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 45

ODONATA

BY

ELLIOT PINHEY (Bulawayo)

The author is indebted to Prof. V. VAN STRAELEN and M. H. DE SAEGER for the opportunity of examining the Garamba Park collection of *Odonata*. Over three thousand two hundred adults and nearly eight thousand larvae were examined. Seven new species and one new genus were brought to light. It was also found necessary to expand the diagnosis of one existing genus, *Porpax* KARSCH, and, in so doing, revise this genus and add another new species from the collections of the National Museum, Bulawayo. Assistance from the Right Reverend Bishop K. SKELTON in the choice of names for the new species is gratefully acknowledged.

The new dragonflies are :

Paragomphus xanthus spec. nov.
Macromia flavimitella spec. nov.
Orthetrum monardi SCHMIDT, allotype female
Orthetrum latihami spec. nov.
Orthetrum saegeri spec. nov.
(*Porpax bipunctus* spec. nov.)
Porpax garambensis spec. nov.
Limnetothemis gen. nov.
Limnetothemis erythra spec. nov.
Trithemis leptosoma spec. nov.

Only a very limited number of references are included in this paper. Further literature, as well as synonymy can be seen in the author's catalogue (PINHEY, 1962*a*).

Remarks. — Surveying the *Odonata* collected in the Garamba National Park, with its relative paucity of adult *Lestes* LEACH, *Enallagma* CHARPENTIER and *Pseudagrion* SELYS, the solitary adult *Macromia* RAMBUR, and the almost total absence of primeval forest Libellulids such as *Tetratheminae* and *Hadrothemis* KARSCH, it seems to indicate that the area is largely savannah, with some gallery forest along the banks of the rivers or streams. The presence of Genus *Bradinopyga* KIRBY suggests some rocky outcrops. These conclusions are confirmed by referring to the ecological data supplied by M. H. DE SAEGER in fascicule 5 of the « Exploration du Parc National de la Garamba » (1956). Judging from this excellent volume, however, there is much swampland in this area and it is rather surprising that marshland species like *Brachythemis lacustris* (KIRBY) and the genus *Rhyothemis* HAGEN were in such small numbers. The nearly complete absence of the almost ubiquitous *Brachythemis leucosticta* (BURMEISTER) is another rather peculiar feature in such terrain. The swampland influence is indicated by *Aethiothemis* RIS.

The species *Pantala flavescens* (FABRICIUS), considered a strong migrant, is very well represented as both adults and larvae in the material. Yet another evident migrant, *Hemianax ephippiger* (BURMEISTER) is absent as an adult, although well represented as a larva, despite the length of time taken by the collecting, wich should have covered an adequate number of seasons to show the adult on the wing. The genus *Anax* LEACH again, is very poorly represented as an adult but it is shown in profusion as a larva. Of the genus *Zygonyx* SELYS, only one adult example was found, but a moderate number of larvae, of more than one species were collected. The possible explanation for the sparseness of all these species is that they are large and powerful fliers; and the genus *Macromia* RAMBUR comes into this category. On the other hand the fact that the adult *Gomphidae* are only represented by a single genus but the larvae show that several genera were present — this is not a very significant fact since adults of this family are often very difficult to collect.

An attempt has been made to sort the larvae of this collection. In the present state of knowledge, however, it is only a preliminary examination of a large African collection. In most cases it has merely been possible to name genera or probable generic groups. Certain genera, especially those of Aeshnids, are readily separated. In the *Coenagriidae* and *Libellulidae*, with so many genera as yet unknown in the larval state, corrections must one day be expected. In particular, two genera which are very well represented in the adult state, *Agriocnemis* SELYS and *Chalcostephia* KIRBY, are at present not distinguishable to the present author. It cannot be necessarily assumed, of course, that larvae of these were collected but in view of the extensive collecting that was carried out over a long period, it does seem highly probable that such larvae *are* present in the collection.

Family LESTIDAE

LESTES LEACH.

Lestes LEACH, 1815, BREWSTER'S Edinb. Encycl. (9) **1** : 137; PINHEY, 1962*a* : 93.

Two large species, both with pendant anal appendages in the male, were present in the Garamba material.

KEY.

1. Abdomen normally less than 37 mm long. Synthorax with longitudinal regular metallic stripes, often pruinosed ..... *plagiatus* (BURMEISTER).
— Abdomen 37 mm or more. Synthorax with irregular metallic fasciation, not pruinosed ..... *uncifer* KARSCH.

1. — **Lestes plagiatus** (BURMEISTER).

BURMEISTER, 1839, Handb. Ent. **2** : 824; PINHEY 1962*a* : 93.

A common and widespread species in most parts of the Ethiopian region.

Adults (see p. 69).

2. — **Lestes uncifer** KARSCH.

KARSCH, 1899, Ent. Nachr. **25** : 381; PINHEY, 1962*a* : 94.

A local but widespread species in tropical and subtropical Africa.

Adults (see p. 69).

3. — **Lestes** spp.

Larvae (see p. 69).

Family PROTONEURIDAE

KEY TO GENERA.

1. Vein 1 A extending one cellule beyond end of quadrilateral. Wings of male yellow ..... *Chlorocnemis* SELYS.
— Vein 1 A only just reaching distal end of quadrilateral. Wings of male hyaline ..... *Elattoneura* COWLEY.

ELATTONEURA Cowley.

Elattoneura Cowley, 1935, Ent. mon. Mag. **71** : 14; Pinhey, 1962*a* : 104.

A single small black species in this collection.

Elattoneura nigra Kimmins.

Kimmins, 1938, Ann. Mag. nat. Hist. (11) **1** : 297; Pinhey, 1962*a* : 106.

At maturity the male of this insect is a black-bodied species, having slender pruinose blue antehumeral stripes on the synthorax which, however, may be lost sometimes in preservation of specimen.

Adults (see p. 69).

CHLOROCNEMIS Selys.

