CHIRONOMIDAE

(DIPTERA, NEMATOCERA)

IMAGINES

BY

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The insects dealt with in this report are the pinned adult *Chironomidae* collected by Dr. J. VERBEKE on the Belgian Hydrobiological Expedition 1952-1954. The specimens were in excellent condition and I am very grateful to Dr. VERBEKE for giving me the opportunity of examining them.

I have been able to recognize nearly 50 species in the collection at least four being new to me. Full descriptions and figures of all the species are being prepared in my series of Studies of *Chironomidae* of Africa South of the Sahara at present being published in Bulletin of British Museum (Nat. Hist.). I am not, therefore, repeating full descriptions here except for new species.

Except where otherwise stated, all localities are in the Belgian Congo and the collector was Dr. J. VERBEKE. The bulk of the collection including holotypes of species described from this material has been placed in « Institut royal des Sciences naturelles de Belgique ».

Pentaneura nilotica KIEFFER.

Tanypus niloticus KIEFFER, 1923, Ann. Soc. ent. Fr., **92**, 200.
Pentaneura nilotica FREEMAN, 1955, Bull. Brit. Mus. (Nat. Hist.), **4**, 36.

Albertville (lac Tanganika), VIII.1953, 11 ♂♂, 3 ♀♀; Kivu, Goma (base), 2.XII.1952, 12 ♂♂, 1 ♀; Vitshumbi (Sud lac Édouard), 13.I.1953, 1 ♂, 1 ♀; Kabimba (lac Tanganika), 11.VIII.1953, 2 ♂♂; Kivu, île Wahu (Ru), 15-18.III.1953, 3 ♂♂, 7 ♀♀; Kiavinionge (Nord lac Édouard), 27.III.1953, 4 ♂♂.

A common and widely distributed species easily recognized by its cross-banded thorax and heavily banded legs.

Pentaneura appendiculata KIEFFER.

Tanypus appendiculatus KIEFFER, 1923, Ann. Soc. ent. Fr., **92**, 201.
Pentaneura appendiculata FREEMAN, 1955, Bull. Brit. Mus. (Nat. Hist.), **4**, 40.

Kivu, Goma (base), 26.XI.1952, 4 ♂♂; Albertville (lac Tanganika), VIII.1953, 8 ♂♂, 2 ♀♀; Kabimba (lac Tanganika), 11.VIII.1953, 3 ♂♂, 3 ♀♀.

Another wide-spread species, recognized by the superposed spots at the apex of cell R_{4+5}.

Pentaneura dusoleili GOETGHEBUER.

Ablabesmyia dusoleili GOETGHEBUER, 1935, Rev. Zool. Bot. Afr., **27**, 359.
Pentaneura dusoleili FREEMAN, 1955, Bull. Brit. Mus. (Nat. Hist.), **4**, 41.

Kivu, île Wahu (Ru), 15-18.III.1953, 1 ♀; Vitshumbi (Sud lac Édouard), 25.III.1953, 1 ♀; Kiavinionge (Nord lac Édouard), 27.III.1953, 4 ♂♂, 1 ♀; Ituri, Kasenyi (lac Albert), 11.XII.1953, 16 ♂♂.

Distinguished from the two preceding species by the presence of three black spots along the costal margin of the wing; again it is a widely distributed species.

Pentaneura pictipes KIEFFER.

Tanypus pictipes KIEFFER, 1923, Ann. Soc. ent. Fr., **92**, 194.
Pentaneura pictipes FREEMAN, 1955, Bull. Brit. Mus. (Nat. Hist.), **4**, 43.

Albertville (lac Tanganika), 25.VIII.1953, 1 ♀.

This species has previously been recorded only from Sudan and Kenya. It is a small species not unlike a small edition of *dusoleili*, but it may be distinguished from that species by the presence of only two spots on the costal margin of the wing and by the short female antennae which have only eleven segments.

Tanypus guttatipennis GOETGHEBUER.

Tanypus guttatipennis GOETGHEBUER, 1935, Rev. Zool. Bot. Afr., **27**, 354. — FREEMAN, 1955, Bull. Brit. Mus. (Nat. Hist.), **4**, 49.

Vitshumbi (Sud lac Édouard), 13.I.1953, 1 ♀; Kivu, île Wahu (Ru), 15-18.III.1953, 7 ♀♀.

This may be only a pale form of *T. lacustris* KIEFFER; both are to be separated from the other African species of the genus by the well marked black spots along the anterior wing margin.

Tanypus brevipalpis KIEFFER.

Protenthes brevipalpis KIEFFER, 1923, Ann. Soc. ent. Fr., **92**, 187.
Tanypus brevipalpis FREEMAN, 1955, Bull. Brit. Mus. (Nat. Hist.), **4**, 49.

