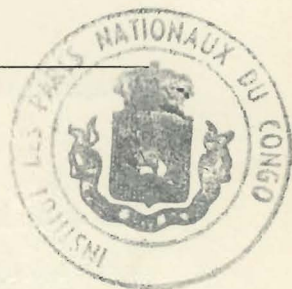


PARC NATIONAL DE LA GARAMBA. — MISSION H. DE SAEGER

en collaboration avec

**P. BAERT, G. DEMOULIN, I. DENISOFF, J. MARTIN, M. MICHA, A. NOIRFALISE, P. SCHOEMAKER,
G. TROUPIN et J. VERSCHUREN (1949-1952).**

Fascicule 33 (2)



**ENDOMYCHIDAE
(COLEOPTERA POLYPHAGA)**

BY

H. F. STROHECKER (Miami)

Although the northeastern part of the Congo Republic is near the northern limit of endomychid distribution in Central Africa, the intensive collecting of the De Saeger Expedition has resulted in the capture of more than 15,000 specimens. Most of these are referable to the genus *Danaë*, but several other genera are represented.

I wish to thank HENRI DE SAEGER for making these specimens available for my continuing study of the *Endomychidae*. Grant G-9023 from the United States National Science Foundation has accelerated the survey of this material and enabled me to clarify taxonomic problems through study of the Gorham and Arrow types in the British Museum, and the Pic types in the Paris Museum.

1. — Subfamily EUMORPHINAE.

Genus **MYCETINA** MULSANT.

MULSANT, Hist. Nat. Coleop. France, Sulcicolles (1846), p. 15.

***1. — Mycetina africana GORHAM.**

GORHAM, Trans. Ent. Soc. London (1874), p. 442.

A single male. Collection No. 3843.

(*) Type studied.

Genus **LYCOPERDINA** LATREILLE.

LATREILLE, Genera Crust. et Insect. (1803), III, p. 73.

*2. — **Lycoperdina clavata** ARROW.

ARROW, Bull. et Ann. Soc. Ent. Belg. (1948), LXXXIV, p. 47.

Two females bearing the collection numbers 3068 and 3190 are referred provisionally to *clavata*.

Genus **ANCYLOPUS** COSTA.

COSTA, Fauna Regno Napoli, Coleotteri, Endomychidei (1854), p. 14.

3. — **Ancylopus bisignatus** GERSTAECKER.

(Figs. 1 a, b.)

GERSTAECKER, Monographie der Endomychiden (1858), p. 192.

Study of male aedeagi shows that five forms, probably species, of *Ancylopus* (s.s.) occur in Africa. The distribution of these is puzzling and requires additional study. The Senegal specimen, of which the aedeagus is figured, has the coloration described by GERSTAECKER, i.e. ferruginous with two small, black spots on each elytron. The Garamba males have the aedeagus essentially identical, but the elytra black, each with two red spots.

Collection notes indicate that this species is associated with low vegetation, especially grasses. Before me are 375 males and 183 females. Collections Nos. 1129, 1274, 1275, 1320, 1332, 1341, 1564, 1570, 1574, 1614, 1801, 1876, 1877, 1887, 1890, 1900, 1918, 2071, 2072, 2084, 2140, 2308, 2484, 2551, 2558, 2642, 2659, 2765, 2775, 2846, 2881, 2902, 2915, 2916, 2917, 2942, 2967, 3548, 3941.

Genus **INDALMUS** GERSTAECKER.

GERSTAECKER, Monographie der Endomychiden (1858), p. 185.

The collections contain examples of nine species of *Indalmus*, the largest assembly which I have seen from any comparable area. Two of these species are undescribed.

4. — **Indalmus grandis** PIC.

PIC, Mélanges Exotico-Ent. (1920), 34, p. 1.

VILLIERS, Bulletin I.F.A.N. (1954), XVI, pp. 515, 516, figs. 3-6.

82 males, 108, females. Collection Nos. 649, 991, 1304, 1386, 1801, 1826, 1876, 1984, 2052, 2112, 2135, 2282, 2317 *a, b*, 2357, 2420, 2484, 2486, 2594, 2642, 2654, 2700, 2717, 2739, 2770, 2780, 2805, 2821, 2861, 2863, 2873, 2902, 2967, 3190, 3281, 3695, 3705, 3719, 3761, 3807, 3883, 3887, 3919, 3943, 3954, 3989, 4023, 4045, Nagero IV-30.VII.54 (C. Nebay).

*5. — **Indalmus percheroni** STROHECKER.

STROHECKER, Revue Zool. Bot. Africaines (1954), XLIX, pp. 145, 147, fig. 10.

21 males, 14 females. Notes indicate its occurrence under decaying leaves and among tufts of grasses and sedges, probably associated with vegetable mould. Collection Nos. 160, 175, 991, 1129, 1275, 1320, 1537, 2317 *a, b*, 2420, 2700, 2873, 2915, 3018, 3240, 3268, 3281, 3288, 3306, 3411.

*6. — **Indalmus rufocinctus** STROHECKER.

STROHECKER, Revue Zool. Bot. Africaines (1954), XLIX, pp. 143, 146, fig. 6.

6 males, 6 females, taken in superficial layers of soil and from tufts of grasses. Collection Nos. 2282, 2420, 3701, 3761, 3792, 3883.

*7. — **Indalmus obscurus** STROHECKER.

STROHECKER, Revue Zool. Bot. Africaines (1954), XLIX, pp. 143, 144, figs. 4, 10.

3 males, 6 females with collection data similar to those of the preceding species. Nos. 2484, 2654, 3320, 3854, 3883, 3943.

*8. — **Indalmus vittiger** STROHECKER.

STROHECKER, Revue Zool. Bot. Africaines (1954), XLIX, pp. 143, 144, fig. 3.

87 males, 90 females taken under leaves in dry forest and among grass tufts. Collection Nos. 1129, 1274, 1275, 1315, 1320, 1326, 1341, 1386, 1502, 1507, 1564, 1703, 1856, 1876, 1954, 2225, 2282, 2317 *a, b*, 2594, 2717, 2805, 2821, 2863, 2873, 2874, 2902, 2915, 2957, 2967, 3015, 3017, 3018, 3106, 3115, 3190, 3240, 3268, 3281, 3283, 3288, 3360.

*9. — **Indalmus nigrescens** STROHECKER.

STROHECKER, Mitteil. Zool. Mus. Berlin (1959), XXXV, p. 179, fig. 3.

83 males 65 females, many from the same situations as the preceding species. Collection Nos. 63, 175, 305, 1078, 1084, 1085, 1107, 1129, 1190, 1275, 1320, 1325, 1332, 1360, 1386, 1444, 1487, 1537, 1564, 1565, 1570, 1616, 1705, 1735, 1795, 1856, 1876, 1887, 2317 *a, b*, 2420, 2478, 2700, 2739, 2805, 2821, 2863, 3002, 3018, 3190, 3240, 3288, 3296, 3320, 3383, 3401, 3411, 3761, 3883, 3943, 3954.

10. — **Indalmus pici** VILLIERS.

VILLIERS, Bulletin I.F.A.N. (1954), XVI, p. 520, figs. 21-23.

17 males, 20 females, apparently associated with the two preceding species. Collection Nos. 175, 190, 305, 1190, 1275, 1327, 1332, 1487, 1537, 1564, 1801, 2280, 2478, 2590, 2821, 2967, 3281, 3412,, 3883, 3919.

*11. — **Indalmus saegeri** n. sp.

(Fig. 2.)

A species of the *bivittatus* group; entirely black, pronotum densely punctured. Length : 5,4 mm.

Sides of pronotum almost straight, a little convergent basad and slightly rounded to the front angles. Lateral sulci linear, deep, reaching the middle of pronotal disc. Transverse sulcus deep and close to base. Elytra but little broader at base than pronotum, gradually widened to apical third, rather abruptly rounded to apex.

In the male there is a short, triangular tooth on the front tibia distal to mid-length, and the hind tibia is sinuate, a little enlarged apically.

Holotype : male : taken by H. DE SAEGER from grasses growing in fissures in a granitic outcrop, 17 kilometers from the Bagbele camp. Collection No. 505.

Allotype : female : data as for holotype.

Paratype : male : data as for holotype.

*12. — **Indalmus afer** n. sp.

(Fig. 3.)

Very much like the preceding in form. Perhaps the final coloration is black but the series at hand consists of specimens which are dark brown with legs and antennae black. Length : 4,8-5,2 mm.

The external sexual characters of the male are a short, sharp tooth on the front tibia and a slight undulation of the hind tibia.

Holotype : male : collected among grasses growing on alluvium in the valley of the Kalangata. Collection No. 2420.

Allotype : female : data as for holotype.

Paratypes : 7 males, 8 females. Collection Nos. 305, 1386, 2282, 2420, 2424, 2615, 2863, 3420, 3678, 3989.

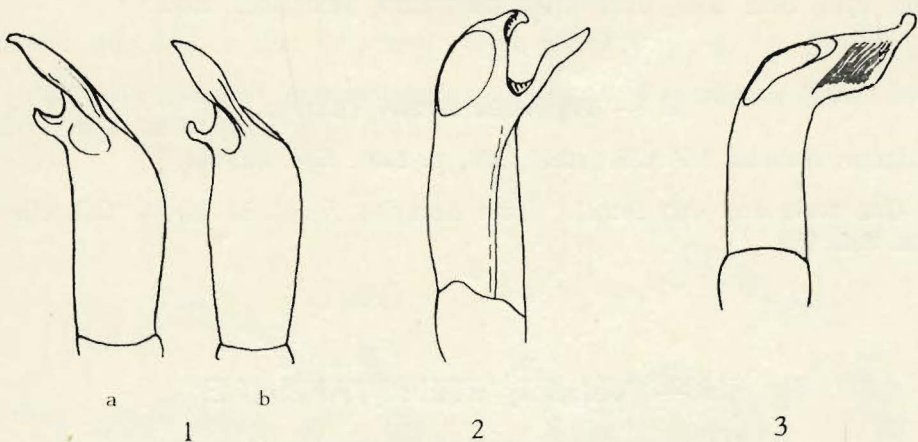


FIG. 1. — *Ancylops bisignatus* GERSTAECKER.

a : aedeagus of specimen from Senegal, dorsal view; b : aedeagus of specimen from Garamba National Park, dorsal view.

FIG. 2. — *Indalmus saegeri* n. sp.
Aedeagus, ventral view.

FIG. 3. — *Indalmus afer* n. sp.
Aedeagus, ventral view.

Genus **TRYCHERUS** GERSTAECKER.

GERSTAECKER, Archiv f. Naturgeschichte (1857), XXIII, p. 223.

*13. — **Trycherus fryanus** GORHAM.

GORHAM, Trans. Ent. Soc. London (1875), p. 12.

VILLIERS, Bulletin I.F.A.N. (1953), XV, p. 1487, figs. 87-88.

One male and one female, collected in wooded savanna and in forest. Collection Nos. 3328, 3817.

*14. — **Trycherus senegalensis** GERSTAECKER.

GERSTAECKER, Archiv f. Naturgeschichte (1857), XXIII, p. 223.

**Trycherus spinipes* ARROW is quite certainly a synonym. The Garamba material consists of 14 males and 5 females. Most of these were taken from dead wood in forest. One note describes the forest as of guinean type. A few records cite capture on trees in wooded savanna, and two specimens were taken from low savanna vegetation. Collection Nos. 934, 1508, 2112, 2188, 2298, 2746, 2942, 3068, 3115, 3190, 3367, 3475, 3499, 3622, 3826.

15. — **Trycherus arrowi** VILLIERS.

VILLIERS, Bulletin I.F.A.N. (1953), XV, p. 1491, figs. 102-104.

One male and one female, from decaying wood in forest. Collection Nos. 801, 929.

II. — Subfamily STENOTARSINAE.

Genus **DANAË** REICHE.

REICHE, in FERRET et GALINIER, Voyage en Abyssinie (1847), III, p. 408.

Study of the GORHAM, ARROW and PIC types permits considerable clarification of the taxonomy of this difficult genus. The collections from Garamba Park contain thousands of specimens. While the males offer good specific characters, I cannot be certain that assignments of females are altogether correct.

*16. — **Danaë rufescens** PIC.

PIC, Mélanges Exotico-Ent. (1921), 34, p. 2.

**Danaë nigricornis* ARROW, Bull. et Ann. Soc. Ent. Belg. (1948), LXXXIV, p. 52.

**Danaë laticollis* STROHECKER, Explor. Parc. Nat. Upemba (1952), fasc. 7, p. 12, figs. 7, A-B.

1455 males and 3491 females. The principal collection sites were herbaceous vegetation and bushes in forest or wooded savanna. Collection Nos. 420, 439, 441, 486, 519, 529, 576, 612, 632, 673, 769, 838, 899, 929, 1424, 1425, 1430, 1507, 1546, 1548, 1726, 1803, 1888, 1900, 1916, 1950, 1968, 1970, 1984,

2052, 2056, 2057, 2063, 2092, 2195, 2242, 2247, 2318, 2338, 2379, 2380, 2383, 2392, 2396, 2446, 2467, 2468, 2471, 2475, 2481, 2486, 2491, 2590, 2599, 2600, 2602, 2651, 2659, 2678, 2708, 2718, 2761, 2769, 2806, 2807, 2808, 2814, 2816, 2818, 2821, 2874, 2901, 2902, 2910, 2912, 2913, 2939, 2987, 2991, 3067, 3123, 3125, 3214, 3387, 3402, 3417, 3431, 3447, 3448, 3450, 3500, 3501, 3503, 3608, 3657, 3700, 3714, 3719, 3720, 3721, 3729, 3743, 3758, 3761, 3763, 3765, 3773, 3792, 3793, 3805, 3919, 3939, 3944, 3983, 3988, 4036, 4040, 4042, 4057, 4078, 4083, 4103, 4805.

*17. — *Danaë ovata* ARROW.

ARROW, Bull et Ann. Soc. Ent. Belg. (1948), LXXXIV, p. 53.

One male and two females taken from leaves of bushes in forest. Collection Nos. 2957 (male), 2282, 3281.