Chlorocnemis Selys, 1863, Bull. Acad. Belg. (2) **16** : 175; Pinhey, 1962*a* : 103.

Only two examples of a single species of this genus were present in this collection. All the species tend to be local, most commonly in the montane forest. The Garamba specimens were collected in dense gallery forest, which is similar to conditions favourable to *C. wittei* Fraser in North West Rhodesia.

Chlorocnemis flavipennis Selys.

Selys, 1863, Bull. Acad. Belg. (2) **16** : 176; Pinhey, 1962*a* : 103.

Described from Sierra Leone, the present author has taken this species on the Nigeria-Cameroons border and has received further examples from the former Moyen Congo. The Garamba specimens were collected at Aka.

Adults (see p. 70).

? Protoneurid larvae (see p. 70).

Family PLATYCNEMIDIDAE

METACNEMIS Selys.

Metacnemis Selys, 1863, Bull. Acad. Belg. (2) **16** : 160; Pinhey, 1962*a* : 114.
Subgenus *Mesocnemis* Karsch, 1891, Ent. Nachr. **17** : 66.

A single species represented in the collection.

Metacnemis (Mesocnemis) singularis (KARSCH).

KARSCH, 1891, Ent. Nachr. **17** : 67; PINHEY, 1962*a* : 114.

A common and widespread species in most parts of the continental Ethiopian region, preferring fast-flowing streams.

Adults (see p. 70).

Larvae (see p. 70).

Family COENAGRIIDAE

KEY TO GENERA.

1. Anal vein leaves margin at *Ac* or less than the length of *Ac* before this vein 2
— Anal vein leaves margin at least the length of *Ac* before this vein. Usually with postocular spots 4
2. Frons with distinct angular crest. *Ac* normally nearer first than second *Ax*. No postocular spots ..... *Ceriagrion* SELYS.
— Frons rounded in front. *Ac* midway between antenodals or nearer second *Ax*. Usually with postocular spots 3
3. Head and body not generally very slender. Female without vulvar scale on 8th sternite ..... *Pseudagrion* SELYS.
— Head and body very slender. Female with vulvar scale on 8th sternite. *Aciagrion* SELYS.
4. Quadrilateral in forewing with anterior edge about half the length of the posterior. Arculus well beyond 2nd Ax ..... *Agriocnemis* SELYS.
— Quadrilateral in forewing with anterior edge less than half the posterior edge. Arculus at or almost at 2nd Ax 5
5. ♀ without vulvar spine. Thoracic and head colorations often red or orange. Postclypeus non-metallic ..... *Pseudagrion* SELYS.
— ♀ with vulvar spine. Head and thorax black or blue, occasionally brown (rarely orange and then the postclypeus is metallic) 6
6. Pterostigma of ♂ bicolorous in forewing. Postclypeus metallic ..... *Ischnura* CHARPENTIER.
— Pterostigma of ♂ unicolorous in forewing. Postclypeus non-metallic. *Enallagma* CHARPENTIER.

CERIAGRION SELYS.

Ceriagrion SELYS, 1876, Bull. Acad. Belg. (2) **41** : 1235; PINHEY, 1962*a* : 118.

Six species of this genus were found in the Garamba collections.

KEY TO MALES.

1. Large species, with rhomboidal pterostigma having rounded edges. 10th segment of abdomen with two strongly sclerotized crescentic ridges. Superior anal appendage very broad in dorsal view, with small inner apical hook ..... *rubellocerinum* FRASER.

— Pterostigma more elongate, a parallelogram 2

2. Thoracic dorsum orange to reddish 3

— Thoracic dorsum green 4

3. Segment 10 with distal teeth. Thorax generally orange to reddish ..... *glabrum* (BURMEISTER).

— Segment 10 without distal teeth. Thorax generally reddish brown dorsally ..... *suave* RIS.

4. Wings in adult strongly amber to beyond nodus. Superior and inferior anal appendages of equal length, the superior with strong distal concavity between the two terminal teeth ..... *whellani* LONGFIELD.

— Wings not strongly suffused with amber. Inferior appendage longer than superior; the concavity between terminal teeth of superior shallow and broader 5

5. Head normally reddish. Arculus at or only just distal to second *Ax* ... *corallinum* CAMPION.

— Head normally green. Arculus well distal to second *Ax* ..... *bidentatum* FRASER.

KEY TO FEMALES.

1. Abdomen well over 30 mm long. Thorax with large rounded black dorsal spots on sutures. Pterostigma rhomboidal ..... *rubellocerinum* FRASER.

— Thorax with, at most, small dorsal dots or dashes, not rounded spots. Pterostigma elongate, parallelogram 2

2. Thorax brown or reddish 3

— Thorax green dorsally 4

3. Epaulette well blackened, elliptical, well dorsal in position ..... *glabrum* (BURMEISTER).

— Epaulette only partially blackened, spherical, less dorsal against mesostigmal lamina ..... *suave* RIS.

4. Black of prothorax more or less evenly rounded. Epaulette an elongated black streak ..... *bidentatum* FRASER.

— Posterior edge of prothorax rather sinuous. Epaulette a small rounded spot ..... *whellani* LONGFIELD and *corallinum* CAMPION.

If the identification of the female *corallinum* CAMPION is correct, the significant difference appears to be a larger epaulette than in *whellani* LONGFIELD.

1. — **Ceriagrion bidentatum** FRASER.

FRASER, 1941, Proc. R. ent. Soc. Lond. (B) **10** : 64; PINHEY, 1962*a* : 119.

A smallish, fairly widespread but local species, characterised by the abnormally distal position of the arculus.

Adults (see p. 70).

2. — **Ceriagrion corallinum** CAMPION.

CAMPION, 1914, Ann. Mag. nat. Hist. (8) **14** : 278; PINHEY, 1962*a* : 119.

Known from the northern Congo and Southern Nigeria this is a rather little known species which has been confused in the past with *whellani* LONGFIELD. The latter is, however, distinguished by anal appendages and the strong amber suffusion of the wings in the male.