Vitshumbi (Sud lac Édouard), 11-13.I.1953, 13 ♂♂, 11 ♀♀.

This differs from other African species by the pale thoracic margin and the absence of spots along the costal margin.

Tanypus fuscus Freeman.

Protenthes brevipalpis var. *obscurus* Kieffer, 1923, Ann. Soc. ent. Fr., **92**, 189.
Tanypus fuscus (nom. nov.) Freeman, 1955, Bull. Brit. Mus. (Nat. Hist.), **4**, 50.

Vitshumbi (Sud lac Édouard), 11.I.1953, 1 ♂, 2 ♀♀; Ituri, Kasenyi (lac Albert), 12.II.1953, 1 ♂.

This species has previously only been known from southern Sudan. It is smaller and darker than the other species and it has a larger median thoracic tubercle.

Procladius brevipetiolatus Goetghebuer.

Trichotanypus brevipetiolatus Goetghebuer, 1935, Rev. Zool. Bot. Afr., **27**, 355.
Procladius brevipetiolatus Freeman, 1955, Bull. Brit. Mus. (Nat. Hist.), **4**, 56.

Vitshumbi (Sud lac Édouard), I.1953, 14 ♂♂, 15 ♀♀; Kivu, île Wahu (Ru), 15-18.III.1953, 3 ♂♂, 5 ♀♀.

A variable species which may really be a complex of closely allied species. It is quite similar to the Palaearctic species *P. choreus* Meigen.

Clinotanypus claripennis Kieffer.

Clinotanypus claripennis Kieffer, 1918, Ann. Mus. Nat. Hung., **16**, 63. — Freeman, 1955, Bull. Brit. Mus. (Nat. Hist.), **4**, 52.

Kivu, Goma (base), 23.XII.1952, 1 ♀; Vitshumbi (Sud lac Édouard), 13.I.1953, 6 ♂♂, 16 ♀♀; Kivu, île Wahu (Ru), 15-18.III.1953, 2 ♀♀; Albertville (lac Tanganika), 8.VIII.1953, 2 ♂♂, 7 ♀♀.

A common and widely distributed species, distinguished in the male from other species by the four round black spots in front and at the side of the lateral stripes; the female is stout and has a reddish thorax without markings.

Clinotanypus verbekei Freeman.

Clinotanypus verbekei Freeman, 1956, Bull. Brit. Mus. (Nat. Hist.), **4**, 290.

Albertville (lac Tanganika), 8-18.VIII.1953, holotype male and paratypes 5 ♂♂, 3 ♀♀.

The original description of this new species has been placed in Part II of my Studies of African Chironomidae for convenience. It is not unlike *claripennis* but is much darker and the thoracic stripes are black and only narrowly separated by yellow lines.

Cricotopus albitibia WALKER.

Chironomus albitibia WALKER, 1848, List Dipt. Brit. Mus., **1**, 16.
Cricotopus bicinctus var. *plumbeus* GOETGHEBUER, 1934, Rev. Zool. Bot. Afr., **25**, 201.
Cricotopus albitibia FREEMAN, 1956, Bull. Brit. Mus. (Nat. Hist.), **4**, 306.

Kivu, Goma (base), XII.1952, 13 ♂; Vitshumbi (Sud lac Édouard), 7.II.1953, 1 ♀; Kivu, île Wahu (Ru), 15-18.III.1953, 1 ♂.

Another common and widely distributed species, very similar to the European species *C. bicinctus* MEIGEN. It may be separated from other African species by the white tibiae and leaden yellow rings on segments 1 and 4 of the abdomen.

Cricotopus verbekei FREEMAN.

Cricotopus verbekei FREEMAN, 1956, Bull. Brit. Mus. (Nat. Hist.), **4**, 313.

Mbereze, Baie Pili-Pili, 8.II.1953, 3 ♂♂ (including the holotype).

I have placed the original description of this species in Part II of my Studies of African *Chironomidae*. Besides these specimens, there are other paratypes from Sudan and Nigeria. The abdomen has yellow bands on segments 1, 4 and 7, but the anterior tibiae have no white bands which distinguishes it from *tricinctellus* GOETGHEBUER.

Cricotopus scottae FREEMAN.

Cricotopus scottae FREEMAN, 1956, Bull. Brit. Mus. (Nat. Hist.), **4**, 312.

Vitshumbi (Sud lac Édouard), 10-24.I.1953, 16 ♂♂, 12 ♀♀.

The holotype of this species is from Cape Province and the original description has been placed in Part II of my Studies of African *Chironomidae*. It is a plain species, very similar to others such as *obscurus*; it is best distinguished by the obtuse inner coxite lobe of the male.

Nanocladius vitellinus KIEFFER.

