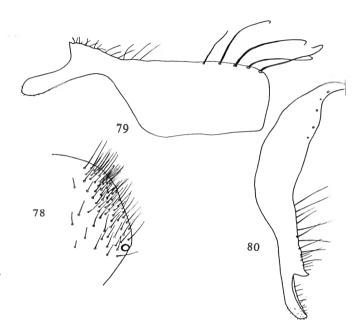
One dorsocentral seta. Middle tibia with one ventral seta in apical third. Hind tibia with one anteroventral seta at middle. Male: posterolateral margin of abdominal tergite 5 with many dense hairs (fig. 78). Surstylus with two forks; width of lower fork less than quarter of its length (fig. 79).

#### Description:

Frons and face dark brown. Length of frons approximately equal to its width. Gena brown or dark brown, weakly shining. Genal width slightly more than width of flagellomere 1. Occiput black, shining. Antenna dark brown. Inner surface of flagellomere 1 partly brick-red. Flagellomere 1 2.5 times as long as wide.

Mesonotum and lateral pleural sclerites black, shining, with a dark blue tinge. Proepimeron above fore coxa with several short pale hairs. Posterior half of an episternum and notopleuron with pale erect hairs of equal length. Scutellum black, with grey pollen. Chaetotaxy of thorax: 2 npl, 1 spal, 1 pal, 2 dc, 1 anepst, 1 ap sctl.

Legs black. Fore coxa with a few very short hairs, with strong anterodorsal and anteroventral setae near apex. Fore femora with a few short seta-like hairs, with a row



Figs 78-80 - P. zuskai: 78 - lateral margin of abdominal tergite 5 of male; 79 - epandrium and surstylus, posterior view; 80 - epandrium and surstylus, lateral view.

of very weak anteroventral setae. Posterior surface of middle trochanter bare. Middle tibia with one ventral seta in apical third. Ventral surface of hind trochanter with short erect hairs. Hind tibia with one anteroventral seta at middle.

Wing hyaline, with brown veins. Upper calypter usually white, with white margin. Lower calypter and its margin darkened. Haltere dark yellow.

Abdomen black, shining, with a dark blue tinge. Syntergite 1+2 with several hairs on lateral surface in addition to a circlet of similar hairs in centre. Male: posterolateral margin of tergite 5 with many setae (fig. 78). Surstylus with two forks. Width of lower fork less than quarter of its length (figs. 79, 80).

Length of body: 5.3-7.0 mm. Length of wing: 3.9-4.6 mm.

### Distribution:

Nigeria, Zaire.

#### Note:

The species is named in honour of Dr. Jan Zuska, who has made such a valuable contribution to the study of Sepsidae, including the species of the Afrotropical Region.

#### Type material:

Holotype: male, "Nigeria, Samaru, 8-15.XII.1970, P.H. WARD, B.M. 1970-604" (BMNH). Paratypes: 2 males, data as holotype (BMNH, ZMUM); 56 males, 36 females, Zaire ("Congo Belge"), P.N.G., Miss. H. DE SAEGER, I/o/2, Pall/2, 23.X.1950, 6.XI.1950, 22.III.1952, Réc. H. DE SAEGER, 899, 936, 3230 (IRSNB, MRAC, ZMUM).

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