Adults (see p. 70).

3. — **Ceriagrion glabrum** (BURMEISTER).

BURMEISTER, 1839, Handb. Ent. **2** : 821; PINHEY, 1962*a* : 119.

A very widespread species.

Adults (see p. 71).

4. — **Ceriagrion rubellocerinum** FRASER.

(Fig. 1.)

FRASER, 1947, Trans. R. ent. Soc. Lond. **98** : 28; PINHEY, 1962*a* : 120.

A very distinctive species, despite the rhomboidal pterostigma and dark spots on sides of thorax, in which it resembles *C. platystigma* FRASER. The

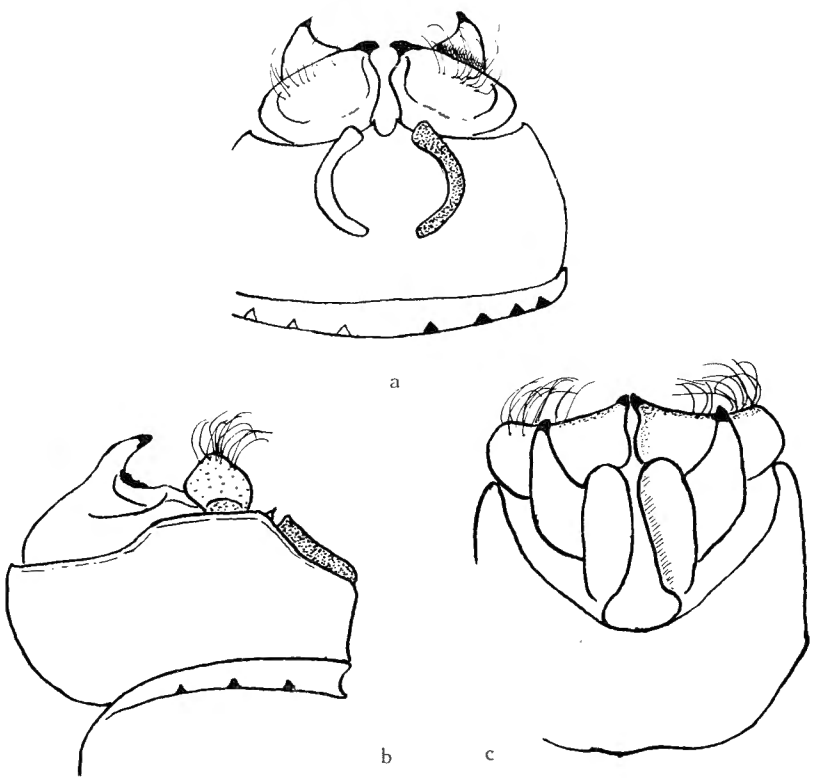


FIG. 1. — *Ceriagrion rubellocerinum* FRASER,
Anal appendages (a) from above (b) from right (c) from below.

crescentic chitinized ridges on the 10th segment of the male (fig. 1) are peculiar. The position of *Ac*, at or distal to end of petiole and situated midway between the antenodal crossveins or nearer the second *Ax* is in itself rather abnormal.

A brief description of immature and mature examples might be of some interest.

Mature male : Labrum, genae, anteclypeus and front of frons pale bluish green; postclypeus, frons above and vertex dull black.

Thorax above dull blackish to below humeral suture; sides pale blue-green, often coated with white pruinosity. Postmortem changes sometimes affect the head and thorax of this species, producing spurious pale or dark markings. Legs pale brown.

Abdomen greenish on segments 1-2, on distal segments reddish. A broad black dorsal band on segment 1, on base and distal end of 2, and continuous on segments 3-6 : swollen at ends of segments to give a superficially spotted appearance to the segments. Segment 10 and appendages are shown in fig. 1.

Pterostigma a black parallelogram. Forewing with 13-14 Px.

Abdomen 33 mm, hindwing 21 mm.

Older male : Thorax gradually becomes black.

Immature males : Head, thorax and base and end of abdomen mainly bright orange. The dark facial marking develops early but juveniles have the thorax entirely pale. Black dorsal dots at humeral and at the two lateral sutures. Abdominal segments 2 and 8-10 entirely red or orange-red at first.

Mature female : Face and head similar to mature male. Thorax less black. Black abdominal band continuous on all segments. Wings often slightly fumose. Pterostigma pale greyish brown.

Known from Ivory Coast, Liberia and Southern Nigeria, the Garamba material now extends the range to the Northern Congo.

Adults (see p. 72).

5. — **Ceriagrion suave** Ris.

Ris, 1921, Ann. S. Afr. Mus. **18** : 316; Pinhey, 1962*a* : 120.

Widespread in Africa but more local than *glabrum* (Burmeister).

Adults (see p. 72).

6. — **Ceriagrion whellani** Longfield.

Longfield, 1952, Proc. R. ent. Soc. Lond. (B) **21** : 42; Pinhey, 1962*a* : 121.

A small distinctive and widespread species.

Adults (see p. 73).

Larvae (see p. 73).

PSEUDAGRION SELYS.

Pseudagrion SELYS, 1876, Bull. Acad. Belg. (2) **42** : 490; PINHEY, 1962*a* : 121.

Only a few species of this very large and widespread genus are represented in this Garamba collection. All these species are known, but further light is shed on the distribution, particularly of *P. coeruleiceps* LONGFIELD.

KEY TO SUBGROUPS.

1. ♂ without distal spines on abdominal segment 10; head and thorax with broad black areas. ♀ with epaulettes ..... Group A.

— ♂ with spines on distal margin of segment 10; black areas on head and thorax reduced or obsolete.
♀ without epaulettes, but with modified mesostigmal lamina Group B.

GROUP A.

KEY TO MALES.

1. Head and thorax normally developing dorsal pruinosity. Superior anal appendage with the lower branch distinctly longer than the upper branch ..... *kersteni* GERSTÄCKER.