Nanocladius vitellinus KIEFFER, 1913, Voy. Alluaud Jeannel Afr. Or., Ins. Dipt., **1**, 32. — FREEMAN, 1956, Bull. Brit. Mus. (Nat. Hist.), **4**, 339.

Vitshumbi (Sud lac Édouard), 7.II.1953, 2 ♂♂, 1 ♀.

The male is a small insect, matt black and with white antennal plumes, the female is more yellowish and with separate scutal stripes; both have pubescent eyes. It is widely distributed in East and South Africa.

Chironomus (Chironomus) palpalis GOETGHEBUER.

Chironomus palpalis GOETGHEBUER, 1934, Rev. Zool. Bot. Afr., **25**, 197.

Vitshumbi (Sud lac Édouard), I-II.1953, 10 ♂♂, and VII.1953, 33 ♂♂.

I have seen the type series of this species and can confirm the identification

of these specimens. The abdominal segments carry round dark spots and the anal point of the male is thick and down turned. The female has dark markings at the apices of the femora.

Chironomus (Chironomus) albomarginatus KIEFFER.

Chironomus albomarginatus KIEFFER, 1924, Ann. Soc. sci. Brux., **43**, (1), **260**. — FREEMAN, 1955, South Afr. Animal Life, Uppsala, **2**, 370.
Chironomus nivalis FREEMAN, 1954, Proc. R. ent. Soc. Lond., (B), **23**, 17.

Kivu, Goma (base), 31.VII.1953, 1 ♂.

This species is agin widely distributed. The thorax has dark stripes which are outlined with pruinosity.

Chironomus (Chironomus) palustris KIEFFER.

Chironomus palustris KIEFFER, 1913, Voy. Alluaud Jeannel Afr. Or., Ins. Dipt., **1**, 16. — FREEMAN, 1954, Proc. R. ent. Soc. Lond., (B), **23**, 18.

Vitshumbi (Sud lac Édouard), 10-13.I.1953, 5 ♂♂, 7 ♀♀.

This is a large species with faintly patterned wings. It is very common and widely distributed.

Chironomus (Xenochironomus) trisetosum KIEFFER.

Cladopelma trisetosum KIEFFER, 1922, Ann. Soc. ent. Fr., **91**, 54.

Kivu, île Wahu (Ru), 15-18.III.1953, 1 ♂, 1 ♀; Albertville (lac Tanganika), 8-25.VIII.1953, 27 ♂♂.

Kieffer placed this species in *Cladopelma* in some doubt and in my opinion it fits better into *Xenochironomus* because appendage 2 of the male hypopygium is quite well developed and has three or four long curved hairs at the apex. The anal point is very deep and is quite characteristic. The type series was from southern Sudan.

Chironomus (Xenochironomus) ugandae GOETGHEBUER.

Chironomus (Xenochironomus) ugandae GOETGHEBUER, 1936, Rev. Zool. Bot. Afr., **28**, 468.

Ituri, Kasenyi (lac Albert), 12.II.1953, 1 ♂ and 23.II.1953, 2 ♂♂.

These three specimens agree exactly with the holotype of Goetghebuer's species. The anal point is deep but not quite the same shape as in *trisetosum*, appendage 2 is racket-shaped. The type locality is Belgian Congo, Uganda, Namasagali.

? var. Kivu, Goma (base) : 26.XI.1952, 15 ♂♂, 6 ♀♀; 2.XII.1952, 4 ♂♂, 1 ♀; 1.II.1953, 4 ♂♂, 4.III.1953, 6 ♂♂.

In these specimens appendage 2 is rather narrower than in the type and they may prove to belong to a different species.

Cryptochironomus leucopus KIEFFER.

Cryptochironomus leucopus KIEFFER, 1923, Ann. Soc. ent. Fr., **92**, 156.

Ituri, Kasenyi (lac Albert), 16-26.II.1953, 2 ♂♂; Sabe, 16.XII.1953, 1 ♂.

A large and striking black, shining species, with trochanters, anterior femora and all tarsi yellow. The type locality is southern Sudan.

Cryptochironomus lindneri FREEMAN.

Cladopelma pseudolabis KIEFFER, 1921, Ann. Soc. ent. Fr., **91**, 53.
Chironomus (Cryptochironomus) lindneri (nom. nov.) FREEMAN, 1954, Arch. Hydrobiol., **48**, 443.

Vitshumbi (Sud lac Édouard), 13.I.1953, 6 ♂♂; Ituri, Kasenyi (lac Albert), 12.II.1953, 2 ♂♂.

This belongs to *Cryptochironomus* in its strictest sense, the hypopygium being of the same general form as in the type of the genus, *C. supplicans* MEIGEN; the anterior tarsi and tibiae are blackened. It is a common and widely distributed species in East Africa.