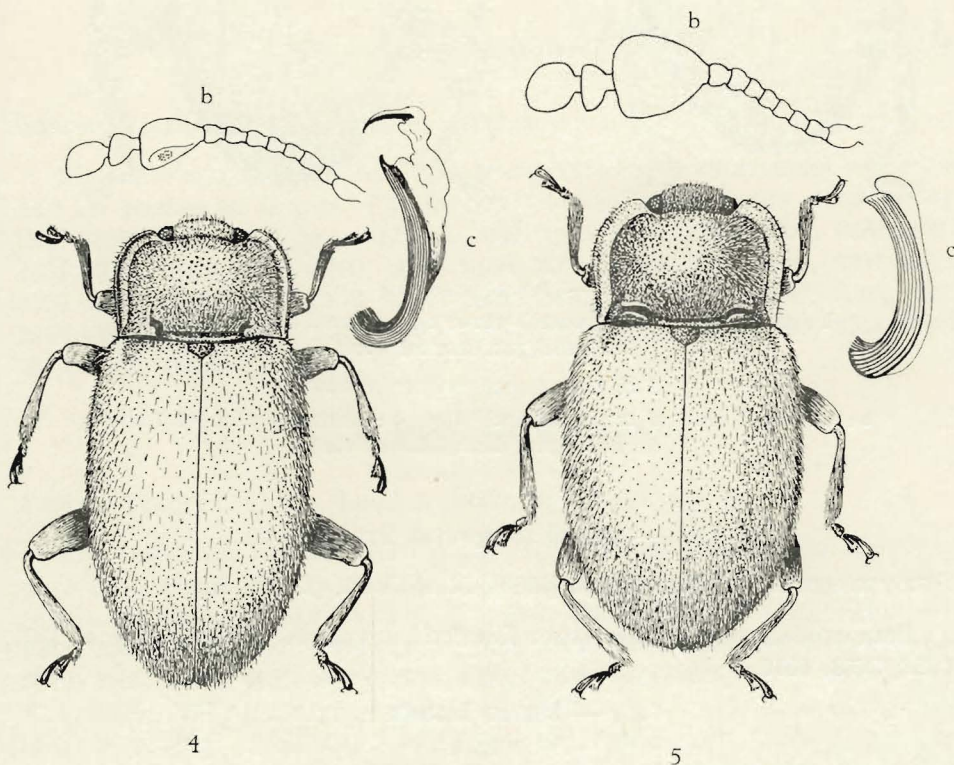


FIG. 4. — *Danaë incerta* n. sp.

b : antenna of male, ventral view; c : aedeagus, dextro-dorsal view.

FIG. 5. — *Danaë cavicollis* ARROW.

b : antenna of male, ventral view; c : aedeagus, dextro-dorsal view.

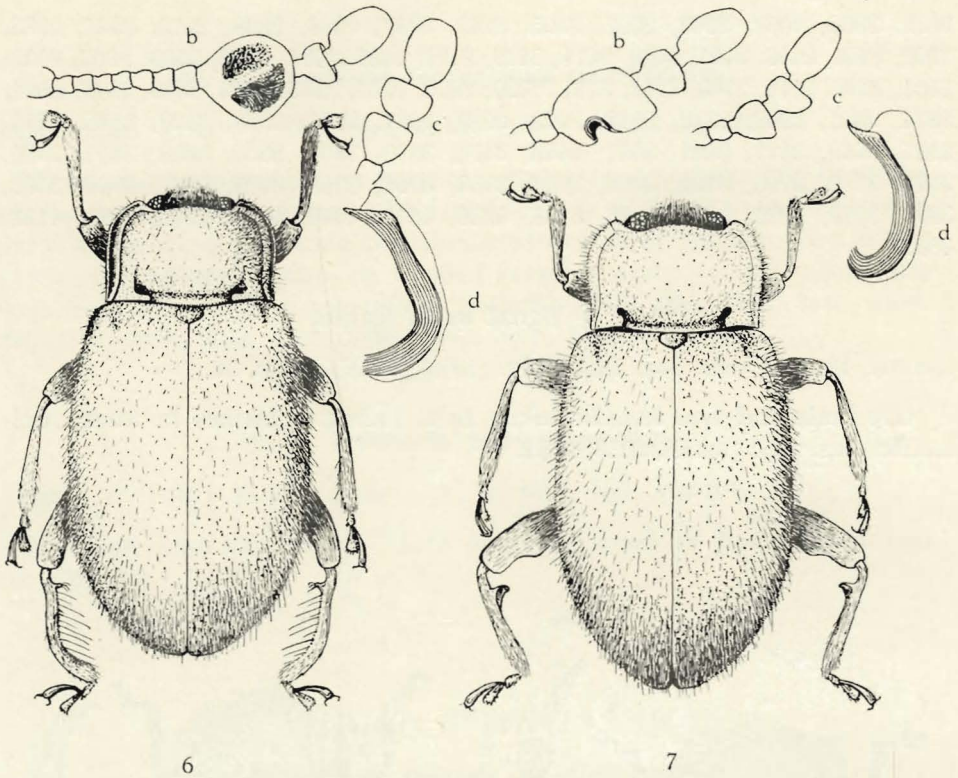


FIG. 6. — *Danae curvipes* ARROW.

b: antenna of male, ventral view; c: antennal club of female;
d: aedeagus, dextral view.

FIG. 7. — *Danae armata* ARROW.

b: antennal club of male, ventral view; c: antennal club of female;
d: aedeagus, dextro-dorsal view.

*18. — ***Danae compressa*** STROHECKER.

STROHECKER, Ann. Mus. Congo (1960), LXXXVIII, p. 267, fig. 1.

Four males, one female from *Loudetia* savanna. Collection Nos. 1507, 3656, 3678, 4070.

*19. — ***Danae incerta*** n. sp.

(Fig. 4.)

Rather elongate oval in form, rust-red with the eyes and antennal club black. Length 2,8-3,6 mm.

Pronotum with disc densely punctured, its lateral sulci short and rather shallow, its raised side margins moderately broad and shallowly sulcate, narrowed at base. Elytra a little more than three times as long as pronotum,

subparallel. Antennae with stalk-joints bead-like, joint 3 a little longer than the others. In the male the ninth antennal is enlarged, its outline approximately a right triangle.

Close to *tournieri* VILLIERS but differing, according to VILLIERS, who has compared specimens, in the form of the aedeagus and pronotum.

Holotype : male : collected by DE SAEGER on an islet in herbaceous savanna. Collection No. 3941 : II/gc/6.

Allotype : female : data as for holotype.

Paratypes : 56 males and fifty females collected from herbaceous vegetation. Collection Nos. 258, 1125, 1315, 1386, 1502, 1559, 1562, 2391, 2578, 2651, 2732, 2805, 2873, 2874, 2902, 2915, 2916, 3017, 3114, 3183, 3262, 3268, 3339, 3360, 3412, 3774, 3919, 3939, 3941.

*20. — **Danaë cavicollis** ARROW.

(Fig. 5.)

ARROW, Trans. Ent. Soc. London (1920), p. 40.

151 males and 103 females. These were collected from savanna vegetation and on bushes in forests. The largest lot was found under dead grasses (No. 3695). Collection Nos. 322, 457, 989, 1125, 1129, 1274, 1327, 1386, 1507, 1801, 1876, 1947, 1984, 2080, 2090, 2140, 2201, 2280, 2282, 2308, 2391, 2424, 2456, 2484, 2599, 2805, 2874, 2877, 2901, 2915, 2916, 2942, 2957, 2965, 3183, 3240, 3268, 3281, 3320, 3345, 3360, 3383, 3401, 3412, 3548, 3695, 3714, 3807, 3883, 3919, 3941.

*21. — **Danaë curvipes** ARROW.

(Fig. 6.)

ARROW, Trans. Ent. Soc. London (1920), pp. 39, 41, fig. 6.

The collections contain 1060 males, with which 1850 female specimens have been associated. Data show these were found on the leaves of forest shrubs. Collection Nos. 439, 441, 612, 632, 725, 769, 1424, 1425, 1429, 1430, 1543, 1546, 1548, 1733, 1876, 1888, 1889, 1901, 1916, 1948, 1950, 1970, 1981, 2056, 2063, 2078, 2131, 2172, 2195, 2224, 2235, 2242, 2247, 2297, 2338, 2364, 2379, 2380, 2383, 2392, 2396, 2420, 2467, 2468, 2471, 2475, 2481, 2486, 2599, 2602, 2678, 2679, 2708, 2761, 2808, 2814, 2815, 2916, 2957, 3123, 3125, 3213, 3402, 3405, 3418, 3431, 3447, 3448, 3500, 3501, 3701, 3720, 3721, 3731, 3756, 3758, 3763, 3774, 3792, 3793, 3805, 3854, 3865, 3867, 3909, 3944, 3954, 3983, 4040, 4042, 4083, 4085.

*22. — **Danaë armata** ARROW.

(Fig. 7.)

ARROW, Trans. Ent. Soc. London (1920), pp. 36, 41, fig. 3.

Apparently occurring with *curvipes*; the principal collection data are the same. At hand are 73 males and 113 females. Collection Nos. 1430, 1546, 1617, 2247, 2338, 2380, 2467, 2471, 2475, 2708, 2814, 2815, 3214, 3708, 3720, 3721, 3758, 3763, 3793, 3909, 3983, 4040, 4083.

*23. — **Danaë curvicrus** STROHECKER.

STROHECKER, Revue Zool. Bot. Africaines (1953), XLVII, p. 86, fig. 7.

The eight males and fourteen females at hand were taken from tufts of grass on savanna. Collection Nos. 462, 1274, 2420, 2478, 2697, 2915, 3411.

*24. — **Danaë masculina** STROHECKER.

STROHECKER, Ann. Hist.-Nat. Mus. Nat. Hungarici (1957), VIII (ser. nov.), pp. 272-274, fig. 37.

This and the preceding are, for the genus, large and stoutly formed. They are very similar, but males may be easily distinguished by the structure of the hind femur. In *curvicrus* the hind femur has a broad, low tooth on its posterior margin; in *masculina* there is, in the same position, a very large, basally recurved process. I have found no satisfactory clue to the identity of females.

Eleven males and nineteen females were collected, evidently in company with *curvicrus*. Collection Nos. 1274, 2420, 2478, 2642, 2874, 2914, 2915, 2916.

25. — **Danaë aetha** n.sp.

(Fig. 8.)

Ferruginous, the antennae with only the club black, its stalk slender, joints 4-6 and 8 about as long as wide; joints 3 and 7 subequal, slightly longer than the others; joint 9 asymmetrically widened with both apical angles well rounded, its upper surface convex, its lower face with a broad fovea. Pronotum with disc strongly convex, thickly and conspicuously punctured, its sides strongly rounded in front and slightly convergent behind; the raised borders are very low, narrow and flat; the lateral foveae are short, oblique grooves; the transverse sulcus is very close to the base. Elytra about three times as long as pronotum, scarcely wider at base than pronotum, subparallel, rather abruptly convergent apically.

Length : 3,3-3,7 mm.

Holotype : male : among grasses and sedges on marshy plain, H. DE SAEGER, No. 2915.

Allotype : female : data as for holotype.

An additional 745 males may be considered paratypes. There are 641 females in addition to the allotype.

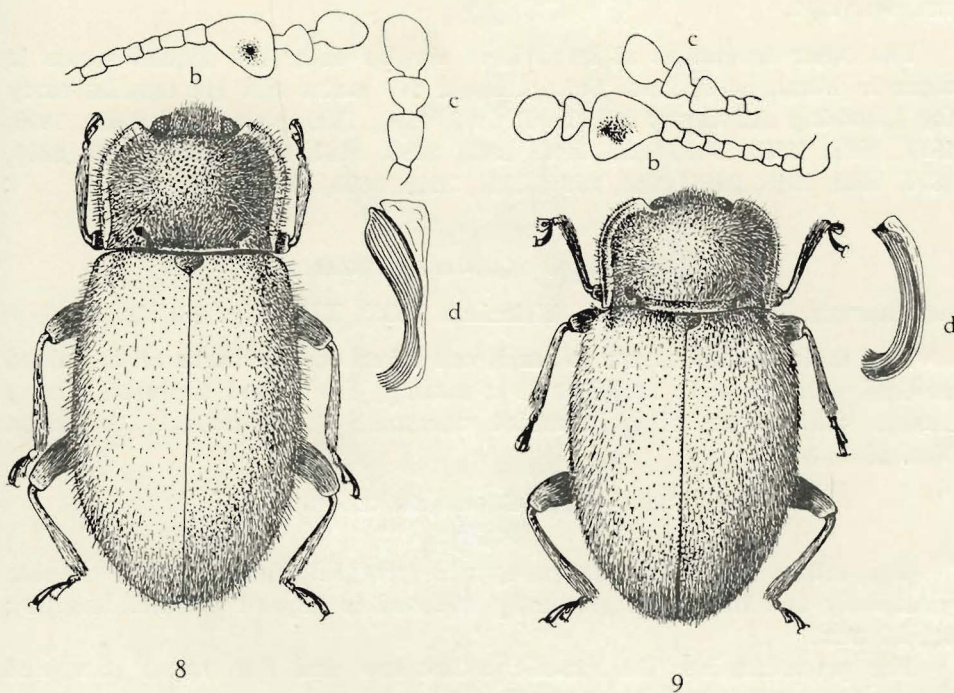


FIG. 8. — *Danaë aetha* n. sp.

b : antenna of male, ventral view; c : antennal club of female;
d : aedeagus, dextro-dorsal view.

FIG. 9. — *Danaë trigona* n. sp.

b : antenna of male, ventral view; c : antennal club of female;
d : aedeagus, dextro-dorsal view.

Collection Nos. 232, 258, 432, 486, 504, 989, 1274, 1275, 1320, 1328, 1386, 1507, 1537, 1564, 1574, 1801, 1877, 1888, 1900, 2084, 2090, 2124, 2140, 2282, 2308, 2357, 2421, 2456, 2484, 2486, 2578, 2775, 2821, 2846, 2874, 2877, 2915, 2916, 2917, 2951, 2967, 3180, 3183, 3188, 3268,, 3287, 3360, 3412, 3420, 3695, 3714. 3716. 3806, 3491, 4070.

26. — **Danaë trigona** n. sp.

(Fig. 9.)

Similar to the preceding species but of shorter, broader form. The enlargement of the ninth antennal joint of the male is also greater, and the raised margins of the pronotum are broader and distinctly sulcate. Length : 3,0-3,5 mm.