— Head and thorax without dorsal pruinosity. Superior appendage with widely gaping branches, but the lower not longer than the upper ... 2

2. Postclypeus mainly blue or greenish. Lateral black bands on thorax linked or nearly linked by an oblique line from first suture ..... *coeruleiceps* LONGFIELD.

— Postclypeus all black. Lateral black bands on thorax not linked up by an oblique line 3

3. Pale antehumeral stripe very narrow; a black dot between the lateral bands of the thorax ..... *melanicterum* SELYS.

— Antehumeral stripe broader, as wide as half the mesepisternum; without black dot between the lateral bands ..... *kibalense* LONGFIELD.

KEY TO FEMALES.

1. Second lateral suture of synthorax with only a black dorsal dot ... 2

— Second lateral suture of synthorax more or less covered by broad black band 3

2. Postclypeus all black. Prothoracic stylet broad, mainly black ..... *kersteni* GERSTÄCKER.

— Postclypeus only partly black. Prothoracic stylet slender, yellow ..... *coeruleiceps* LONGFIELD.

3. Antehumeral stripe slender. Hind lobe of prothorax slightly angled in the centre of posterior margin ..... *melanicterum* SELYS.

— Antehumeral stripe more or less as broad as half the mesepisternum. Hind lobe of prothorax rounded in centre of posterior margin ..... *kibalense* LONGFIELD.

1. — **Pseudagrion kersteni** (GERSTAECKER).

GERSTAECKER, 1869, Arch. Nat. **35** (1) : 222; PINHEY, 1962*a* : 125.

A very common and widespread species, usually in open country.

Adults (see p. 74).

2. — **Pseudagrion coeruleiceps** LONGFIELD.

LONGFIELD, 1959, Publ. cult. Cia Diamantes, Angola **45** : 17, 19; PINHEY, 1962*a* : 124.

Hitherto only recorded from Nigeria, this species now has its range extended to the North Eastern Congo.

Adults (see p. 74).

3. — **Pseudagrion melanicterum** SELYS.

SELYS, 1876, Bull. Acad. Belg. (2) **42** : 492; PINHEY, 1962*a* : 126.

Widespread in tropical and subtropical Africa, in forest.

Adults (see p. 74).

4. — **Pseudagrion kibalense** LONGFIELD.

LONGFIELD, 1959, loc. cit. **45** : 17, 22; PINHEY, 1962*a* : 126.

Local : Uganda, N.W. Rhodesia, Katanga.

Adults (see p. 75).

GROUP B.

KEY TO MALES.

1. Face and thorax green or blue-green 2
— Face and thorax red or orange red, or heavily coated with black ... 3
2. Synthorax almost entirely pale, with only vestigial black markings ... *glaucescens* SELYS.
— Synthorax black dorsally with broad blue or green antehumeral stripes. *glaucescens* f. *zambeziensis* PINHEY.
3. Face, vertex and thorax more or less red, with black stripes on thorax. *sjöstedti sjöstedti* FÖRSTER.
— Face red; vertex and the synthorax mainly black ... *whellani* PINHEY.

KEY TO FEMALES.

1. Prothoracic stylets vestigial. Face and thorax orange-red to brownish. *whellani* PINHEY.
— Prothoracic stylets well developed 2
2. Face and thorax green to blue. Prothoracic stylets elongate, parallel, reaching over halfway across middle lobe of prothorax ..... *glaucescens* SELYS.
— Face and thorax orange-red or brownish. Stylets divergent, reaching only a third across middle lobe of prothorax ..... *sjöstedti sjöstedti* FÖRSTER.

1. — **Pseudagrion glaucescens** SELYS.

SELYS, 1876, Bull. Acad. Belg. (2) **42** : 498 (208 sep.); PINHEY, 1962*a* : 125.

Widespread in tropical and subtropical Africa, most commonly on broad streams and rivers. The darker form *zambeziensis* PINHEY (*in litt.*) is only a melanic variety.

Adults (see p. 75).

3. — **Pseudagrion sjöstedti sjöstedti** FÖRSTER.

FÖRSTER, 1906, Jber. Ver. Naturk. Mannheim **71-72** : (62 sep.); PINHEY, 1962*a* : 128.

Widespread in tropical and subtropical Africa but apparently separable into geographical subspecies. The series from Garamba National Park

shows variation from examples with only vestigial black on head and moderate black bands on thorax; to similar examples with broader anteocellar band on vertex; and from this to specimens with broader thoracic bands. Probably these are only developmental conditions.

Adults (see p. 75).

4. — **Pseudagrion whellani** PINHEY.

PINHEY, 1956, Occ. Pap. Coryndon Mus. **4** : 18; PINHEY, 1962*a* : 129.
Widespread in tropical and subtropical Africa.

Adults (see p. 76).

5. — **Pseudagrion** spp.

Larvae (see p. 76).

ACIAGRION SELYS.

Aciagrion SELYS, 1891, Ann. Mus. Stor. Nat. Genova (2) **10** : 30, 509; PINHEY, 1962*a* : 132.

The African members of this genus require revision before determinations of both sexes can be satisfactory. Two species are present in this collection.

KEY TO MALES.

1. Superior anal appendage elongate, as long as segment 10, inferior appendage short ..... *africanum* MARTIN.
— Superior appendage conical in lateral view, shorter than segment 10 and not longer than inferior appendage ..... *attenuatum* FRASER.

1. — **Aciagrion africanum** MARTIN.

MARTIN, 1908, Ann. Mus. Stor. Nat. Genova **43** : 659 (11 sep.); PINHEY, 1962*a* : 132.

Male : Face and frons blue; three black spots on postclypeus and a black basal band on frons. Vertex black with large blue triangular postocular spots linked across black of occiput.