Cryptochironomus aegyptius KIEFFER.

Cryptochironomus aegyptius KIEFFER, 1925, Bull. Soc. R. ent. Égypte, **1924**, 288.

Vitshumbi (Sud lac Édouard), 1.II.1953, 6 ♂♂.

A small green species with characteristic hypopygium as figured by KIEFFER. It seems to be quite a common East African species.

Cryptochironomus dewulfianus GOETGHEBUER.

Chironomus (Cryptochironomus) dewulfianus GOETGHEBUER, 1934, Rev. Zool. Bot. Afr., **25**, 198.

Kivu, Goma (base), 2.XII.1952, 1 ♂, and 2.II.1953, 1 ♂; Vitshumbi (Sud lac Édouard), 13.I.1953, 1 ♂; Ituri, Kasenyi (lac Albert), 12.II.1953, 2 ♂♂.

A green species with black mesonotal stripes. The male styles are of a characteristic shape and only one very short appendage is present.

Cryptochironomus diceras KIEFFER.

Cryptochironomus diceras KIEFFER, 1923, Ann. Soc. ent. Fr., **92**, 163.

Kabimba (lac Tanganika), 11.VIII.1953, 1 ♂.

The hypopygium has the styles not unlike those of *C. lindneri* but the basal appendages are much smaller and are figured by Kieffer. The type locality is southern Sudan.

Cryptochironomus subovatus Freeman.

Chironomus (Cryptochironomus) subovatus Freeman, 1954, Proc. R. ent. Soc., (*B*), **23**, 20.

Albertville (lac Tanganika), 8.VIII.1953, 2 ♂♂.

Originally described from Cape Province, but other specimens are now known from Sudan, suggesting that the species has a wide East African distribution. It is a dark species, sometimes with separate stripes; the male hypopygium has characteristic sub-oval styles and the coxite appendages are very reduced.

Cryptochironomus acutus Goetghebuer.

Chironomus (Harnischia) acutus Goetghebuer, 1936, Rev. Zool. Bot. Afr., **28**, 470.

Vitshumbi (Sud lac Édouard), 1.II.1953, 2 ♂♂.

I prefer to regard this species as belonging to *Cryptochironomus* and not to *Harnischia*. It is a fairly small species, green in colour, with elongate pointed male styles; the coxite appendages are absent.

Cryptochironomus monilis Freeman.

Chironomus (Cryptochironomus) monilis Freeman, 1954, Proc. R. ent. Soc. Lond., (B), **23**, 19.

Vitshumbi (Sud lac Édouard), 13.I.1953, 2 ♂♂; Kiavinionge (Nord lac Édouard), 27.III.1953, 4 ♂♂.

A tiny green insect with simple hypopygium, coxite appendages being absent and styles practically fused to coxites. It was originally described from Cape Province but probably has an East and South African distribution.

Dicrotendipes pictipennis Kieffer.

Dicrotendipes pictipennis Kieffer, 1913, Voy. Alluaud Jeannel Afr. Or., Ins. Dipt., **1**, 23. — Freeman, 1955, Explor. Parc Nat. Albert, Miss. G. F. de Witte, fasc. **83**, 22.

Kiavinionge (Nord lac Édouard), 27.III.1953, 9 ♂♂; Ishango-bac, 20.II.1954, 2 ♂♂.

This is a common East African species separated from others in the genus by the presence of dark knees only on the front legs and by the absence of a tarsal beard. The arrangement of the wing spots is similar to that of the next species.

Dicrotendipes fusconotatus Kieffer.

Calochironomus fusconotatus Kieffer, 1922, Ann. Soc. ent. Fr., **91**, 68.
Dicrotendipes fusconotatus Freeman, 1955, Explor. Parc Nat. Albert, Miss. G. F. de Witte, fasc. **83**, 22.

Vitshumbi (Sud lac Édouard), 13.I.1953, 35 ♂♂, 15 ♀♀, and 7.II.1953,

4 ♂♂; Mbereze, Baie Pili-Pili, 8.II.1953, 4 ♂♂; Kiavinionge (Nord lac Édouard), 27.III.1953, 3 ♂♂; Emb. Semliki, 24.XII.1953, 10 ♂♂, 1 ♀; Ishango-bac, 20.II.1954, 13 ♂♂; Ituri, Kasenyi, 12.II.1953, 4 ♂♂, 6 ♀♀.

This is another common East African species which can be distinguished from the preceding by the dark knees to all the legs. It differs from *peringueyanus* by the presence of a dark spot in the centre of cell M_{3+4}. A pair from Ituri, Kasenyi is much darker and larger, though both are structurally indistinguishable from the smaller more usual specimens; further study may show the presence of a second species.

Dicrotendipes peringueyanus Kieffer.