Holotype : male : in grasses and rushes on marshy plain, H. DE SAEGER, No. 1274.

The other specimens at hand have similar data; the species seems to occur in humid situations. An additional 117 males and 112 females carry the following numbers : 989, 1129, 1274, 1320, 1430, 1507, 1652, 1801, 1876, 1877, 1888, 1900, 1916, 2084, 2280, 2308, 2456, 2484, 2578, 2651, 2805, 2846, 2874, 2902, 2915, 2916, 2951, 2967, 3268, 3548, 3695, 3939, 3941, 4045.

*27. — **Danaë capnicera** STROHECKER.

STROHECKER, Revue Zool. Bot. Africaines (1953), XLVII, p. 90, fig. 12.

Two male specimens are at hand, one taken on low herbs on an island covered with *Phoenix reclinata* in a swamp, the second captured among bushes and herbs of arborescent savannah (*Combretum*). Collection Nos. 2874, 3656.

28. — **Danaë compsa** n. sp.

(Fig. 10.)

Size rather large for the genus, form graceful, the pronotum sinuate posteriorly and the elytra gradually widened to beyond middle. Length : 3,4-4,0 mm.

The pronotum has the raised borders low and flat, much narrowed basad; the lateral foveae are small, deep, oblique pits and the transverse sulcus is shallow. Elytra scarcely wider at their base than pronotum.

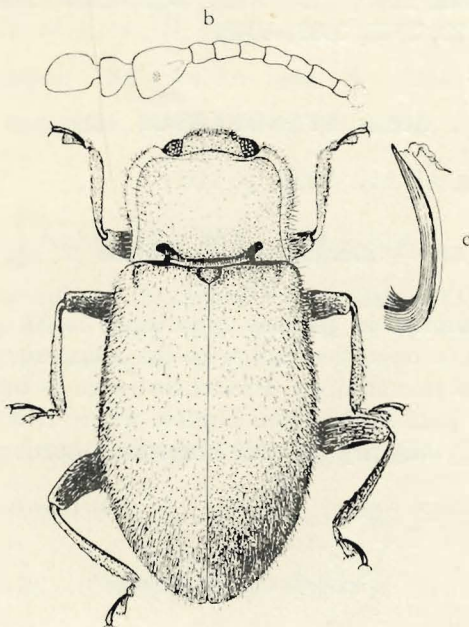
The male has the ninth antennal joint triangularly widened, rather longer than its greatest width, convex above, the lower face slightly flattened and showing a very shallow, circular impression. Posterior edge of hind femur with a low, broad tooth at middle. Hind tibia feebly curved.

Holotype : male : taken on bushes in open forest, H. DE SAEGER, No. 2467.

Allotype : female : taken on *Canthium* in open forest, H. DE SAEGER, No. 2955.

There are an additional 1916 males and 2132 females. The sites of the major collections of these were also leaves of bushes in forest, both dense and open. Collection Nos. 395, 529, 537, 576, 612, 632, 635, 719, 809, 1341,

1430, 1564, 1603, 1801, 1803, 1824, 1876, 1877, 1888, 1896, 1899, 1900, 1901, 1907, 1916, 1925, 1931, 1950, 1970, 1981, 2015, 2016, 2056, 2057, 2063, 2064, 2071, 2084, 2123, 2129, 2131, 2134, 2182, 2242, 2247, 2281, 2312, 2341, 2364, 2379, 2380, 2383, 2392, 2396, 2467, 2468, 2471, 2481, 2678, 2708, 2761, 2808, 2814, 2815, 2818, 2831, 2903, 2910, 2912, 2913, 2917, 2955, 2957, 2991, 3123, 3125, 3161, 3268, 3281, 3287, 3405, 3428, 3429, 3447, 3500, 3548, 3719, 3720, 3763, 3865, 3964, 3983, 4040, 4083.



10

FIG. 10. — *Danaë compsa* n. sp.

b : antenna of male; c : aedeagus, dextro-dorsal view.

29. — ***Danaë leona*** n. sp.

(Fig. 11.)

Average size very large for the genus. Antennae massive, black except first two joints. Length : 4,0-4,7 mm.

Pronotum with sides parallel from base to beyond middle, moderately rounded to the obtuse front angles; raised borders low, flat, rather narrow, vanishing at the rectangular hind angles; lateral foveae in the form of short, oblique pits. Elytra more than three times as long as pronotum, widening slightly to mid-length, gradually convergent behind. Legs stout, femora simple, tibiae straight.

In the male the ninth antennal joint is greatly enlarged, about as wide as long, convex above and below, its median face broadly and deeply foveate.

Holotype : male : on leaves of bushes in forest, H. DE SAEGER, No. 1430.

Allotype : female : data as for holotype, No. 2815.

An additional 30 males and 63 females are referred to this species. Collection data are similar to those for the type specimens. Collection Nos. 420, 1430, 1546, 1726, 1888, 2380, 2467, 2468, 2475, 2815, 2818, 3123, 3213, 3214, 3279, 3500, 3501, 3721, 3793, 3983, 4040.

Genus **STENOTARSUS** PERTY.

PERTY, Dilectus Animal. Art. (1832), p. 112.

30. — **Stenotarsus sudanicus** n. sp.

(Fig. 12.)

Dark rust-red, similar in general appearance to *St. guineensis* GERSTAECKER, of which it may be a race, but with the antennae proportionally shorter than joints 9 and 10 combined. Pronotum twice as broad at base as long, narrowed from the base to the front angles, where it is only half the basal width, the sides only slightly curved. The raised borders are very broad in

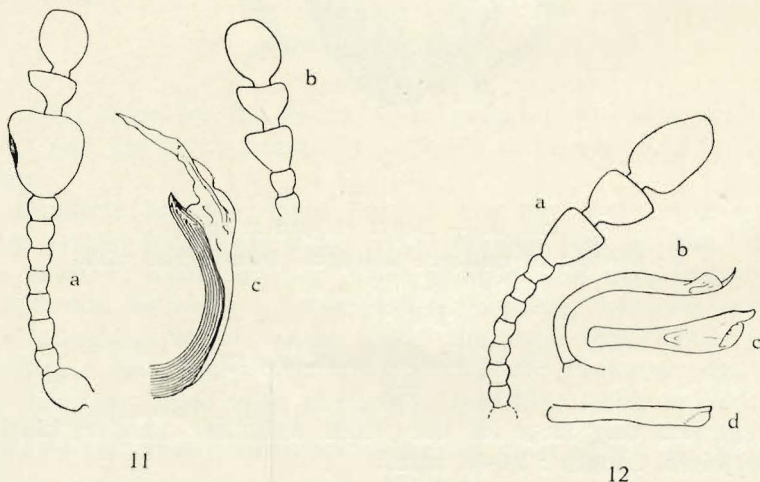


FIG. 11. — *Danaë leona* n. sp.

a : antenna of male, dorsal view; b : antennal club of female;
c : aedeagus, dextral view.

FIG. 12. — *Stenotarsus sudanicus* n. sp.

a : antenna of male; b : aedeagus, sinistral view; c : aedeagus, dorsal view;
d : *Stenotarsus guineensis* GERSTAECKER, aedeagus, dorsal view.

front, flat, narrowed in continuous fashion basad so that they are only half as wide at the hind angles as they are at the front angles. Elytra as in *guineensis*. Length : 5,4 mm (males); 5,0-5,5 (females).

The aedeagus of *sudanicus* is much larger and more heavily sclerotized than that of *guineensis*. Figure 13*d* was drawn from a specimen from Old Calabar, but it would serve as well for illustrating the aedeagus of the type of *guineensis* in the MURRAY Collection (British Museum).

Holotype : male : mont Embe, Sudan, 19.IV.1952, from wood decaying on the ground in dense forest, H. DE SAEGER, No. 3344.

Allotype : female : data as for type, No. 3344.

Paratypes : one male, two females, Nos. 3344, 3463.

Subfamily MYCETAEINAE.

The placement of species in genera within this subfamily is often difficult, the major problem being the decision as to whether to extend the definitions of existing genera or to propose additional generic names.

Genus **IDIOPHYES** BLACKBURN.

BLACKBURN, Trans. Royal Soc. S. Australia (1895), XIX, p. 234.

31. — **Idiophyes garambae** n. sp.

(Fig. 13.)

Oval, strongly convex, tawny and clothed with sparse, short, upright pubescence. Legs and antennae yellowish. Length : 1.3 mm. Pronotum twice as wide as long, its side margins narrow and very little attenuated basad, disc very finely punctured and with a carina on each side which runs from base to apex; internal to the base of each carina is a shallow fovea. The pronotal base is sinuate, with a fine, transverse sulcus. Elytra rapidly widened from base, their combined width about equal to their length, narrowly margined. Tarsi 3-jointed; antennae 10-jointed, the club about as long as the entire stalk. The prosternum is spatulate, broadly rounded at apex.

Holotype : male : M'Paza/9, in bark of, and in ground at base of *Mitragyna* in forest, H. DE SAEGER, No. 3068.

Allotype : female : data as for holotype, No. 3068.

Thirty-one additional specimens are at hand, taken mostly from sites like those of the holo- and allotype. Collection Nos. 2243, 2924, 2939, 2972, 2998, 3026, 3068, 3106, 3128, 3185, 3193, 3337, 3339, 3434, 3476.

Genus **BYSTODES** STROHECKER.

STROHECKER, Genera Insect. (1953), fasc. 210, p. 19.

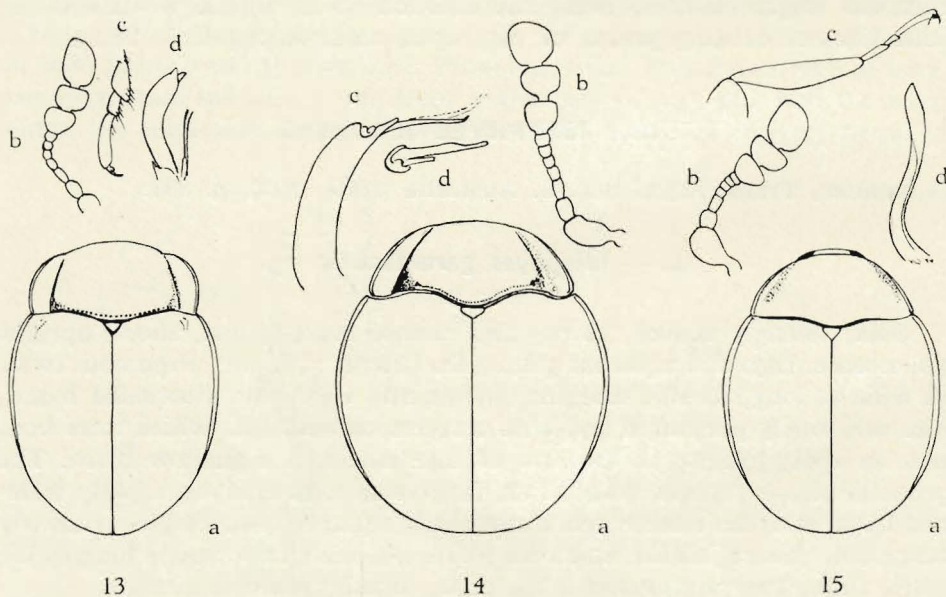
32. — **Bystodes africanus** n. sp.

(Fig. 14.)

Suborbicular in outline, moderately convex, fuscous, with sparse, yellow pubescence. Antennae and legs yellowish.

Length : 1,6 mm.

The pronotum is about three times as broad at base as long, its sides strongly rounded, narrowly margined. Disc of pronotum finely rather closely punctured; on each side a carina runs from the base almost to the apex. Base of pronotum broadly lobed at middle and with a fine, transverse sulcus. The hind angles are much rounded. The combined width of the elytra is greater than their length. Tarsi 3-jointed, antennae 10-jointed.

FIG. 13. — *Idiophyes garambae* n. sp.

a : form of body; b : antenna of male; c : middle tarsus; d : aedeagus, sinistral view.

FIG. 14. — *Bystodes africanus* n. sp.

a : form of body; b : antenna of male; c : aedeagus, sinistral view;
d : aedeagus, apical view.

FIG. 15. — *Mychothenus tropicalis* n. sp.

a : form of body; b : antenna of male; c : hind tibia and tarsus; d : aedeagus.

Holotype : male : in dead branches on the ground, heavy forest in ravine, H. DE SAEGER, No. 3306.

Allotype : female : data as for holotype.

Three other specimens were also collected in heavy forest (guinean type). Collections Nos. 3306, 3468, 3514.

This species is similar to one which I have described under the name *Geoendomychus hesperus* (Mitteil. Zool. Mus. Berlin, (1959), XXXV, p. 186), which probably should also be referred to *Bystodes*. *B. africanus* has much shorter pubescence, is smaller and the last antennal joint is quadrate; longer than broad in *hesperus*.

Genus **MYCHOTHENUS** STROHECKER.

STROHECKER, Genera Insect. (1953), Fasc. 210, p. 24.

This name was proposed as a replacement for the preoccupied *Mychophilus* FRIVALDZSKY.

33. — **Mychothenus tropicalis** n. sp.

(Fig. 15.)

Regularly oval, highly convex, testaceous or fuscous with sparse, short, pubescence. Length : 1.4 mm.

Pronotum nearly three times as broad basally as long, narrowly margined at sides, the margins attenuate behind. Disc of pronotum finely and sparsely punctured, devoid of sulci or carinae. Base of pronotum feebly and broadly lobed at middle. Elytra not quite as long as their combined width, rather closely and coarsely punctured. Prosternal process subtruncate. Tarsi 3-jointed, antennae 10-jointed with the club very stout, not quite as long as the preceding seven joints.

Very similar to *M. minutus* FRIVALDZKY, of Europe, but of darker color, longer prosternal process, the hind tibiae broader, the hind tarsus longer, about 2/3 as long as its tibia.

Holotype : male : in decaying bark of *Voacanga* in degraded forest, H. DE SAEGER, No. 2764.

Twenty-seven additional specimens, also from dead wood and bark, Collection Nos. 1696, 2591, 2764, 2774, 2924, 2962, 3115, 3405, 3823, 3950.

UNIVERSITY OF MIAMI.