Thorax blue with black marking. Synthorax black to just below humeral suture, with blue antehumeral stripes slightly wider than half the mesepisternum. A short black dorsal bar on first lateral suture and a dorsal spot on second suture. Legs yellow with only traces of posterior black streaks on femora.

Abdomen with narrowish black dorsal band on segments 1-7, incomplete distally on 7; segments 8-10 all blue. Superior appendage broad, elongate, almost as long as segment 10; inferior short, with dorsal spine (as in many *Enallagma* CHARP.).

Pterostigma rhomboidal, brown, with clear periphery. 12 *Px* in forewing.

Abdomen 27 mm, hindwing 20 mm.

Female : Incomplete and stained. The thorax appears to show no visible modification for gripping points but it is not clear in the specimen.

Adults (see p. 76).

2. — **Aciagrion attenuatum** FRASER.

(Fig. 2.)

FRASER, 1928, Trans. Ent. Soc. Lond., **76** : 126.

Male (No. 2056) : Face blue-green; postclypeus and vertex entirely black except for narrow green postocular spots which are linked across back of occiput.

Thorax green with black markings. Synthorax black to well below humeral suture, with narrow green antehumeral stripes. Legs yellow with slender black streaks on femora.

Abdomen green, with narrowish black dorsal band on segments 1-7; 8-10 all blue. Superior and inferior anal appendage short and of about equal length; superiors conical in lateral view (fig. 2).

Pterostigma rhomboidal, brown, with clear periphery. Forewing with 13 *Px.*

Abdomen 32 mm, hindwing 22 mm.

? Female : Head similar but the postocular spots larger. Prothorax similar to male in marking but the synthorax with very reduced black marking; black dorsal dot and traces of a line on humeral suture; ventral dot on mesepimeron; dorsal dot on second lateral suture. Gripping point a small black depression at ventral end of mesepisternum near median carina just behind a slightly raised postdorsal angle of the mesostigmal lamina. Legs as in male. Abdominal black band much more slender, bulbous distally on each segment, broadened on terminal segments.

Wings similar.

Abdomen 28 mm, hindwing 22 mm.

Adults (see p. 77).

ISCHNURA Charpentier.

Ischnura Charpentier, 1840, Libell. Eur. 20; Pinhey, 1962*a* : 136.

Represented in this collection by the only widespread Ethiopian species, other species of this region being highly localized.

Ischnura senegalensis (Rambur).

Rambur, 1842, Névr. 276; Pinhey, 1962*a* : 137.

Only two adults in this collection.

Adults (see p. 77).

Larvae (see p. 77).

ENALLAGMA Charpentier.

Enallagma Charpentier, 1840, Libell. Eur. 21; Pinhey, 1962*a* : 133.

Only a single species of this cosmopolitan genus was present in this collection.

Enallagma subtile Ris.

Ris, 1921, Ann. S. Afr. Mus. **18** : 332; Pinhey, 1962*a* : 135.

This species is local but widely distributed in tropical and subtropical Africa.

Except for the broad black band across the vertex this species is normally characterized by sparse black markings, consisting of a slender medial band on the thorax and a stripe along the adomen. The legs are entirely pale. The ground colour is most frequently a pale yellowish colour, rarely blue. Most of the Garamba examples, however, are blue.

Melanic aberration. — Amongst this material there are some examples (nos. 2408, 3567) which are much more heavily marked with black : vertex more distinctly and broadly black; synthoracic dorsum black to well below humeral suture, with pale antehumeral stripe. In the immature condition the antehumeral is nearly as wide as half the mesepisternum, but at maturity it has shrunk, in the male, to a very slender stripe. On the basal half of the abdominal segment 8 there is a black triangle which is larger in the mature males. A few melanic females are also present.

Adults (see p. 77).

Larvae (see p. 78).

AGRIOCNEMIS SELYS.

Agriocnemis SELYS, 1869, POLLEN et VAN DAM, Madagascar, **5** (1) : 24; idem, 1872, Rev. et Mag. Zool. **23** : (182); PINHEY, 1962*a* : 138.

A genus of small widespread and gregarious species, generally found at reedy pools. Three species in the present collection, which can be readily separated.

KEY.

1. Labrum of ♂ pale green to yellowish, of ♀ black with distal cream anterior transverse line; hindlobe of prothorax in ♀ angled in centre, with small ventral projection below the angle; anal appendages of ♂ forcipate ..... *forcipata* LE ROI.

— Labrum in both sexes entirely metallic (golden brown in teneral state); hindlobe of prothorax in ♀ not angled in centre; anal appendages of ♂ not forcipate 2

2. Abdomen generally under 17 mm. long. Labrum in both sexes usually metallic green; becoming glossy black in adult ♂. Hindlobe of prothorax in ♀ excised in middle portion; anal appendages of ♂ short, the superior and inferior of equal length ..... *exilis* SELYS.

— Abdomen over 19 mm. long. Labrum in ♂ metallic purple, in ♀ metallic green. Hindlobe of prothorax in ♀ with broad medial projection; inferior anal appendage much longer than superior ..... *maclachlani* SELYS.

1. — **Agriocnemis exilis** SELYS.

(Fig. 3*b*.)

SELYS, 1869, POLLEN et VAN DAM, Madagascar, **5** (1) : 24; idem, 1872, Rev. et Mag. Zool. **23** : (182); PINHEY, 1962*a* : 139.

A small species, with short, equal-lengthed superior and inferior anal appendages in the male, the superior curled and provided ventrally with a fine spine. The labrum of the male changes from golden brown in the teneral state, sometimes with lilac sheen, through metallic green to glossy black in adult. The thorax of adult in both sexes is broadly black to below humeral suture; but in the juvenile female the black is restricted to a bronze green median stripe (reminiscent of the heterochroic female of *Ischnura senegalensis* (RAMBUR), then gradually widens, eventually covering the dorsum except for the pale antehumeral stripes. These latter may be obliterated in the fully adult male. Penis fig. 3*b*.

Adults (see p. 78).