Dicrotendipes peringueyanus Kieffer, 1924, Ann. Soc. sci. Brux., **43**, (1), 257.

Kivu, Goma (base), XII.1952, 3 ♂♂, 1 ♀; Albertville (lac Tanganika), 8-27.VIII.1953, 9 ♂♂.

The main difference between this species and the previous one lies in the absence of a spot in the middle of the fork cell and the presence of darkening over the fork itself. Structurally and in leg colour the two species are very similar. It was described from South Africa.

Nilodorum brevibucca Kieffer.

Nilodorum brevibucca Kieffer, 1922, Ann. Soc. ent. Fr., **91**, 45.

Kivu, Goma (base), XI.1952-III.1953, 44 ♂♂, 12 ♀♀; Vitshumbi (Sud lac Édouard), 13.I.1953, 35 ♂♂, 5 ♀♀; Ituri, Kasenyi (lac Albert), 12.II.1953, 17 ♂♂; Kivu, île Wahu (Ru), 15-18.III.1953, 3 ♂♂; Albertville (lac Tanganika), 27.VIII.1953, 1 ♂.

The smooth rounded grey-dusted thorax, reduced mouthparts and racket-shaped male appendages to the hypopygium make this species easily determined. It is one of the commonest and most widely distributed species of the family in the African fauna.

Nilodorum brevipalpis Kieffer.

Chironomus brevipalpis Kieffer, 1918, Ann. Mus. Nat. Hung., **16**, 69.
Nilodorum dewulfi Goetghebuer, 1934, Rev. Zool. Bot. Afr., **25**, 196 (Syn. nov.).

Kivu, Goma (base), XI-XII.1952, 30 ♂♂, 3 ♀♀; Vitshumbi (Sud lac Édouard), 11-13.I.1953, 13 ♂♂, 3 ♀♀; Kivu, lac Vert, forêt route Goma-Sake, 8.I.1954, 5 ♂♂.

Through the kindness of Dr. Mihalyi I have been able to examine the type of this species and I have found it to be the species later described by Goetghebuer as *N. dewulfi*, a name which must fall as a synonym.

It is a smaller species than *brevibucca* and is usually rather paler, but the

only certain way to separate the two lies in the structure of appendage 2 of the male hypopygium, which in *brevipalpis* is more or less rectangular. It is a wide-spread East African species.

Nilodorum fractilobus KIEFFER.

Phytochironomus fractilobus KIEFFER, 1923, Ann. Soc. ent. Fr., **92**, 151.
Nilodorum elongatum FREEMAN, 1955, Explor. Parc Nat. Upemba, Miss. G. F. de Witte, fas. **35**, (6), 98 (Syn. nov.).

Vitshumbi (Sud lac Édouard), I-II.1953, 4 ♂♂.

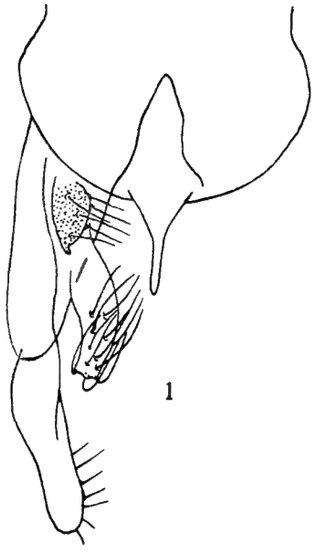

FIG. 1. — Male hypopygium of *Nilodosis grisea* n. sp.

Since describing *N. elongatum* I have realised that it is a redescription of *fractilobus*. The type is lost, but from KIEFFER's figure, especially the shape of the styles, it is certain that the synonymy is correct.

This species is not as typical a member of the genus as the preceding two, and it is considerably darker than they are. The anterior tarsi of the male have a much shorter beard and appendage 2 of the hypopygium is longer and narrower than in *brevipalpis*. It seems to have a fairly wide distribution in East Africa; the type locality is southern Sudan.

Nilodosis grisea sp. n.

The genus *Nilodosis* was described by KIEFFER (Ann. Soc. ent. Fr., 1921, **90**, 30) from a Sudanese species *N. fusca* KIEFFER which is automatically the type of the genus. The genus is similar to *Endochironomus* but may be distin-

guished by the prominent anterior tibial spur, greater reduction of the prothorax which is invisible from above and by the absence of pulvilli; the male antennae are 14-segmented and those of the female 6-segmented, the wings are faintly patterned. *N. grisea* is the second known species and is very similar to *fusca* but distinguished by the plain grey thorax, which is striped with pruinosity in *fusca*, and by the reduction of appendage 1 of the male hypopygium.

Male : Wing length 3,0 mm.