**LIST OF THE LOCALITIES OF THE GARAMBA NATIONAL PARK
WHERE ENDOMYCHIDAE HAVE BEEN COLLECTED.**

- 63 : I/b/3, partie herbeuse immergée en période de crue, 21.XII.1949 (H. DE SAEGER).
 160 : I/a/2, abords marécageux de la mare, 16.I.1950 (G. DEMOULIN).
 175 : I/a/2, partie herbeuse, ni séchée ni brûlée en lisière de l'Aka, 23.I.1950 (H. DE SAEGER).
 190 : I/b/2', herbes d'un petit vallon asséché, 1.II.1950 (H. DE SAEGER).
 232 : I/b/2", mare permanente et ses abords marécageux, 25.I.1950 (G. DEMOULIN).
 258 : I/b/2", mare permanente, 22.II.1950 (G. DEMOULIN).
 305 : mont Ndogo, savane arborescente, 15.III.1950 (H. DE SAEGER).
 322 : I/c/1, savane arborescente, 3.II.1950 (H. DE SAEGER).
 420 : I/a/4, galerie forestière sèche, 17.IV.1950 (H. DE SAEGER).
 432 : Km 17, stations xériques dans des pelotes de mousses, 18.IV.1950 (H. DE SAEGER).
 439 : Akam, galerie forestière sèche, 21.IV.1950 (H. DE SAEGER).
 441 : Akam, galerie forestière humide, 21.IV.1950 (H. DE SAEGER).
 457 : I/b/2', marais à Cypéracées fortement inondé, 22.IV.1950 (G. DEMOULIN).
 462 : I/a/2, crique temporairement inondée, 24.IV.1950 (G. DEMOULIN).
 486 : I/a/4'', feuilles des arbres, 5.V.1950 (G. DEMOULIN).
 504 : Km 17, affleurement rocheux, 10.V.1950 (H. DE SAEGER).
 505 : Km 17, affleurement rocheux, 10.V.1950 (H. DE SAEGER).
 519 : I/o/2, galerie forestière humide, 15.V.1950 (H. DE SAEGER).
 529 : Akam, galerie forestière sèche, 19.V.1950 (H. DE SAEGER).
 537 : I/a/3, rive de l'Aka, 22.V.1950 (G. DEMOULIN).
 576 : I/a/4'' et I/a/4''', galerie forestière, feuilles des arbres, 5.VI.1950 (G. DEMOULIN).
 612 : I/b/3', galerie sèche, 16.VI.1950 (G. DEMOULIN).
 632 : Akam, galerie sèche, sur les feuilles des arbres, 23.VI.1950 (G. DEMOULIN).
 635 : Akam, savane arborescente, 23.VI.1950 (G. DEMOULIN).
 649 : I/b/2, savane herbeuse, près du ruisseau, 28.VI.1950 (G. DEMOULIN).
 673 : Km 17, sur les feuilles des arbres de la galerie, 6.VII.1950, (G. DEMOULIN).
 719 : I/a/3 amont, feuilles d'arbres en galerie sèche, 24.VII.1950 (G. DEMOULIN).
 725 : I/o/1, savane arbustive sur feuilles des arbres, 26.VII.1950 (G. DEMOULIN).
 769 : I/c/2'', sur les feuilles de galerie humide, 28.VIII.1950 (G. DEMOULIN).
 801 : I/o/2, arbres pourris, en galerie, 4.IX.1950 (G. DEMOULIN).
 809 : I/o/1, savane de pente, de part et d'autre de I/o/2, 7.IX.1950 (G. DEMOULIN).
 838 : I/o/2, feuilles des arbres en galerie humide, 21.IX.1950 (G. DEMOULIN).
 899 : I/o/2, franche galerie forestière humide, 23.X.1950 (H. DE SAEGER).
 929 : I/o/2, galerie forestière, lisière, 6.XI.1950 (H. DE SAEGER).
 934 : I/o/2, galerie forestière, dans des branches pourries, 6.XI.1950 (H. DE SAEGER).
 989 : I/o/1, 20.XI.1950 (J. VERSCHUREN).
 991 : II/f, savane herbeuse plateau, 15.XII.1950 (H. DE SAEGER).
 1078 : II/g/3, parmi les détritux végétaux, 12.I.1951 (J. VERSCHUREN).
 1084 : PpK/10, 11.I.1951 (J. VERSCHUREN).
 1085 : II/g/11, sur les feuilles de *Kigelia aethiopica*, 12.I.1951 (J. VERSCHUREN).
 1107 : Kassi-Garamba, détritux végétaux, 20.I.1951 (J. VERSCHUREN).
 1125 : Kassi-Garamba, 18.I.1951 (J. VERSCHUREN).
 1129 : II/e, 24.I.1951 (J. VERSCHUREN).
 1190 : Confluent Aka-Garamba, sous détritux végétaux, 2.II.1951 (J. VERSCHUREN).
 1274 : II/ed/15, *Cyperetum*, 20.II.1951 (H. DE SAEGER).
 1275 : II/ed/15, strate herbeuse courte, 20.II.1951 (H. DE SAEGER).
 1304 : II/te/17, galerie forestière, 1.III.1951 (H. DE SAEGER).

- 1315 : II/gc/10, bords de rivière à cours dénudé, 1.III.1951 (H. DE SAEGER).
1320 : II/fb/9, petite galerie forestière, 5.III.1951 (H. DE SAEGER).
1325 : II/fd/4, au sol, 3.III.1951 (J. VERSCHUREN).
1326 : II/fd/4, savane brûlée deux mois auparavant, 3.III.1951 (J. VERSCHUREN).
1327 : II/fd/5, savane herbeuse, 6.III.1951 (H. DE SAEGER).
1328 : II/fd/4, savane brûlée deux mois auparavant, 3.III.1951 (J. VERSCHUREN).
1332 : Nagero, savane arborescente, 3.III.1951 (H. DE SAEGER).
1341 : II/fd/17, galerie forestière sèche, 8.III.1951 (H. DE SAEGER).
1360 : II/ge/9, bord de rivière, 12.III.1951 (H. DE SAEGER).
1386 : II/fc/15, marécage à *Papyrus*, 14.III.1951 (H. DE SAEGER).
1424 : II/ed/16, galerie forestière, 20.III.1951 (H. DE SAEGER).
1425 : II/bc/9, herbes courtes, 19.III.1951 (J. VERSCHUREN).
1429 : II/ed/16, extension de galerie forestière, 20.III.1951 (H. DE SAEGER).
1430 : II/ed/16, extension de galerie forestière, 20.III.1951 (H. DE SAEGER).
1444 : II/hd/4, savane herbeuse brûlée, 23.III.1951 (H. DE SAEGER).
1487 : II/gc/11, mare permanente, 30.III.1951 (H. DE SAEGER).
1502 : II/fd/17, galerie forestière, 3.IV.1951 (H. DE SAEGER).
1507 : II/gf/10, Cyperaië, 6.IV.1951 (H. DE SAEGER).
1508 : II/hc/8, tête de source, 5.IV.1951 (H. DE SAEGER).
1537 : II/gc/7, prairie, 14.IV.1951 (H. DE SAEGER).
1543 : Garamba/13, humus en formation sous galerie, 6.IV.1951 (J. VERSCHUREN).
1546 : Garamba/15, arbre, sur feuilles, 6.IV.1951 (J. VERSCHUREN).
1548 : Garamba/13, au sol, 6.IV.1951 (J. VERSCHUREN).
1559 : II/hd/4, savane herbeuse à ligneux rares, non brûlée, 16.IV.1951 (H. DE SAEGER).
1562 : II/gd/4, 17.IV.1951 (J. VERSCHUREN).
1564 : II/fb/4, 18.IV.1951 (J. VERSCHUREN).
1565 : II/gd/4, 17.IV.1951 (J. VERSCHUREN).
1570 : II/fb/4, 19.IV.1951 (J. VERSCHUREN).
1574 : II/fc/7, 19.IV.1951 (J. VERSCHUREN).
1602 : II/gc/4, 15.IV.1951 (J. VERSCHUREN).
1614 : II/ee/15, 26.IV.1951 (J. VERSCHUREN).
1616 : II/gd/4, 25.IV.1951 (J. VERSCHUREN).
1617 : II/ee/14, sur feuilles d'arbre, 26.IV.1951 (J. VERSCHUREN).
1652 : II/ee/13, 27.IV.1951 (J. VERSCHUREN).
1696 : II/gd/8, tête de source arborée, 9.V.1951 (H. DE SAEGER).
1703 : II/ba/5, au sol, 10.V.1951 (J. VERSCHUREN).
1705 : II/gd/4, 11.V.1951 (J. VERSCHUREN).
1726 : II/fd/17, galerie forestière, 14.V.1951 (H. DE SAEGER).
1733 : II/fd/17, galerie forestière, 14.V.1951 (H. DE SAEGER).
1735 : II/fb/4, au sol, 12.V.1951 (J. VERSCHUREN).
1795 : II/id/8, végétation dense, 22.V.1951 (J. VERSCHUREN).
1801 : II/fd/15, plaine marécageuse, îlot de Graminées, 24.V.1951 (H. DE SAEGER).
1803 : II/fd/17, galerie forestière, 25.V.1951 (H. DE SAEGER).
1824 : II/fd/17, strate de Graminées ripicoles, 28.V.1951 (H. DE SAEGER).
1826 : II/hd/8, galerie forestière, 30.V.1951 (H. DE SAEGER).
1856 : II/gc/4, savane herbeuse brûlée, 4.VI.1951 (H. DE SAEGER).
1876 : II/gd/4, savane herbeuse non brûlée, 6.VI.1951 (H. DE SAEGER).
1877 : II/gc/6, savane à Graminées paludicoles, 8.VI.1951 (H. DE SAEGER).
1887 : II/gd/7'', frange de Graminées paludicoles, 8.VI.1951 (H. DE SAEGER).
1888 : II/fd/17, galerie forestière, 9.VI.1951 (H. DE SAEGER).
1889 : II/gd/4, savane herbeuse, 8.VI.1951 (H. DE SAEGER).
1890 : II/fd/17, strate herbacée sur berges sablonneuses, 11.VI.1951 (H. DE SAEGER).
1896 : II/fd/17, galerie forestière, 9.VI.1951 (H. DE SAEGER).

- 1899 : II/fd/18, galerie forestière claire, 11.VI.1951 (H. DE SAEGER).
1900 : II/fd/17, 11.VI.1951 (H. DE SAEGER).
1901 : II/fd/18, galerie forestière claire, 11.VI.1951 (H. DE SAEGER).
1907 : II/hd/4, savane herbeuse brûlée, 14.VI.1951 (H. DE SAEGER).
1916 : II/fd/17, galerie forestière dense, 15.VI.1951 (H. DE SAEGER).
1918 : II/fd/17, galerie forestière claire, 15.VI.1951 (H. DE SAEGER).
1925 : Morubia/8, 13.VI.1951 (J. VERSCHUREN).
1931 : Morubia/8, 14.VI.1951 (J. VERSCHUREN).
1947 : II/gd/8, tête de source, 20.VI.1951 (H. DE SAEGER).
1948 : II/gd/8, tête de source, 20.VI.1951 (H. DE SAEGER).
1950 : II/fd/17, galerie forestière claire, 18.VI.1951 (H. DE SAEGER).
1954 : II/ed/9, galerie forestière dégradée, 22.VI.1951 (H. DE SAEGER).
1968 : II/cd/9, galerie forestière dégradée, 22.VI.1951 (H. DE SAEGER).
1970 : II/fd/17, galerie forestière, 25.VI.1951 (H. DE SAEGER).
1981 : II/fd/18, strate herbeuse, 26.VI.1951 (H. DE SAEGER).
1984 : II/gd/4, 27.VI.1951 (J. VERSCHUREN).
2015 : II/gc/6, hautes Graminées non brûlées (*Urelytrum giganteum*), 29.VI.1951 (J. VERSCHUREN).
2016 : II/gc/6, petits buissons divers, 29.VI.1951 (J. VERSCHUREN).
2052 : II/gd/4, savane herbeuse à ligneux rares, 5.VII.1951 (H. DE SAEGER).
2056 : II/fd/17, strate herbeuse, 9.VII.1951 (H. DE SAEGER).
2057 : II/ge/6, fond partiellement marécageux, 10.VII.1951 (H. DE SAEGER).
2063 : II/fd/17, galerie forestière très claire, 13.VII.1951 (H. DE SAEGER).
2064 : II/fd/17, galerie forestière, 13.VII.1951 (H. DE SAEGER).
2071 : II/gd/11, expansion marécageuse, 12.VII.1951 (H. DE SAEGER).
2072 : II/fd/8, bas-fond partiellement marécageux, 13.VII.1951 (H. DE SAEGER).
2078 : Haute-Makpe, bord d'une galerie marécageuse, 12.VII.1951 (J. VERSCHUREN).
2080 : Haute-Makpe/9, galerie forestière, 13.VII.1951 (J. VERSCHUREN).
2084 : II/gd/11, galerie forestière très claire, 14.VII.1951 (H. DE SAEGER).
2090 : II/lf/10, savane herbeuse, 16.VII.1951 (P. SCHOEMAKER).
2092 : II/fd/17, galerie forestière, 3.VII.1951 (H. DE SAEGER).
2112 : II/hd/4, savane herbeuse non brûlée, 17.VII.1951 (H. DE SAEGER).
2123 : II/fd/17, galerie forestière, 21.VII.1951 (H. DE SAEGER).
2124 : II/fd/18, 21.VII.1951 (H. DE SAEGER).
2129 : II/fd/17, galerie forestière, 24.VII.1951 (H. DE SAEGER).
2131 : II/fd/19, strate graminéenne, 21.VII.1951 (H. DE SAEGER).
2134 : II/gd/4, savane herbeuse à ligneux rares, 20.VII.1951 (H. DE SAEGER).
2135 : II/gd/4, savane herbeuse à ligneux rares, 20.VII.1951 (H. DE SAEGER).
2140 : II/gc/6, savane herbeuse, 25.VII.1951 (H. DE SAEGER).
2172 : II/ec/4, savane herbeuse brûlée, 30.VII.1951 (H. DE SAEGER).
2182 : II/fd/17, galerie forestière, 31.VII.1951 (J. VERSCHUREN).
2188 : II/hd/8b, tête de source, 3.VIII.1951 (H. DE SAEGER).
2195 : II/hd/8, tête de source, 3.VIII.1951 (H. DE SAEGER).
2201 : II/gd/4, savane herbeuse non brûlée, 3.VIII.1951 (H. DE SAEGER).
2224 : II/fd/17, lisière de galerie forestière, 6.VIII.1951 (H. DE SAEGER).
2225 : II/fd/15, marécage à strate d'Herbacées paludicoles, 7.VIII.1951 (H. DE SAEGER).
2235 : II/fc/13, 13.VIII.1951 (H. DE SAEGER).
2242 : II/fd/17, galerie forestière, 13.VIII.1951 (H. DE SAEGER).
2243 : II/gc/6, savane herbeuse brûlée, 9.VIII.1951 (H. DE SAEGER).
2247 : II/fd/17, lisière de galerie forestière, taillis, 13.VIII.1951 (H. DE SAEGER).
2280 : II/gc/7", savane, 20.VIII.1951 (H. DE SAEGER).
2281 : II/fd/17, galerie forestière claire, 18.VIII.1951 (H. DE SAEGER).
2282 : II/fc/6, savane herbeuse de bas-fond, 20.VIII.1951 (H. DE SAEGER).