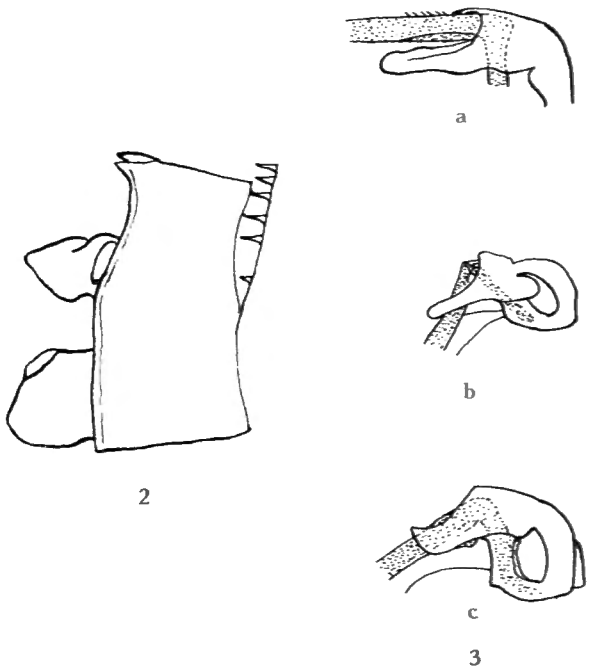


FIG. 2. — *Aciagrion attenuatum* FRASER.
Anal appendages from right.

FIG. 3. — Penis in *Agriocnemis* SELYS.
a) *forcipata* LE ROI (*victoria* FRASER similar); b) *exilis* SELYS;
c) *maclachlani* SELYS, all from right.

2. — **Agriocnemis forcipata** LE ROI.

(Fig. 3*a*.)

LE ROI, 1915, 2 Deutsch. zentr. Afr. Exped. (1910-11), **1** : 341; PINHEY, 1962*a* : 139.

Syn. nov. : *Agriocnemis victoria* FRASER, 1928, Trans. Ent. Soc. Lond. 123; PINHEY, 1962*a* : 140.

This is a readily identified species, in the colour of the non-metallic labrum (all pale in the male, pale anteriorly in the female), and in the forcipate appendages of the male. In the teneral female, however, the labrum may be mainly purple. The postclypeus is dull black in adult but glossy in juvenile. The thorax of the female and the immature male is vermilion red, but as in the other two species mentioned here, it is broadly black on dorsum and to well below humeral suture; with a black band on second lateral suture. In teneral female however, the black may just

extend below humeral suture and the band on second suture only develops slightly later. The pale antehumeral stripes may be moderately broad or narrow (particularly in adult male). Pterostigma rhomboidal, not elongate as in the other two species.

It is quite evident, from this and other material, that *A. victoria* FRASER is no more than a small form, occurring in the same areas and at the same time of year as the normal form. Colour changes are similar and the penes (fig. 3*a*) are identical. In fact there is even a tendency to intergradation of size.

One of the females in No. 2250 has a Chalcidoid attached to the thorax.

Adults (see p. 79).

3. — **Agriocnemis maclachlani** SELYS.

(Fig. 3*c*.)

SELYS, 1877, Bull. Acad. Belg. **43** : (58); PINHEY, 1962*a* : 139.

A large species for this genus. Labrum metallic purple in male, metallic green in female. The inferior anal appendage in the male is very long and robust, the superior short and curled. The thorax in both sexes is broadly black in adult but in teneral and juvenile female it is entirely orange, without trace of black.

Penis fig. 3*c*.

Adults (see p. 80).

Family COENAGRIIDAE

Larvae incogn. (see p. 81).

Family AGRIIDAE

PHAON SELYS.

Phaon SELYS, 1853, Bull. Acad. Belg. 20, Suppl. 22, 23, PINHEY, 1962*a* : 143.

Phaon iridipennis (BURMEISTER).

BURMEISTER, 1839, Handb. Ent. **2** : 827; PINHEY, 1962*a* : 143.

Common in tropical and subtropical Africa.

Adults (see p. 82).

Larvae (see p. 82).

A few Agriid larvae in the Garamba material are probably this widespread species. Total body length (without gills) 10 mm., the two outer gills 10 mm., the medium gill c. 5 mm. Head small. Antenna with very elongate first segment, more than twice a slong as the head, followed by a 6-segmented flagellar portion of short segments, progressively shorter to apex. Abdomen slender, cylindrical, each segment except the last two with two pairs of black dots on posterior margin. Caudal gills triquetral but flattened in each direction; with finely serrate margins and acute apices. Mask reaching just beyond middle legs; median lobe very strongly pointed medially but deeply bifid at apex, the division leading to an ovate sulcus. Each lateral lobe convex inwardly; with two widely spaced setae and, terminally, with two short and two long claws.

Family CHLOROCYPHIDAE

CHLOROCYPHA FRASER.

Chlorocypha FRASER, 1928, J. Bombay nat. Hist. Soc. **32** : 684; PINHEY, 1962*a* : 147.

Three species of this large, colourful genus were found in the collection. Despite FRASER'S invaluable revisions of this group (FRASER 1949*c*, 1950*c*, vide PINHEY'S Catalogue, 1962 p. 67), confusion still exists in the species and synonymy and, at our present state of knowledge, too much reliance in the male must be placed both on colour of the abdomen and on markings of head and body. Thus, stained or immature examples may often be difficult to identify; and the gradual elimination of pale areas by black during development has not yet been adequately studied.

In the following species the male examples placed as *aphrodite* (LE ROI) are all either immature or so altered by postmortem changes that the abdominal colour is not distinct. Markings indicate that this is probably the correct identification and the limited female characteristics help to confirm this. A further review of the family is being published elsewhere.

KEY TO MALES (in moderately fresh condition).