Head blackish or dark grey, antennal flagellum brown, plumes pale; palpi rather short; A.R. about 3, frontal tubercles absent. Thorax covered with plain grey dusting and without stripes; dorso-central bristles uniserial, pale and not very conspicious; prothorax reduced and not visible from above. Legs mainly blackish; basitarsi, anterior tibiae and bases of femora yellowish; L.R. 1,75, anterior tarsi with sparse beard, pulvilli absent, anterior tibial scale conical and ending in a curved spur, posterior combs broad and separated, each with a short spur. Wings very faintly clouded and with pale areas around the margin; R_{2+3} ending midway between R_1 and R_{4+5}, cross-vein blackened; halteres dark. Abdomen black and with pale hairs. Hypopygium (fig. 1) with long coxites and straight styles; appendage 1 short and broad, with long hairs and sometimes with a slight hook at the apex; appendage 2 short and with long curved hairs.

Female not known.

Holotype male and paratypes 4 ♂♂, Belgian Congo : Albertville (lac Tanganika), 8-25.VIII.1953 (J. VERBEKE). Holotype in « Institut royal des Sciences naturelles de Belgique ».

Stenochironomus edwardsi sp. n.

A variable species with shoulders pale, stripes partially brown, abdomen white. Legs darkened above and below knees, femora with additional and variable markings, wings with transverse dark band distal to cross-vein and posterior fork, spreading into anal cell and with variable basal darkening. Distinguished from other African species known to me by the pattern, especially of legs and wings, structurally very similar to other species. Perhaps closest to *S. pustulatus* FREEMAN, but in that species the transverse wing marking is basal to posterior fork.

Male : Wing length 2-3 mm.

Head and pedicel yellowish brown, mouthparts and flagellum darker, A.R. about 1,2. Thorax yellowish, shoulders whiter, anterior half of median stripe may be whitish, lateral stripes with variable amount of darkening especially anteriorly, scutellum and postnotum at least partially brown; S. African specimens have all stripes and sternopleuron brown; dorso-central bristles uniserial. Legs yellow with variable dark markings; Congo and Kenya specimens have apices of femora and bases of tibiae (half of anterior tibiae) dark, anterior

femora with central dark band, apices of tibiae and tarsal segments narrowly dark; S. African specimens have femora with a good deal of darkening and a pale band in apical half, tibiae also darker; L.R. about 1,4. Wings with a broad dark band distal to cross-vein and posterior fork, occupying half of fork cell and spreading basally into anal cell; wing also dark at base in some specimens. Halteres whitish. Abdomen whitish yellow, with vague posterior darkenings probably due to gut content. Hypopygium very similar to other species of the genus; anal point long and narrow, apical margin of tergite more or less transverse and with strong hairs; appendage 1 short and with a few hairs, appendage 2 and styles elongated.

Female : Quite similar to male but usually rather darker and with more definite markings on basal halves of femora which have subapical pale band as in S. African males. Congo female has also a sub-basal pale band on posterior and middle femora; in this specimen the basal half of the wing has a good deal of extra clouding. The main wing cloud sometimes has a pale area in cell R_{4+5}. Antennal segments with well formed narrow necks, apical segment a little longer than subapical.

Holotype male and paratype 1 ♀, Kenya : Mt. Elgon, Swam River, 5,000 ft., II.1935 (F. W. Edwards). Other paratypes : Belgian Congo : Albertville (lac Tanganika), 8.VIII.1953, 1 ♂, 1 ♀ (J. Verbeke). Natal : Mt. Currie, Kokstad, 21.III.1953, 1 ♂ (G. H. Satchell).

Transvaal : Lydenburg Distr., Waterval, 23.IV.1955, 3 ♂♂, 1 ♀ (A. D. Harrison). Congo specimens in « Institut royal des Sciences naturelles de Belgique », one paratype in South African Museum, Cape Town, remainder of series in British Museum.

Stictochironomus caffrarius Kieffer.

Polypedilum caffrarium Kieffer, 1921, Ann. Soc. sci. Brux., **41**, (1), 97.
Stictochironomus caffrarius Freeman, 1955, South African Animal Life, Uppsala, **2**, 377.

Vitshumbi (Sud lac Édouard), 13.I.1953, 31 ♂♂, 1 ♀; Ituri, Kasenyi (lac Albert), II.1953, 1 ♂, 1 ♀; Albertville (lac Tanganika), 25.VIII.1953, 12 ♂♂.

The spotted wings and striking broad pruinose bands on the thorax make this species readily recognizable. It has a wide distribution in East and South Africa, being particularly abundant in Sudan.

Stictochironomus puripenne Kieffer.

Polypedilum puripenne Kieffer, 1921, Ann. Soc. sci. Brux., **41**, (1), 97.
Stictochironomus puripenne Freeman, 1955, South African Animal Life, Uppsala, **2**, 378.