- 2297 : II/hd/9, tête de source, 21.VIII.1951 (H. DE SAEGER).
2298 : II/hd/9, galerie forestière, 21.VIII.1951 (H. DE SAEGER).
2308 : II/fd/6, savane herbeuse de fond, 23.VIII.1951 (H. DE SAEGER).
2312 : II/fe/10, vestiges de galerie forestière ancienne, 23.VIII.1951 (H. DE SAEGER).
2317 : II/gd/4, savane herbeuse brûlée, 26.VIII.1951 (H. DE SAEGER).
2318 : II/gd/4, savane herbeuse à ligneux rares, 27.VIII.1951 (H. DE SAEGER).
2338 : PpK/72, galerie forestière dense, 27.VIII.1951 (H. DE SAEGER).
2341 : II/fd/17, galerie forestière claire, 31.VIII.1951 (H. DE SAEGER).
2357 : II/gc/13^s, strate graminéenne autour d'une mare, 3.IX.1951 (H. DE SAEGER).
2364 : II/fd/17, galerie forestière dense, 5.IX.1951 (H. DE SAEGER).
2379 : II/fd/17, galerie forestière dense, 5.IX.1951 (H. DE SAEGER).
2380 : II/fd/17, galerie forestière claire, 4.IX.1951 (H. DE SAEGER).
2383 : II/dd/8, tête de source densément boisée, 6.IX.1951 (H. DE SAEGER).
2391 : II/ic/10, 7.IX.1951 (H. DE SAEGER).
2392 : II/fd/17, galerie forestière dégradée, 8.IX.1951 (H. DE SAEGER).
2396 : II/fd/5, savane herbeuse, 10.IX.1951 (H. DE SAEGER).
2420 : II/gc/5, savane herbeuse pauvre, 12.IX.1951 (H. DE SAEGER).
2421 : II/fd/18, berges herbeuses, 8.IX.1951 (H. DE SAEGER).
2424 : II/fd/5, savane herbeuse de vallée, 14.IX.1951 (H. DE SAEGER).
2446 : II/cc/9, galerie forestière dégradée, 17.IX.1951 (H. DE SAEGER).
2456 : II/fd/15, Graminées dans une région marécageuse, 21.IX.1951 (H. DE SAEGER).
2467 : II/fd/17, galerie forestière claire, 24.IX.1951 (H. DE SAEGER).
2468 : II/fd/18, galerie forestière claire, 24.IX.1951 (H. DE SAEGER).
2471 : II/fc/17, galerie forestière claire, 25.IX.1951 (H. DE SAEGER).
2475 : II/hd/8, tête de source, 26.IX.1951 (H. DE SAEGER).
2478 : II/gc/6, savane herbeuse sans ligneux, 27.IX.1951 (H. DE SAEGER).
2481 : II/gc/9, rivière marécageuse, 28.IX.1951 (H. DE SAEGER).
2484 : II/fd/15, plaine marécageuse, 2.X.1951 (H. DE SAEGER).
2486 : II/hd/9, rivière à cours boisé peu dense, 3.X.1951 (H. DE SAEGER).
2491 : II/hc/9, rivière à cours boisé peu dense, 28.IX.1951 (H. DE SAEGER).
2551 : II/fd/18, 6.X.1951 (H. DE SAEGER).
2558 : II/fd/18, 8.X.1951 (H. DE SAEGER).
2578 : II/fd/15, marécage, 9.X.1951 (H. DE SAEGER).
2590 : II/fd/6, savane herbeuse de fond, 11.X.1951 (H. DE SAEGER).
2591 : II/ke/9, galerie forestière très dégradée, 12.X.1951 (H. DE SAEGER).
2594 : II/gd/4, savane herbeuse ayant brûlé, 13.X.1951 (H. DE SAEGER).
2599 : II/je/8, tête de source à boisement dégradé, 15.X.1951 (H. DE SAEGER).
2600 : II/je/8, tête de source à boisement dégradé, 15.X.1951 (H. DE SAEGER).
2602 : II/ke/9, galerie forestière très dégradée, 12.X.1951 (H. DE SAEGER).
2615 : PpK/52/g, savane herbeuse, 16.X.1951 (H. DE SAEGER).
2642 : II/gc/5, savane herbeuse de vallée, 18.X.1951 (H. DE SAEGER).
2651 : II/gc/9, petite galerie forestière à boisement dégradé, 20.IX.1951 (H. DE SAEGER).
2654 : II/fd/5, savane herbeuse de vallée, 23.X.1951 (H. DE SAEGER).
2659 : II/fc/14, mare temporaire, 22.X.1951 (H. DE SAEGER).
2678 : II/fd/5, savane de vallée, 25.X.1951 (H. DE SAEGER).
2679 : II/PpK/55/d/9, galerie forestière, 26.X.1951 (H. DE SAEGER).
2697 : II/fd/6, savane herbeuse de bas-fond marécageux, 29.X.1951 (H. DE SAEGER).
2700 : II/fc/6, savane de bas-fond marécageux, 30.X.1951 (H. DE SAEGER).
2708 : II/id/8, tête de source à boisement dégradé, 31.X.1951 (H. DE SAEGER).
2717 : II/gd/4, savane herbeuse, 3.XI.1951 (H. DE SAEGER).
2718 : Makpe/8, tête de source boisée, 5.XI.1951 (H. DE SAEGER).
2732 : II/gd/8, tête de source dénudée, 8.XI.1951 (H. DE SAEGER).
2739 : II/gd/4, savane herbeuse, 8.XI.1951 (H. DE SAEGER).

- 2746 : II/me/9, cours d'eau à boisement dégradé, 21.XI.1951 (H. DE SAEGER).
 2761 : II/fd/17, galerie forestière, 14.XI.1951 (H. DE SAEGER).
 2764 : II/id/9, galerie forestière dégradée, 31.X.1951 (H. DE SAEGER).
 2765 : II/id/8, tête de source, 17.XI.1951 (H. DE SAEGER).
 2770 : II/gd/4, savane herbeuse, 22.XI.1951 (H. DE SAEGER).
 2774 : II/gc/13^s, mare permanente, 21.XI.1951 (H. DE SAEGER).
 2775 : II/fd/18, 22.XI.1951 (H. DE SAEGER).
 2780 : II/gd/4, savane herbeuse, 23.XI.1951 (H. DE SAEGER).
 2805 : II/fc/18, Graminées, 24.XI.1951 (H. DE SAEGER).
 2806 : II/fc/18, Graminées, 24.XI.1951 (H. DE SAEGER).
 2807 : II/hd/8, 26.XI.1951 (H. DE SAEGER).
 2808 : II/hd/8, tête de source dénudée, 26.XI.1951 (H. DE SAEGER).
 2814 : II/fd/16, massif forestier au bord de la Garamba, 28.XI.1951 (H. DE SAEGER).
 2815 : II/fd/16, massif forestier, 28.XI.1951 (H. DE SAEGER).
 2818 : II/fc/17, petite galerie forestière, 29.XI.1951 (H. DE SAEGER).
 2821 : II/gd/11, végétation paludicole dense, 30.XI.1951 (H. DE SAEGER).
 2831 : II/gd/4, savane herbeuse, 30.XI.1951 (H. DE SAEGER).
 2846 : II/fd/14, Herbacées paludicoles, 5.XII.1951 (H. DE SAEGER).
 2861 : II/hd/4, savane herbeuse, 6.XII.1951 (H. DE SAEGER).
 2863 : II/gd/4, savane herbeuse, 5.XII.1951 (H. DE SAEGER).
 2873 : II/gd/10, abords marécageux, 6.XII.1951 (H. DE SAEGER).
 2874 : II/fc/15, 7.XII.1951 (H. DE SAEGER).
 2877 : II/gc/11, expansion marécageuse à Cypéracées, 8.XII.1951 (H. DE SAEGER).
 2881 : II/fc/14, mare temporaire en cours de dessiccation, 10.XII.1951 (H. DE SAEGER).
 2901 : II/gd/8, tête de source dénudée, 13.XII.1951 (H. DE SAEGER).
 2902 : II/hc/8, tête de source à boisement dégradé, 12.XII.1951 (H. DE SAEGER).
 2903 : II/fd/17, galerie forestière claire, 14.XII.1951 (H. DE SAEGER).
 2910 : II/fd/17, galerie forestière très claire, 14.XII.1951 (H. DE SAEGER).
 2912 : II/fd/17, galerie forestière, 14.XII.1951 (H. DE SAEGER).
 2913 : II/fd/17, galerie forestière très claire, 14.XII.1951 (H. DE SAEGER).
 2914 : II/fd/14, mare temporaire sous couvert, 14.XII.1951 (H. DE SAEGER).
 2915 : II/gc/14, plaine marécageuse, 17.XII.1951 (H. DE SAEGER).
 2916 : II/gc/15, partie marécageuse récemment asséchée, 17.XII.1951 (H. DE SAEGER).
 2917 : II/gc/15, partie herbeuse dans une plaine marécageuse, 17.XII.1951 (H. DE SAEGER).
 2924 : PpK/60/d/8, galerie forestière dégradée, 18.XII.1951 (H. DE SAEGER).
 2939 : II/fd/18, berge, boisement relique de galerie, 21.XII.1951 (H. DE SAEGER).
 2942 : II/fc/14, 26.XII.1951 (J. VERSCHUREN).
 2951 : II/fd/12, 27.XII.1951 (H. DE SAEGER).
 2955 : II/fc/17, galerie forestière claire, 29.XII.1951 (H. DE SAEGER).
 2957 : II/fc/17, galerie forestière claire, 29.XII.1951 (H. DE SAEGER).
 2962 : II/gd/4, savane herbeuse, 30.XII.1951 (H. DE SAEGER).
 2965 : II/fd/17, lambeau de galerie forestière, 28.XII.1951 (H. DE SAEGER).
 2967 : II/gd/10, 28.XII.1951 (H. DE SAEGER).
 2972 : PpK/12/d/9, galerie forestière claire, 2.I.1952 (H. DE SAEGER).
 2987 : II/fd/17, galerie forestière claire, 3.I.1952 (H. DE SAEGER).
 2991 : II/fd/17, galerie forestière, 3.I.1952 (H. DE SAEGER).
 2998 : Mabanga/8", petite tête de source légèrement boisée, 8.I.1952 (H. DE SAEGER).
 3002 : Mabanga/10", Cyperaiie, 11.I.1952 (H. DE SAEGER).
 3017 : II/fc/17, galerie forestière claire, 17.I.1952 (H. DE SAEGER).
 3018 : II/fc/17, galerie forestière claire, 17.I.1952 (H. DE SAEGER).
 3026 : II/fd/17, galerie forestière dense, 15.I.1952 (J. VERSCHUREN).
 3067 : II/fd/17, galerie forestière, 28.I.1952 (H. DE SAEGER).
 3068 : M'Paza/9, galerie forestière à *Mitragyna*, 24.I.1952 (H. DE SAEGER).