1. Abdomen bright blue on all segments; segments 2-3 with black dots attached to distal margin ..... *aphrodite* (LE ROI).
— Abdomen red on all segments 2

2. Segment 2 of abdomen with black bean-shaped spots attached to distal margin, these spots proximally curved *inwards*; on segment 3 with distal spots free from distal margin ..... *wittei* FRASER.
— Segments 2-3 of abdomen with broad black hooks on distal margin, these hooks curved *outwards* proximally ..... *rubida* (SELYS).

KEY TO FEMALES.

1. Abdominal segment 2 with broad continuous black band enclosing a pale mushroom-shaped central spot ..... *rubida* (SELYS).
— Abdominal segment 2 pale with only small black spots attached to distal margin 2

2. Smaller species, abdomen c. 18 mm, hindwing 21-22 mm ..... *wittei* FRASER.
— Large, robust species, abdomen 19 mm, hindwing c. 23 mm ..... *aphrodite* (LE ROI).

1. — **Chlorocypha aphrodite** (LE ROI).

LE ROI, 1915, 2 Deutsch. Zentr. Afr. Exp. **1** : 331; PINHEY, 1962*a* : 147.

A well known species in the Northern Congo.

Adults (see p. 82).

2. — **Chlorocypha rubida** (SELYS).

SELYS, 1853, Bull. Acad. Belg. (2) 1, **20**, Annexe 58; PINHEY, 1962*a* : 150.

Widespread in equatorial-Africa.

Adults (see p. 82).

3. — **Chlorocypha** spp.

Larvae (see p. 83).

4. — **Chlorocypha wittei** FRASER.

FRASER, 1955, Mission DE WITTE, Parc nat. Upemba **38** : 10; PINHEY, 1962*a* : 151.

Another Congo species, not very well known, but occurring as far south as the Rhodesian border.

Adults (see p. 83).

Zygoptera larvae indet. (see p. 83).

Family GOMPHIDAE

KEY TO GENERA.

1. Triangles and subtriangles crossed by more than one vein ..... *Ictinogomphus* COWLEY.
— Triangles and subtriangles free 2
2. Forewing with 3 crossveins between sectors of arculus prior to bifurcation of *RS*. Small slender insects. Abdominal segment 10 excessively elongate; anal appendages very short ..... *Lestinogomphus* MARTIN.
— Forewing with 1-2 crossveins between sectors of arculus. Abdominal segment 10 not elongate 3
3. Frons without crest, the face sloped forwards. Abdominal segment 10 constricted at base ..... *Neurogomphus* KARSCH.
— Frons with well developed crest, the face more or less vertical. Segment 10 not constricted 4
4. Discoidal field of forewing expanding strongly before nodal level. Segment 8 with very large foliations ..... *Phyllogomphus* SELYS.
— Discoidal field not markedly expanding. Foliations moderate or small. *Paragomphus* COWLEY.

ICTINOGOMPHUS COWLEY.

Ictinogomphus COWLEY, 1934, Entomologist **67** : 274; PINHEY, 1962*a* : 168.

No adults in this collection, only early instar larvae.

Larvae. These are possibly *I. ferox* (RAMBUR, 1842) (see p. 84).

LESTINOGOMPHUS MARTIN.

Lestinogomphus MARTIN, 1912, Ann. Soc. ent. Fr. **80** : 484; PINHEY, 1962*a* : 174.

Only larvae were present in the Garamba material.

The Lestinogomphine larvae may be *L. angustus* MARTIN (1912) [= *L. africanus* (FRASER)] or an undescribed species.

Larvae (see p. 84).

NEUROGOMPHUS KARSCH.

Neurogomphus KARSCH, 1890, Ent. Nachr. **66** : 374, 380; PINHEY, 1962*a* : 178.

Larvae only.

Larvae (see p. 84).

PHYLLOGOMPHUS Selys.

Phyllogomphus Selys, 1854, Bull. Acad. Belg. **21** (2) : 62 (34 sep.); Pinhey, 1962*a* : 180.

Larvae only.

Larvae (see p. 84).

NOTOGOMPHUS Hagen.

Notogomphus Hagen, in Selys, 1858, Mém. Soc. Liège **11** : 119; Pinhey, 1962*a* : 176.

Only one larva appears to be of this genus (see p. 84).

PARAGOMPHUS Cowley.

Paragomphus Cowley, 1934, Entomologist **67** : 201; Pinhey, 1962*a* : 183.

Two species of this genus were in the Garamba material, one of them a new species. It seems significant that these were the only adult examples of the moderately large family of the *Gomphidae*. Some members of this family are, on the whole, notoriously difficult to find, although some species are widespread and abundant.

KEY.

1. Large, robust species, with yellow ground colour, the thoracic markings distinct. Abdominal foliations narrow, superior appendages of male very robust, divergent at apices ..... *xanthus* spec. nov.

— Small, slender species, with green ground colour, the thoracic markings rather indistinct. Abdominal foliations large in the male, superior appendages slender, tapering, adjacent at apices ..... *hageni* Selys.

1. — **Paragomphus hageni** (Selys).

Selys, 1871, Ann. Soc. ent. Belg. **14** : 14, 15, 20; Pinhey, 1962*a* : 184.

A common species throughout the African Continent.

Adult (see p. 84).

2. — **Paragomphus xanthus** spec. nov.

(Fig. 4*a-e*.)

A rather large species, yellow in colour, instead of the usual green. Anal appendages robust, the superiors divergent at apices.