Albertville (lac Tanganika), 8-25.VIII.1953, 3 ♂♂.

This is a dark brown species with mottled thorax and plain wings; the legs are whitish. The species is distributed from Abyssinia and Sudan to the Cape.

Kribionympha declivis KIEFFER.

Kribionympha declivis KIEFFER, 1922, Ann. Soc. ent. Fr., **91**, 7.

Albertville (lac Tanganika), 13.VIII.1953, 1 ♂.

I hope to discuss the status of this genus at a later date elsewhere. The species is not unlike a species of *Polypedilum*, the thorax is pale and the abdomen dark, frontal tubercles are present and there are three pairs of appendages to the hypopygium. The type locality is French Cameroons, Kribi.

Polypedilum deletum GOETGHEBUER.

Polypedilum deletum GOETGHEBUER, 1936, Rev. Zool. Bot. Afr., **28**, 483.

Kivu, Goma (base), X-XII.1952, II-III.1953, 73 ♂♂, 20 ♀♀; Kivu, île Wahu (Ru), 15-18.III.1953, 9 ♂♂.

A blackish species with dark halteres and faint wing spots mainly in cell R_{4+5}. It is known to me only from Belgian Congo, the type locality being Vitshumbi.

Polypedilum ramiferum KIEFFER.

Polypedilum ramiferum KIEFFER, 1922, Ann. Soc. ent. Fr., **91**, 24.

Ituri, Kasenyi (lac Albert), 26.II.1953, 1 ♂; Albertville (lac Tanganika), VIII.1953, 20 ♂♂.

This is an unusual looking species for the genus but it seems to have all the generic characters. The wings are faintly mottled, the abdomen is ringed, the legs have dark markings and legs and body are unusually hairy. The male hypopygium is peculiar in that the long hairs on the inner side of the style carry short branches making them appear plumose.

I have material from Sudan and Uganda, and the original locality was French Cameroons, Kribi, giving it a wide Central African distribution.

Polypedilum abyssiniae KIEFFER.

Polypedilum abyssiniae KIEFFER, 1918, Ann. Mus. Nat. Hung., **16**, 65.

Kabimba (lac Tanganika), 11.VIII.1953, 5 ♂♂.

A small species with well marked blackish spots on the wings the largest one being in the basal half of cell R_{4+5}. It can be distinguished from *octomaculatum* GOETGHEBUER by the presence of a spot in cell M basal to the cross-vein. The anal point of the male is very broad and short.

Polypedilum decemmaculatum GOETGHEBUER.

Polypedilum decemmaculatum GOETGHEBUER, 1934, Rev. Zool. Bot. Afr., **25**, 195.

Ituri, Kasenyi (lac Albert), 23.II.1953, 1 ♂; Albertville (lac Tanganika), 8-13.VIII.1953, 2 ♂♂, 1 ♀; Kabimba (lac Tanganika), 11.VIII.1953, 12 ♂♂, 1 ♀; Sabe (lac Albert), 16.XII.1953, 6 ♂ ♂.

A species with distinctive wing pattern as figured by GOETGHEBUER; there are three spots in cell R_{4+5} and also a spot basal to the cross-vein in cell M besides longitudinal markings more distally in that cell and others in the fork cell and anal cell. I have seen other material from the Belgian Congo.

Polypedilum longicrus KIEFFER.

Polypedilum longicrus KIEFFER, 1922, Ann. Soc. ent. Fr., **91**, 40.

Ituri, Kasenyi (lac Albert), **23.II.1953**, 1 ♂.

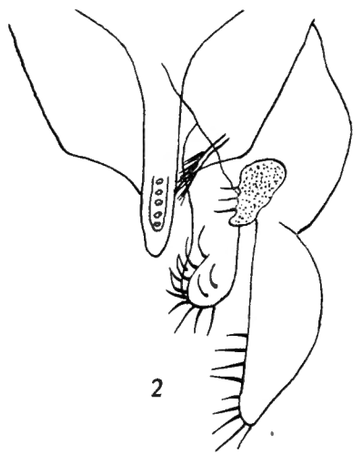

FIG. 2. — Male hypopygium of *Tanytarsus* (*Tanytarsus*) *nigrocinctus* n. sp.

This species is most easily recognized by the arrangement of the spots on the wings; besides darkenings in the median and anal cells, there are two spots in cell R_{4+5} and two in the posterior fork cell, one covering the posterior branch. It was described from Belgian Congo but I have seen a good deal of material from southern Sudan.

Polypedilum ? dewulfi GOETGHEBUER.

Polypedilum dewulfi GOETGHEBUER, 1936, Rev. Zool. Bot. Afr., **28**, 484.