- 3106 : II/db/8, tête de source à boisement dégradé, 6.II.1952 (H. DE SAEGER).
3114 : Mabanga/10', 7.II.1952 (J. VERSCHUREN).
3115 : II/hc/8, tête de source à boisement dégradé, 9.II.1952 (H. DE SAEGER).
3123 : II/fd/17, galerie forestière dense, 13.II.1952 (H. DE SAEGER).
3125 : II/fd/17, galerie forestière dense, 13.II.1952 (H. DE SAEGER).
3128 : II/ke/8, tête de source à boisement dégradé, 12.II.1952 (H. DE SAEGER).
3161 : II/je/9, galerie forestière, 4.III.1952 (H. DE SAEGER).
3180 : II/fd/12, 10.III.1952 (H. DE SAEGER).
3183 : II/gd/11, marais à *Thalia Welwitschii*, 11.III.1952 (H. DE SAEGER).
3185 : II/fd/17, galerie forestière, 10.III.1952 (H. DE SAEGER).
3188 : Morubia/9, galerie forestière très éclairée, 12.III.1952 (H. DE SAEGER).
3190 : II/eb/9, galerie forestière dégradée, 13.III.1952 (H. DE SAEGER).
3193 : Anie/8, 18.III.1952 (H. DE SAEGER).
3213 : Pali/9, galerie forestière dense, 22.III.1952 (H. DE SAEGER).
3214 : Pali/9, galerie forestière dense, 22.III.1952 (H. DE SAEGER).
3240 : II/gd/11, 13.III.1952 (H. DE SAEGER).
3262 : II/fe/18, berges à fourrés de ligneux touffus, 31.III.1952 (H. DE SAEGER).
3268 : II/fe/18, berges à fourrés de ligneux touffus, 31.III.1952 (H. DE SAEGER).
3279 : II/fd/17, galerie forestière sèche, 3.IV.1952 (H. DE SAEGER).
3281 : II/fd/17, galerie forestière sèche, 3.IV.1952 (H. DE SAEGER).
3283 : II/gd/4, savane herbeuse, 4.IV.1952 (H. DE SAEGER).
3287 : II/gc/6, savane herbeuse, 5.IV.1952 (H. DE SAEGER).
3288 : II/gc/6, savane herbeuse, 5.IV.1952 (H. DE SAEGER).
3296 : II/hd/4, savane herbeuse, 7.IV.1952 (H. DE SAEGER).
3306 : PpK/73/d/9, ravin fortement boisé, 8.IV.1952 (H. DE SAEGER).
3320 : Nagero/18, 11.IV.1952 (H. DE SAEGER).
3328 : Pidigala, savane arborescente, 23.IV.1952 (H. DE SAEGER).
3337 : II/gd/11, 21.IV.1952 (H. DE SAEGER).
3339 : II/gd/4, savane herbeuse, 21.IV.1952 (H. DE SAEGER).
3344 : mont Embe, rivière Meridi (Soudan), 19.IV.1952 (H. DE SAEGER).
3345 : mont Embe, 18.IV.1952 (H. DE SAEGER).
3360 : II/gd/11, 12.IV.1952 (H. DE SAEGER).
3367 : mont Embe, savane arborescente dense, 21.IV.1952 (H. DE SAEGER).
3383 : II/gd/10, 10.IV.1952 (H. DE SAEGER).
3387 : mont Embe, 20.IV.1952 (H. DE SAEGER).
3401 : II/gc/10, 29.IV.1952 (H. DE SAEGER).
3402 : II/gc/8, tête de source faiblement boisée, 30.IV.1952 (H. DE SAEGER).
3405 : II/gc/8, tête de source faiblement boisée, 30.IV.1952 (H. DE SAEGER).
3411 : II/gd/4, savane herbeuse sans ligneux, 2.V.1952 (H. DE SAEGER).
3412 : II/gd/11, 10.IV.1952 (H. DE SAEGER).
3417 : II/le/8, tête de source boisée, 3.V.1952 (H. DE SAEGER).
3418 : II/le/8, tête de source boisée, 3.V.1952 (H. DE SAEGER).
3420 : II/le/8, tête de source boisée, 3.V.1952 (H. DE SAEGER).
3428 : II/fd/17, galerie forestière claire, 6.V.1952 (H. DE SAEGER).
3429 : II/fd/18, 6.V.1952 (H. DE SAEGER).
3431 : II/fd/17, galerie forestière, 7.V.1952 (H. DE SAEGER).
3434 : II/gc/8, tête de source faiblement boisée, 30.IV.1952 (H. DE SAEGER).
3447 : II/fd/17, galerie forestière, 7.V.1952 (H. DE SAEGER).
3448 : II/fd/17, galerie forestière, 7.V.1952 (H. DE SAEGER).
3459 : Aka, savane arborescente, 17.V.1952 (H. DE SAEGER).
3463 : Aka, galerie forestière dense (type guinéen), 15.V.1952 (H. DE SAEGER).
3468 : Dedegwa, galerie forestière dense, 17.V.1952 (H. DE SAEGER).
3475 : Aka, savane arborescente, 19.V.1952 (H. DE SAEGER).

- 3476 : Aka, savane arborescente, 19.V.1952 (H. DE SAEGER).
 3499 : Dedegwa, galerie forestière dense (type guinéen), 21.V.1952 (H. DE SAEGER).
 3500 : Nagero, galerie forestière de la Dungu, 20.V.1952 (H. DE SAEGER).
 3501 : PpK/14/2, savane boisée à *Crossopteryx*, 9.V.1952 (H. DE SAEGER).
 3514 : Aka/2, lisière de galerie forestière dense, 22.V.1952 (H. DE SAEGER).
 3548 : II/fd/18, 30.V.1952 (H. DE SAEGER).
 3622 : Iso II/3, savane arborescente, 12.VI.1952 (H. DE SAEGER).
 3656 : PFSK/5/3, savane arborescente à *Combretum*, 20.VI.1952 (H. DE SAEGER).
 3678 : Ndelele/4, savane herbeuse, 18.VI.1952 (H. DE SAEGER).
 3695 : II/fc/11, 25.VI.1952 (H. DE SAEGER).
 3701 : II/gd/11, 24.VI.1952 (H. DE SAEGER).
 3705 : II/gd/4, savane herbeuse à ligneux, 26.VI.1952 (H. DE SAEGER).
 3708 : II/fd/18, 28.VI.1952 (H. DE SAEGER).
 3714 : II/fd/18, 28.VI.1952 (H. DE SAEGER).
 3716 : II/fd/14, 30.VI.1952 (H. DE SAEGER).
 3719 : II/gd/17, petite galerie forestière, 30.VI.1952 (H. DE SAEGER).
 3720 : II/dd/9, galerie forestière à *Erythrophloeum*, 2.VII.1952 (H. DE SAEGER).
 3721 : II/gd/11, marais à Marantacées, 30.VI.1952 (H. DE SAEGER).
 3729 : II/fe/7, prairie à paludicoles, 4.VII.1952 (H. DE SAEGER).
 3731 : II/fe/9, 3.VII.1952 (H. DE SAEGER).
 3743 : II/gd/4, savane herbeuse à ligneux suffrutescents, 5.VII.1952 (H. DE SAEGER).
 3756 : II/gc/14^s, 8.VII.1952 (H. DE SAEGER).
 3758 : II/dd/9, galerie forestière partiellement dégradée, 7.VII.1952 (H. DE SAEGER).
 3761 : II/gc/4, savane herbeuse, 9.VII.1952 (H. DE SAEGER).
 3763 : II/fd/17, galerie forestière claire, 9.VII.1952 (H. DE SAEGER).
 3765 : II/gc/8, tête de source à boisement dégradé, 10.VII.1952 (H. DE SAEGER).
 3773 : II/id/9, 11.VII.1952 (H. DE SAEGER).
 3774 : II/id/9, 11.VII.1952 (H. DE SAEGER).
 3792 : PpK/8/9, galerie forestière dégradée, 15.VII.1952 (H. DE SAEGER).
 3793 : PpK/8/9, lisière de galerie forestière, 15.VII.1952 (H. DE SAEGER).
 3805 : II/id/9, galerie forestière, 16.VII.1952 (H. DE SAEGER).
 3806 : II/fc/14, 17.VII.1952 (H. DE SAEGER).
 3807 : II/id/6, savane herbeuse de fond partiellement marécageux, 18.VII.1952 (H. DE SAEGER).
 3817 : PFNK/12/9, galerie forestière, 24.VII.1952 (H. DE SAEGER).
 3823 : Utukuru/9, galerie forestière, 26.VII.1952 (H. DE SAEGER).
 3826 : PFNK/7/9, galerie forestière, 28.VII.1952 (H. DE SAEGER).
 3843 : Anie/9, galerie forestière peu dense, 29.VII.1952 (H. DE SAEGER).
 3854 : II/fc/5, savane de vallée, 17.VII.1952 (H. DE SAEGER).
 3865 : II/gf/17, galerie forestière, 31.VII.1952 (H. DE SAEGER).
 3867 : II/fc/17, galerie forestière dégradée, 17.VII.1952 (H. DE SAEGER).
 3883 : II/gd/4, savane herbeuse à *Loudetia*, 6.VIII.1952 (H. DE SAEGER).
 3887 : II/gc/4, savane herbeuse, 7.VIII.1952 (H. DE SAEGER).
 3909 : II/gd/10, 7.VIII.1952 (H. DE SAEGER).
 3919 : II/fd/5, savane herbeuse de vallée, 11.VIII.1952 (H. DE SAEGER).
 3939 : II/fd/18, 12.VIII.1952 (H. DE SAEGER).
 3941 : II/gc/6, îlot de savane herbeuse, 14.VIII.1952 (H. DE SAEGER).
 3943 : II/hd/5, savane herbeuse à *Urelytrum*, 16.VIII.1952 (H. DE SAEGER).
 3944 : II/jd/9, galerie forestière claire, 16.VIII.1952 (H. DE SAEGER).
 3950 : II/hd/9, galerie forestière très dégradée, 18.VIII.1952 (H. DE SAEGER).
 3954 : II/hd/4, savane herbeuse de crête, 20.VIII.1952 (H. DE SAEGER).
 3964 : II/gd/4 savane herbeuse à *Loudetia* sur plateau, 22.VIII.1952 (H. DE SAEGER).
 3983 : II/fd/17, talus de berge boisée, 27.VIII.1952 (H. DE SAEGER).

- 3988 : II/nf/4, savane herbeuse de crête, 28.VIII.1952 (H. DE SAEGER).
3989 : II/gd/10, savane herbeuse à *Urelytrum*, 29.VIII.1952 (H. DE SAEGER).
4023 : II/gd/6, savane herbeuse, 2.IX.1952 (H. DE SAEGER).
4036 : II/gd/11, 4.IX.1952 (H. DE SAEGER).
4040 : II/le/8, tête de source boisée, 8.IX.1952 (H. DE SAEGER).
4042 : II/gc/8, tête de source à boisement très dégradé, 9.IX.1952 (H. DE SAEGER).
4044 : PpK/9/g/9, galerie forestière très dégradée, 10.IX.1952 (H. DE SAEGER).
4045 : II/gd/4, 8 IX.1952 (H. DE SAEGER).
4057 : II/gd/4, savane herbeuse à *Loudetia arundinacea*, 15.IX.1952 (H. DE SAEGER).
4070 : Mabanga, plateau latéritique herbeux, 23.IX.1952 (H. DE SAEGER).
4078 : II/fd/4, savane herbeuse, 22.IX.1952 (H. DE SAEGER).
4083 : II/fd/17, galerie forestière claire, 25.IX.1952 (H. DE SAEGER).
4085 : II/gd/8, tête de source marécageuse, 24.IX.1952 (H. DE SAEGER).
4103 : Mabanga, plateau sur dalle latéritique, 29.IX.1952 (H. DE SAEGER).

INDEX ARRANGED ALPHABETICALLY

GENERA.

	Pages.		Pages.
<i>Ancylopus</i> COSTA	40	<i>Lycoperdina</i> LATREILLE	40
<i>Bystodes</i> STROHECKER	54	<i>Mycetina</i> MULSANT	39
<i>Danaë</i> REICHE	44	<i>Mychophilus</i> FRIVALDZSKY	55
<i>Geoendomychus</i>	55	<i>Mychothenus</i> STROHECKER	55
<i>Idiophyes</i> BLACKBURN	53	<i>Stenotarsus</i> PERTY	52
<i>Indalmus</i> GERSTAECKER	40	<i>Trycherus</i> GERSTAECKER	43

SPECIES.

	Pages.		Pages.
<i>aetha</i> (<i>Danaë</i>) n. sp.	48	<i>garambae</i> (<i>Idiophyes</i>) n. sp.	53
<i>afer</i> (<i>Indalmus</i>) n. sp.	42	<i>grandis</i> PIC (<i>Indalmus</i>)	41
<i>africana</i> GORHAM (<i>Mycetina</i>)	39	<i>guineensis</i> GERSTAECKER (<i>Stenotarsus</i>)	52
<i>africanus</i> (<i>Bystodes</i>) n. sp.	54	<i>hesperus</i> STROHECKER (<i>Geoendomy-</i>	
<i>armata</i> ARROW (<i>Danaë</i>)	48	<i>chus</i>)	55
<i>arrowi</i> VILLIERS (<i>Trycherus</i>)	44	<i>incerta</i> n. sp.	46
<i>bisignatus</i> GERSTAECKER (<i>Ancylopus</i>) .	40	<i>laticollis</i> STROHECKER (<i>Danaë</i>)	44
<i>capnicera</i> STROHECKER (<i>Danaë</i>)	50	<i>leona</i> (<i>Danaë</i>) n. sp.	51
<i>cavicollis</i> ARROW (<i>Danaë</i>)	47	<i>masculina</i> STROHECKER (<i>Danaë</i>)	48
<i>clavata</i> ARROW (<i>Lycoperdina</i>)	40	<i>minutus</i> FRIVALDZSKY (<i>Mychothenus</i>) .	55
<i>compressa</i> STROHECKER (<i>Danaë</i>)	46	<i>nigrescens</i> STROHECKER (<i>Indalmus</i>) ...	42
<i>compsa</i> (<i>Danaë</i>) n. sp.	50	<i>nigricornis</i> ARROW (<i>Danaë</i>)	44
<i>curvicrus</i> STROHECKER (<i>Danaë</i>)	48	<i>obscurus</i> STROHECKER (<i>Indalmus</i>) ...	41
<i>curvipes</i> ARROW (<i>Danaë</i>)	47	<i>ovata</i> ARROW (<i>Danaë</i>)	45
<i>fryanus</i> GORHAM (<i>Trycherus</i>)	43		

	Pages.		Pages.
<i>percheroni</i> STROHECKER (<i>Indalmus</i>) ...	41	<i>spinipes</i> ARROW (<i>Trycherus</i>)	44
<i>pici</i> VILLIERS (<i>Indalmus</i>)	42	<i>sudanicus</i> (<i>Stenotarsus</i>) n. sp.	52
<i>rufescens</i> PIC (<i>Danaë</i>)	44	<i>tourneri</i> VILLIERS (<i>Danaë</i>)	47
<i>rufocinctus</i> STROHECKER (<i>Indalmus</i>) ..	41	<i>trigona</i> (<i>Danaë</i>) n. sp.	50
<i>saegeri</i> (<i>Indalmus</i>) n. sp.	42	<i>tropicalis</i> (<i>Mychothenus</i>) n. sp.	55
<i>senegalensis</i> GERSTAECKER (<i>Trycherus</i>)	44	<i>vittiger</i> STROHECKER (<i>Indalmus</i>)	41

CONTENTS

	Pages.
INTRODUCTION	39
Subfamily <i>Eumorphinae</i>	39
Subfamily <i>Stenotarsinae</i>	44
Subfamily <i>Mycetaeinae</i>	53
Liste of localities	56
INDEX ARRANGED ALPHABETICALLY	64

Published December 31, 1962.

PARC NATIONAL DE LA GARAMBA. — MISSION H. DE SAEGER

en collaboration avec

P. BAERT, G. DEMOULIN, I. DENISOFF, J. MARTIN, M. MICHA, A. NOIRFALISE, P. SCHOEMAKER,
G. TROUPIN et J. VERSCHUREN (1949-1952).

Fascicule 33 (3)

HETEROCERIDAE
(COLEOPTERA POLYPHAGA)

BY

REINHOLD CHARPENTIER (Lund)

Most collections contain only a small number of the members of this family. The collection from the National Park of Garamba is no exception. However, although it contains only six specimens, there are representatives of three species, one of which new to science.

I am very grateful to Dr. V. VAN STRAELEN for the privilege of studying this material. It is also my pleasant duty to express my cordial thanks to M. P. BASILEWSKY, of Tervuren, who has kindly arranged for the loan of type specimens of *Heterocerus minusculus* MAMITZA, and other valuable material for comparison. Finally, I wish to thank the Officials of Muséum National d'Histoire Naturelle, Paris, for their kind cooperation when I was working there.

***Heterocerus capensoïdes* n. sp.**

(Figs. 1 and 2.)

This species is very closely related to *H. capensis* PÉRINGUEY which is endemic in Cape, but it has brighter femora, and the reddish-yellow of the pronotum is confined to the front angles and not all along the lateral edge. It differs from *H. incertus* GROUVELLE in the presence of a distinct, light spot in the region of the diffuse, wide, and shallow depression of the elytral disc.

Description.

Length : 3,5-3,6 mm; width (over the shoulders) : c. 1,4 mm.

Head brownish-black, the width (across eyes) is about twice the length from front of clypeus to back of eyes. Frons slightly sloping, convex; cly-

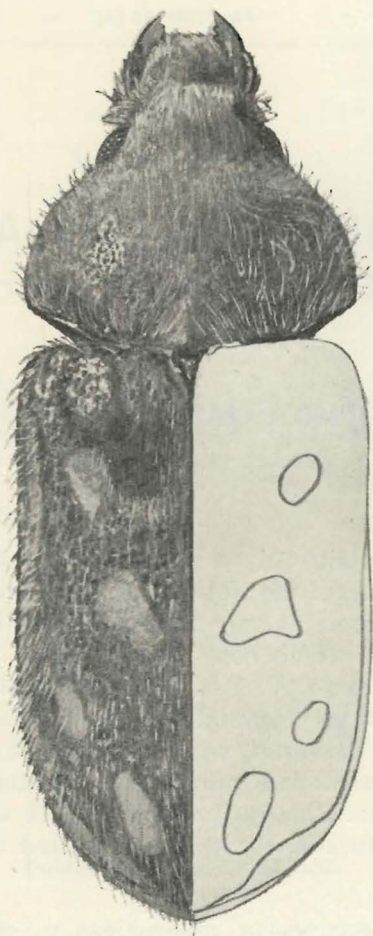


FIG. 1. — *Heterocerus capensoides* n. sp., ♂ (holotype).

peus without horns, like frons and labrum covered with close, pale, forwardly directed pubescence of varying length, shorter and thinner at base of labrum and base of frons. Frons with slightly rugose punctures, smaller than eye facets, separated by about one diameter; surface between them smooth. Labrum broader than long, apically more or less notched (Fig. 2, A). Mandibulae normal, without prolonged lobes or projections. Antennae clothed with light coloured hairs, 11-jointed with 7-segmented club, 3rd and especially 4th joints very small, basal four segments brownish-yellow, succeeding segments becoming increasingly darker distally.

Pronotum quite black or black-brown, only front angles and sometimes front margin diffusely reddish-yellow, nearly twice as broad as long (5 : 3), evenly arched, broadest between hind angles or just in front of them, base with a distinct and rather straight, elevated line, reaching the fairly strongly convex lateral edges. Surface densely and minutely punctate; punctures of two kinds, very small punctures and others about five times larger; larger punctures third to half the size of eye facets, separated by one to three times their own width; interspaces smooth, not bulbous. Dorsal pubescence rather thin, yellowish, directed forwards except at front angles, consisting in part of fairly short recumbent hairs and in part of rather long semi-erect hairs.

Elytra parallel (their width more or less equal throughout length) or slightly broader about two-thirds from base, evenly and slightly arched, with a distinct shallow depression basally near lateral margin, extending backwards parallel with epipleuron and confluent with another depression which is wide and shallow. This extends outwards from the elytral suture at a point about one-third from the base of the latter; sides slightly depressed about one-third from shoulders, above and along lateral margins; disc sometimes vaguely substriate. Shoulders even. Surface densely and rather roughly punctate; punctures of two sizes, larger punctures rather deep, twice to three times as large as eye facets, basally and near scutellum slightly smaller, separated by a half to one diameter; small punctures between the large ones, as minute as on pronotum, interspaces smooth but slightly bulbous. Pubescence light yellowish, rather thin, with short, recumbent, slender and straight hairs and two-thirds to four-fifths longer, semi-erect hairs of about the same density and thickness. Colour black, shining, with five reddish-yellow spots or bands on each wing-sheath (Fig. 1); one spot (*a*) in anterior half, near the wide and shallow depression, another spot or band (*b*), more or less triangular at the middle of the disc, another spot or band (*c*) behind and outside (*b*), another spot or band (*d*) somewhat elongate near apex, and, finally, one band (*e*) close to the apical side margin; in one paratype specimen spot *b* is associated with spot *c*, and spot *d* with band *e*. Epipleura reddish-brown or black, their bases without an oblique, elevated line.

Scutellum beneath elytra, narrowly triangular, not rounded at corners.

Ventral Surface reddish-brown to brownish-black, anal sternite apically more or less yellow; sparsely clothed with thin, long, pale hairs, denser on the last three sternites, densest on the last one. Metasternum finely and fairly distinctly punctured, punctures round, smaller than eye facets, separated by about one diameter. Abdominal ventral surface minutely and rugosely punctate, punctures transverse and slightly scattered on first

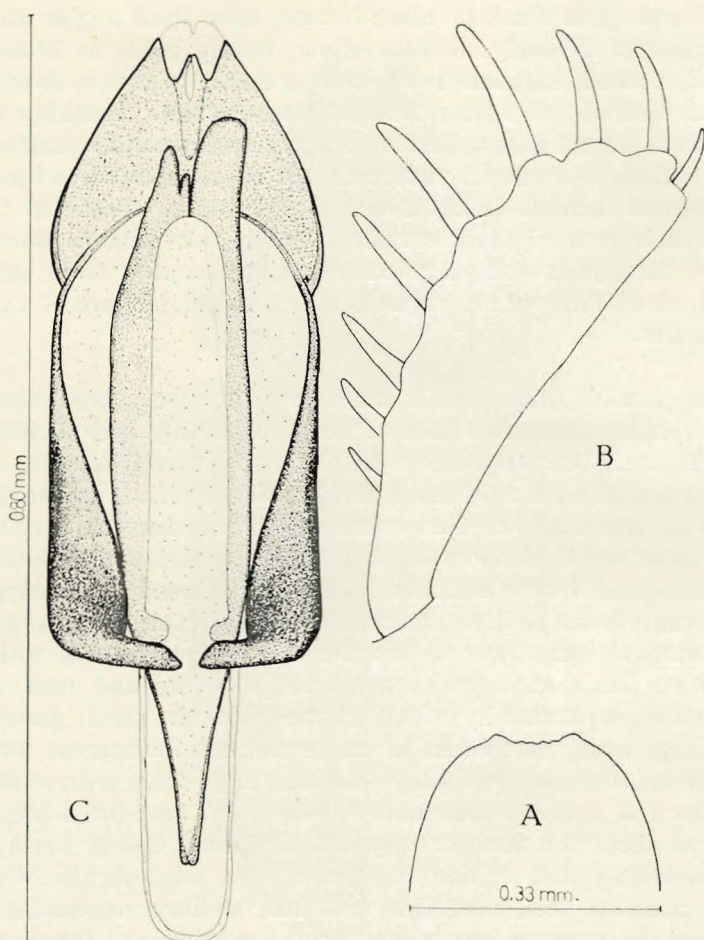


FIG. 2. — *Heterocerus capensoides* n. sp., ♂.

A : labrum, pubescence omitted (holotype);

B : left front tibia, pubescence omitted (paratype specimen); C : aedeagus (holotype).

two sternites, increasingly more rounded and crowded on succeeding three segments. Elevated post-mesocoxal line of metasternum fairly distinct. The ridges of the first sternite incomplete, i. e. they extend from the front angles posteriorly and inwards until they almost meet in the posterior median region where they terminate (and do not continue forward in median line).

Legs clothed with light coloured hairs, femora yellow to yellowish-brown, proximally darker (most pronounced in femora of forelegs); anterior tibiae rather short, at their outer edge with 6-8 rather long, slender spurs (Fig. 2, B).

Aedeagus, see Fig. 2, C; uniformly and rather weakly sclerotized, parameres and basal piece fused together; length : c. 0,80 mm.

Geographical distribution.

Three male specimens from CONGO, National Park of Garamba, coll. H. DE SAEGER : 1.II.1951, in humid sand (II/fd/17, 1174); 30.XI.1951, at light (II/gd/4, 2812); 29.II.1952, 14-17 p. m., swept on sand-banks, humidity 100 % (II/fd/Gar., 3152), holotype.

Type material, holotype (σ) and two paratypes ($\sigma\sigma$) belonging to Institut des Parcs Nationaux du Congo.

Heterocerus nodieri GROUVELLE.

Heterocerus nodieri GROUVELLE, 1919, Mém. Ent., **2** (déposé 1917), Paris, pp. 62-63, (SENEGAL : Badoumbé).

Heterocerus jeanneli GROUVELLE, 1920, Voyage ALLUAUD et JEANNEL, Paris, pp. 221-223 (KENYA : Tschania), **syn. nov.**

Heterocerus conterminus GROUVELLE, 1920, Voyage ALLUAUD et JEANNEL, Paris, pp. 223-25, (TANGANYIKA : Taita), **syn. nov.**

CONGO : National Park of Garamba, 24.I.1951, coll. H. DE SAEGER (II/e/17, 1147, galerie forestière, feuille, terreau et sable humide, sous des *Iringia* en fleurs), 1 specimen (φ).

Heterocerus parvus GROUVELLE.

Heterocerus parvus GROUVELLE, 1909, Bull. Soc. Ent. Fr., Paris, pp. 137-138 (THE SUDAN : Roseires).

Heterocerus minusculus MAMITZA, 1930, Rev. zool. bot. afr. Bruxelles, **XIX**, **3**, Bruxelles, pp. 369-370 (CONGO : Kasai, Mushie), **syn. nov.**

CONGO : National Park of Garamba, 24.I.1951, coll. H. DE SAEGER (II/e/17, 1147, galerie forestière, feuille, terreau et sable humide, sous des *Iringia* en fleurs), 2 specimens ($\delta\varphi$).

Heterocerus nodieri and *H. parvus* are both widely distributed in Africa, belonging to the Sudanese fauna as well as that of Guinea.

 INDEX ARRANGED ALPHABETICALLY

	Pages.
<i>capensoides</i> n. sp. (<i>Heterocerus</i>)	67
<i>conterminus</i> GROUVELLE (<i>Heterocerus</i>) syn. nov.	71
<i>jeanneli</i> GROUVELLE (<i>Heterocerus</i>) syn. nov.	71
<i>minusculus</i> MAMITZA (<i>Heterocerus</i>) syn. nov.	71
<i>nodieri</i> GROUVELLE (<i>Heterocerus</i>)	71
<i>parvus</i> GROUVELLE (<i>Heterocerus</i>)	71

 Published December 31, 1962.

PARC NATIONAL DE LA GARAMBA. — MISSION H. DE SAEGER

en collaboration avec

**P. BAERT, G. DEMOULIN, I. DENISOFF, J. MARTIN, M. MICHA, A. NOIRFALISE, P. SCHOEMAKER
G. TROUPIN et J. VERSCHUREN (1949-1952)**

Fascicule 33 (4)

**CHIRONOMIDAE
(DIPTERA NEMATOCERA)**

PAR

PAUL FREEMAN (London)

1. — *Anatopynia petersi* FREEMAN.

FREEMAN, 1955, Bull. Brit Mus. (N. H.) Entom., 4, p. 47.

1 ex. : PFSK/22/8, en tête de source à boisement clair, 10.VI.1952, H. DE SAEGER, 3608; 1 ex. : II/id/9, en galerie forestière à *Erythrophloeum*, 2.VII.1952, H. DE SAEGER, 3720.

2. — *Clinotanypus lacteus* FREEMAN.

FREEMAN, 1955, Bull. Brit Mus. (N. H.) Entom., 4, p. 47.

1 ex. : II/fd/4, en savane herbeuse non brûlée, 16.VIII.1951, H. DE SAEGER, 2264; 1 ex. : II/fd/18, sur berge sablonneuse, 12.VIII.1952, H. DE SAEGER, 3939; 1 ex. : II/gd/11, vallon marécageux sans ombrage, 4.IX.1952, H. DE SAEGER, 4036; 1 ex. : II/fd/4, en savane herbeuse, 22.IX.1952, H. DE SAEGER, 4078.

3. — *Clinotanypus* ? sp. nov.

1 ex. : II/fd/16, massif forestier au bord de la Garamba, 28.XI.1951, H. DE SAEGER, 2814.

4. — *Pentaneura* sp. indet.

1 ex. : II/gd/11, en expansion marécageuse, 3.VII.1951, H. DE SAEGER, 2026; 2 ex. : PpK/8/9, en galerie forestière dégradée, 15.VII.1952, H. DE SAEGER, 3792; 1 ex. : II/1e/8, en tête de source boisée, 8.IX.1952, H. DE SAEGER, 4040.

5. — **Chironomus (Chironomus) scotti** KIEFFER.

KIEFFER, 1911, Trans. Linn. Soc. Lond. (Zool.), 14, p. 352.

1 ex. : II/sd/8, végétation herbacée, 30.IV.1951, J. VERSCHUREN, 1639; 1 ex. : II/fd/17, en galerie forestière, 13.VIII.1951, H. DE SAEGER, 2242; 1 ex. : II/gd/10, vallon marécageux, 24.IX.1951, H. DE SAEGER, 2483; 1 ex. : II/hc/9, rivière à cours boisé peu dense, 28.IX.1951, H. DE SAEGER, 2491; 1 ex. : II/fd/18, berge, boisement relique de galerie, 21.XII.1951, H. DE SAEGER, 2939; 2 ex. : II/id/9, en galerie forestière à *Erythrophloeum*, 2.VII.1952, H. DE SAEGER, 3720; 2 ex. : II/dd/9, en galerie forestière partiellement dégradée, 7.VII.1952, H. DE SAEGER, 3758; 1 ex. : PpK/8/9, en galerie forestière dégradée, 15.VII.1952, H. DE SAEGER, 3792; 1 ex. : II/gd/11, en vallon marécageux sans ombrage, 4.IX.1952, H. DE SAEGER, 4036; 1 ex. : II/gd/8, en tête de source marécageuse, 24.IX.1952, H. DE SAEGER, 4085.