Kabimba (lac Tanganika), **11.VIII.1953**, 10 ♂♂; Albertville (lac Tanganika), **27.VIII.1953**, 2 ♂♂.

Although resembling *dewulfi* in general appearance and in hypopygial structure, the halteres of these specimens are dark and they may belong to a different species. It is a plain winged species with simple hypopygium.

Tanytarsus (Tanytarsus) pallidulus FREEMAN.

Tanytarsus (Tanytarsus) pallidulus FREEMAN, 1954, Proc. R. ent. Soc. Lond., (B), **23** **24**.

Ituri, Kasenyi (lac Albert), **13.XII.1953**, 4 ♂♂.

A medium sized green species with yellowish scutal stripes. It is best distinguished from other species of the genus by the structure of the male hypopygium; appendage **1**a is absent, **2**a is short and with simple hairs, the styles are fairly long and pointed at the apex. It was described from Cape Province, but has since been found to have a much wider distribution in East and Central Africa.

Tanytarsus (Tanytarsus) nigrocinctus sp. n.

Quite a large species for the genus, falling into *Tanytarsus* sensu stricto Series **1** of EDWARDS' classification (**1929**, Trans. ent. Soc. Lond., **77**, **414**). Frontal tubercles large, thorax with brown markings, abdomen banded, wings hairy at apex; A.R. **2**, hypopygium not unlike Palaearctic species of the same group, most resembling *T. atrocinctus* GOETGHEBUER in the African fauna but easily separated on size, colour and absence of dots on the anal point of latter species.

Male : Wing length 1,8-2,0 mm.

Head yellowish, mouthparts and antennae brown; frontal tubercles well developed, A.R. **2**. Thorax yellowish with brown markings on the stripes, especially lateral ones, on the sternopleuron and postnotum. Legs yellow; L.R. **2**, pulvilli absent, anterior tarsi with scanty beard, posterior tibial combs well separated, each with a spur. Wings with macrotrichia at apices of cells R_{4+5}, M_{1+2}, M_{3+4}, and as single rows in cells R_{4+5} and M_{1+2}; halteres white. Abdomen greenish or brownish yellow with apical third of segments **2**-**7** black, segments **1** and 8 wholly black, segments **2**-**7** with a dark longitudinal median stripe in addition to the apical band. Hypopygium as in figure **2**; anal point with row of dots (probably hair pits), IXth tergite with shoulders, appendage **1**a absent, **2**a fairly small and with simple hairs, styles slightly contracted at apex.

Female very similar to male; abdomen more evenly dark but with yellow markings showing in some specimens; wings with macrotrichia more evenly distributed.

Holotype male and paratype 1 ♀, Uganda : lac Victoria, **24.V.1952** (W. W. MACDONALD). Other paratypes : Kenya : Kitui, **29.VI.1953**, 1 ♂, 3 ♀♀ (C. TEESDALE). Belgian Congo : lac Kivu, île Wahu (Ru), **15-18.III.1953**, 6 ♂♂, 2 ♀♀ (J. VERBEKE). Five paratypes returned to Dr. VERBEKE, holotype and remainder of specimens in British Museum.

Tanytarsus (Cladotanytarsus) pseudomancus GOETGHEBUER.

Tanytarsus pseudomancus GOETGHEBUER, 1934, Rev. Zool. Bot. Afr., **25**, 200.

Ruanda, Kisenyi (près emb. rive Sebeya), **4.XII.1952**, 57 ♂♂; Kivu, Goma (base), **XII.1952** and **II.1953**, 4 ♂♂; Vitshumbi (Sud lac Édouard), **7.II.1953**, 7 ♂ ♂; Mbereze, baie Pili-Pili, **8.II.1953**, 4 ♂ ♂; Ituri, Kasenyi (lac Albert), **23.II.1953**, 8 ♂♂; Kivu, île Wahu (Ru), **15-18.III.1953**, 7 ♂♂; Kiavinionge, (Nord lac Édouard), **27.III.1953**, 4 ♂♂.

Very similar to the European species *T. mancus* and to some other African species. The abdomen of the male has dark rings on the segments; appendage 1 of the hypopygium is narrow and appendage 1 a rather long. It appears to be a common species in Central Africa and I have also seen South African specimens.

SUMMARY.

The material mentioned in this report is the collection of pinned adult Chironomids made by Dr. J. VERBEKE whilst taking part in the Belgian Hydrobiological Expedition 1952-1954 to the East African Lakes Kivu, Edward and Albert. Nearly 50 species were present, including four new ones; most of the major groups and genera were represented. Full descriptions and keys to the species are not given because these are being prepared elsewhere for the African Chironomid fauna as a whole, but brief summaries of distinguishing features are included.

BRITISH MUSEUM, NATURAL HISTORY.