6. — **Chironomus (Chironomus) imicola** KIEFFER.

KIEFFER, 1913, Voy. ALLUAUD et JEANNEL Afr. Or., Ins. Dipt., 1, p. 20.

1 ex. : II/fe/17, strate herbeuse sous couvert forestier, 22.V.1951, H. DE SAEGER, 1772; 1 ex. : II/fd/17, en galerie forestière, 25.VI.1951, H. DE SAEGER, 1970; 1 ex. : II/gd/4, en savane herbeuse (camp), 30.X.1951, H. DE SAEGER, 2701; 1 ex. : II/gd/8, tête de source dénudée, 13.XII.1951, H. DE SAEGER, 2901; 1 ex. : Garamba/2, source, en savane arborescente claire, 6.VI.1952, H. DE SAEGER, 3583; 1 ex. : PpK/8/9, en galerie forestière dégradée, 15.VII.1952, H. DE SAEGER, 2792.

7. — **Chironomus (Kiefferulus) chloronotus** KIEFFER.

KIEFFER, 1911, Trans. Linn. Soc. Lond. (Zool.), 14, p. 355.

1 ex. : I/a/4, petit boisement exondé, 16.XII.1949, H. DE SAEGER, 51; 1 ex. : II/d, graminées diverses, 5.I.1951, J. VERSCHUREN, 1048; 1 ex. : Nakobo/dc/8, feuilles de *Canthium* en galerie, 26.I.1951, J. VERSCHUREN, 1163; 1 ex. : II/gc/4, en savane herbeuse à ligneux rares, 1.VI.1951, H. DE SAEGER, 1853; 1 ex. : II/fd/17, galerie forestière, 9.VI.1951, H. DE SAEGER, 1888; 1 ex. : II/fd/17, en galerie forestière, 25.VI.1951, H. DE SAEGER, 1970; 1 ex. : II/fd/5, savane herbeuse, 10 IX.1951, H. DE SAEGER, 2396; 1 ex. : II/fd/18, berges sablonneuses colonisées, 6.X.1951, H. DE SAEGER, 2522; 2 ex. : II/fd/17, galerie forestière, 14.XI.1951, H. DE SAEGER, 2761; 1 ex. : II/fc/18, sur graminées, 24.XI.1951, H. DE SAEGER, 2806; 1 ex. : II/fd/17, en galerie forestière très claire, 14.XII.1951, H. DE SAEGER, 2910; 1 ex. : II/fc/17, en galerie forestière claire, 17.I.1952, H. DE SAEGER, 3022; 1 ex. : II/fd/17, en galerie forestière (massif), 28.I.1952, H. DE SAEGER, 3067; 1 ex. : PpK/8/9, en galerie forestière dégradée, 15.VII.1952, H. DE SAEGER, 3792; 1 ex. : PFNK/12/9, en galerie forestière, 24.VII.1952, H. DE SAEGER, 3820; 1 ex. : II/gc/8, tête de source à boisement très dégradé, 9.IX.1952, H. DE SAEGER, 4042.

8. — **Chironomus (Dicrotendipes) cordatus** (KIEFFER).

KIEFFER, 1922, Ann. Soc. Ent. France, 91, p. 64.

1 ex. : II/cd/9, en galerie forestière dégradée, 22.VI.1951, H. DE SAEGER, 1968; 1 ex. : II/gf/17, en galerie forestière, 31.VII.1952, H. DE SAEGER, 3865; 1 ex. : II/gd/6, en savane herbeuse, 2.IX.1952, H. DE SAEGER, 4023; 1 ex. : II/gd/11, en vallon marécageux sans ombrage, 4.IX.1952, H. DE SAEGER, 4036; 1 ex. : II/gc/8, tête de source à boisement très dégradé, 9.IX.1952, H. DE SAEGER, 4042.

9. — **Chironomus (Dicrotendipes) ? schoutedeni** GOETGHEBUER.

GOETGHEBUER, 1936, Rev. Zool. Bot. Afr., 28, p. 465.

1 ex. : II/gd/4, en savane herbeuse non brûlée, 12.VI.1951, H. DE SAEGER, 1902; 1 ex. : II/hd/4, en savane herbeuse, 6.XII.1951, H. DE SAEGER, 2861; 1 ex. : II/fd/18, berge, boisement relique de galerie, 21.XII.1951, H. DE SAEGER, 2939; 1 ex. : II/gd/6, en savane herbeuse, 2.IX.1952, H. DE SAEGER, 4023.

10. — **Chironomus (Dicrotendipes) regalis** GOETGHEBUER.

2 ex. : II/fd/17, en galerie forestière, 25.VI.1951, H. DE SAEGER, 1970; 1 ex. : II/fd/19, strate graminéenne, 21.VII.1951, H. DE SAEGER, 2131; 1 ex. : II/eb/9, en galerie forestière dégradée, 13.III.1952, H. DE SAEGER, 3234; 1 ex. : II/fd/17, en galerie forestière claire, 25.IX.1952, H. DE SAEGER, 4083.

11. — **Chironomus (Cryptochironomus) forcipatus** FREEMAN.

FREEMAN, 1954, Proc. R. Ent. Soc. Lond., (B), 1954, 23, p. 20.

1 ex. : II/fd/18, prairie à Graminées, 6.IX.1952, H. DE SAEGER, 4038.

12. — **Chironomus (Cryptochironomus) acutus** GOETGHEBUER.

GOETGHEBUER, 1936, Rev. Zool. Bot. Afr., 28, p. 470.

1 ex. : II/gd/4, savane herbeuse (camp), 30.X.1951, H. DE SAEGER, 2701.

13. — **Chironomus (Nilodorum) ? brevibucca** (KIEFFER).

KIEFFER, 1922, Ann. Soc. Ent. France, 91, p. 45.

1 ex. : II/e, en savane basse, 4.I.1951, J. VERSCHUREN, 1040; 1 ex. : II/gd/4, 30.XI.1951, H. DE SAEGER, 2812.

14. — *Chironomus* spp. indet.

1 ex. : Gangala-na-Bodio, X et XI 1949, H. DE SAEGER, 24; 1 ex. : I/o/3, aval, « Ndiwili » isolé, strate herbacée, 29.IX.1950, G. DEMOULIN, 853; 1 ex. : I/o/2, 2.XI.1950, H. DE SAEGER, 923; 1 ex. : mont Bagunda, haute savane brûlée, 17.I.1951, J. VERSCHUREN, 1126; 1 ex. : II/gd/11, végétation paludicole, 5.V.1951, H. DE SAEGER, 1663; 1 ex. : II/gd/8, tête de source arborée, 9.V.1951, H. DE SAEGER, 1700; 1 ex. : II/fd/17, en galerie forestière, 14.V.1951, H. DE SAEGER, 1724; 1 ex. : II/fe/17, strate herbeuse sous couvert forestier, 22.V.1951, H. DE SAEGER, 1772; 1 ex. : II/fd/18, berge argilo-sablonneuse humide, 21.V.1951, H. DE SAEGER, 1796; 1 ex. : II/hc/4, sur touffes de Graminées, 31.V.1951, J. VERSCHUREN, 1849; 1 ex. : II/fd/17, en galerie forestière claire, 18.VI.1951, H. DE SAEGER, 1950; 1 ex. : II/gd/11, en expansion marécageuse, 23.VI.1951, H. DE SAEGER, 1969; 4 ex. : II/fd/17, en galerie forestière, 25.VI.1951, H. DE SAEGER, 1970; 2 ex. : II/gd/11, en expansion marécageuse, 3.VII.1951, H. DE SAEGER, 2026; 1 ex. : II/fd/5, 23.VII.1951, H. DE SAEGER, 2128; 1 ex. : II/gd/4, en savane herbeuse à ligneux rares, 20.VII.1951, H. DE SAEGER, 2134; 1 ex. : II/fd/17, en galerie forestière, 13.VIII.1951, H. DE SAEGER, 2242; 1 ex. : II/lf/9, en galerie à boisement très dégradé, 21.VIII.1951, H. DE SAEGER, 2999; 1 ex. : II/fd/17, en galerie forestière claire, 24.IX.1951, H. DE SAEGER, 2468; 1 ex. : II/fd/17, en galerie forestière, 14.XI.1951, H. DE SAEGER, 2761; 2 ex. : II/gd/8, en tête de source dénudée, 13.XII.1951, H. DE SAEGER, 2901; 2 ex. : II/fd/17, en galerie forestière très claire, 14.XII.1951, H. DE SAEGER, 2910; 1 ex. : II/gc/15, partie herbeuse dans une plaine marécageuse, 17.XII.1951, H. DE SAEGER, 2917; 1 ex. : II/fc/17, en galerie forestière claire, 17.I.1952, H. DE SAEGER, 3022; 1 ex. : II/ke/8, en tête de source à boisement dégradé, 12.II.1952, H. DE SAEGER, 3105; 1 ex. : II/fd/18, berges sablonneuses, 6.V.1952, H. DE SAEGER, 3429; 1 ex. : II/gd/4, en savane herbeuse, 8.V.1952, H. DE SAEGER, 3449; 1 ex. : Aka, lisière de galerie forestière dense, 14.V.1952, H. DE SAEGER, 3450; 3 ex. : PFSK/22/8, tête de source à boisement clair, 10.VI.1952, H. DE SAEGER, 3608; 3 ex. : II/id/9, galerie forestière à *Erythrophloeum*, 2.VII.1952, H. DE SAEGER, 3720; 1 ex. : II/fd/17, galerie forestière claire, 9.VII.1952, H. DE SAEGER, 3763; 3 ex. : PpK/8/9, galerie forestière dégradée, 15.VII.1952, H. DE SAEGER, 3792; 1 ex. : PpK/8/9, lisière de galerie forestière, 15.VII.1952, H. DE SAEGER, 3793; 2 ex. : PFNK/12/9, en galerie forestière, 24.VII.1952, H. DE SAEGER, 3820; 1 ex. : II/gd/14, prairie à Herbacées paludicoles, 25.VII.1952, H. DE SAEGER, 3863; 1 ex. : II/gd/4, 12.VIII.1952, H. DE SAEGER, 3932; 1 ex. : II/fd/17, talus de berge boisée, 27.VIII.1952, H. DE SAEGER, 3983; 2 ex. : II/fc/4, en savane herbeuse, 30.VIII.1952, H. DE SAEGER, 3997; 1 ex. : II/gd/4, 9.IX.1952, J. VERSCHUREN, 4021; 4 ex. : II/gd/6, en savane herbeuse, 2.IX.1952, H. DE SAEGER, 4023; 2 ex. : II/gd/11, en vallon marécageux sans ombrage, 4.IX.1952, H. DE SAEGER, 4036; 1 ex. : II/le/8, en tête de source boisée, 8.IX.1952, H. DE SAEGER, 4040; 2 ex. : II/gc/8, en tête de source à boisement très dégradé, 9.IX.1952, H. DE SAEGER, 4042.

15. — *Stenochironomus ? atroconus* FREEMAN.

FREEMAN, 1955, Explor. Parc. Nat. Upemba, Miss. G. F. DE WITTE, fasc. 35 (6), p. 99.

1 ex. : I/a/3, taillis de galerie forestière, 13.III.1950, H. DE SAEGER, 304; 1 ex. : II/fd/17, en galerie forestière, 31.VII.1951, J. VERSCHUREN, 2182; 1 ex. : II/fd/17, en galerie forestière très claire, 14.XII.1951, H. DE SAEGER, 2913.

16. — **Stenochironomus spatuliger** KIEFFER.

KIEFFER, 1922, Ann. Soc. Ent. France, 91, p. 60.

1 ex. : II/id/9, en galerie forestière à *Erythrophloeum*, 2.VII.1952, H. DE SAEGER, 3720; 1 ex. : II/fd/17, en galerie forestière claire, 9.VII.1952, H. DE SAEGER, 3763.

17. — **Stenochironomus** spp. indet.

1 ex. : Gangala-na-Bodio, 9-10.XI.1949, H. DE SAEGER, 35; 2 ex. : I/o/2, sur feuilles des arbres, en galerie humide, 13.IX.1950, G. DEMOULIN, 818; 1 ex. : I/o/2, en galerie humide, feuilles des arbres, 5.X.1950, G. DEMOULIN, 868; 1 ex. : II/fc/17, en galerie forestière claire 17.I.1952, H. DE SAEGER, 3022.

18. — **Polypedilum** sp.

2 ex. : II/gd/11, en expansion marécageuse, 3.VII.1951, H. DE SAEGER, 2026; 1 ex. : PpK/55/d/8, en tête de source à découvert, 19.XI.1951, H. DE SAEGER, 2768; 1 ex. : II/gd/4, en savane herbeuse à ligneux suffrutescents, 5.VII.1952, H. DE SAEGER, 3743.

19. — **Skusella pallidipes** (KIEFFER).

KIEFFER, 1924, Ann. Soc. Ent. France, 90, p. 52.

1 ex. : II/gd/4, 3.XII.1951, H. DE SAEGER, 2843.

INDEX ALPHABÉTIQUE DES ESPÈCES

	Pages.
<i>acutus</i> GOETGHEBUER (<i>Chironomus</i>)	75
<i>atroconus</i> FREEMAN (<i>Stenochironomus</i>)	76
<i>brevibucca</i> (KIEFFER) (<i>Chironomus</i>)	75
<i>chloronotus</i> KIEFFER (<i>Chironomus</i>)	74
<i>cordatus</i> (KIEFFER) (<i>Chironomus</i>)	75
<i>forcipatus</i> FREEMAN (<i>Chironomus</i>)	75
<i>imicola</i> KIEFFER (<i>Chironomus</i>)	74
<i>luteus</i> FREEMAN (<i>Clinotanytus</i>)	73
<i>pallidipes</i> (KIEFFER) (<i>Skusella</i>)	77
<i>petersi</i> FREEMAN (<i>Anatopynia</i>)	73
<i>regalis</i> GOETGHEBUER (<i>Chironomus</i>)	75
<i>schoutedeni</i> GOETGHEBUER (<i>Chironomus</i>)	75
<i>scotti</i> KIEFFER (<i>Chironomus</i>)	74
<i>sjatuliger</i> KIEFFER (<i>Stenochironomus</i>)	77

Sorti de presse le 31 décembre 1962.