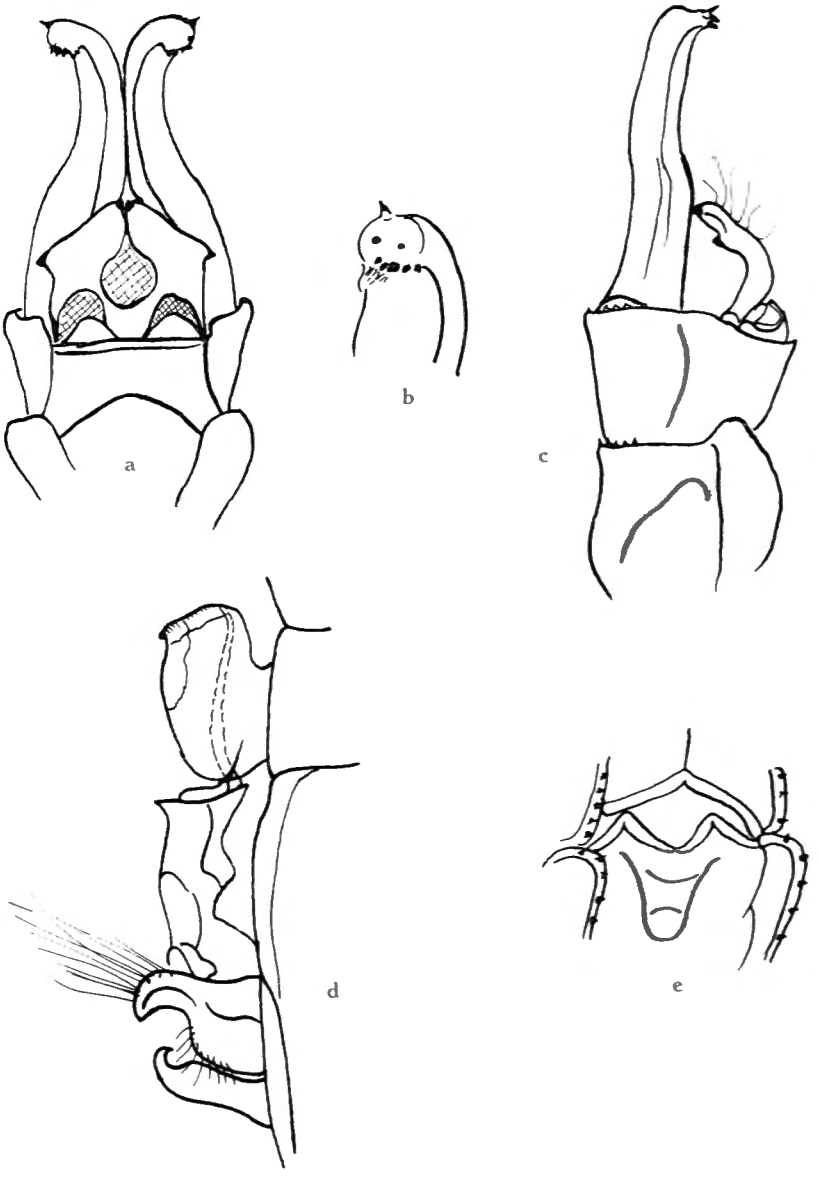


FIG. 4. — *Paragomphus xanthus* spec. nov.

a) anal appendages from below; b) detail of left superior appendage; c) appendages from left; d) accessory genitalia from right. Note the spine at base of flagellum (which is indicated by dotted lines). e) ventral surface of abdominal segments 8-9 in female, showing vulvar spine.

Holotype male (no. 1501): Labium, face and frons yellow; labrum with fine brown distal margin and basal stripe; postclypeus brown on distal margin; frons with brown stripe just below crest and a brown basal band; vertex black; occipital rectangle brown.

Prothorax yellow suffused with brown medially.

Synthorax brown to below humeral suture; collar and median crest yellow and two yellow antehumeral stripes; the inner one shortish, oblique, fusiform, the outer long, slender, curved at dorsal end. Side of thorax yellow, with brown stripes on both lateral sutures and a subventral one on metepimeron.

Femora yellowish to brown; tibiae and tarsi blackish, but foretibia paler.

Abdominal segments 1-2 mainly yellow, including the rather evenly curved oreillets, with some brown suffusion dorso-laterally, ending in lateral streaks. Segments 3-6 brown with broad lateral yellow band, severed by a brown line at the transverse carina. Segment 7 mainly lost. Segment 8 brown with irregular yellow latero-basal patch; 9 brown with broken yellow lateral band; 10 yellow with two brown basal dots.

Foliations narrow. Anal appendages (fig. 4) yellow. Superiors robust, convergent at halfway, divergent before apices and slightly down-turned; the apex with prominent terminal spine and a few teeth in two rows behind the apex. Inferiors reaching rather less than half as far. Hamules robust, peneal flagellum well developed and having a prominent basal spine.

Venation brown, costal margin yellow. Pterostigma dark brown. Forewing with 12-13 Ax, the 5th being primary; 7-9 Px. Discoidal field of two rows, expanding slightly after nodal level. Anal loop showing 3-4 cells. Anal triangle of 4 cellules. Abdomen (without appendages and allowing for segment 7) c. 28 mm, hindwing 25 mm, pterostigma 4 mm.

Allotype female (no. 1360): Face, head and thorax similar to male. Femora more yellow, tibiae and tarsi dark brown. Abdomen broader and yellower. Segments 1-2 as in male; segments 3-6 yellow with brown mid-dorsal line linked, via transverse carina and distal end of segment, to a brown sublateral stripe. Segment 7 yellow in basal two thirds, with ferruginous dorsal line connected to the ferruginous distal third; 8 ferruginous with yellow sub-basal patch; 9 ferruginous dorsally, yellow laterally; segment 10 and cerci yellow, cerci slender, tapering to acute apices, vulvar scale as in fig. 4*e*.

Forewing with 14-15 *Ax*, the 5th primary. Other features as in male.

Abdomen 30 mm, hindwing 28 mm, pterostigma 4 mm.

Paratype female: (teneral; no. 1361) Similar but the abdominal markings not yet developed; pterostigma pinkish white.

In general appearance, colour of body, particularly the thorax, and the neuration, and length of pterostigma, this resembles *Crenigomphus* SELYS (1892), but the anal appendages of the male definitely place this species in *Paragomphus* COWLEY. In the very robust anal appendages, divergent at apices, it is closest to the following species of *Paragomphus* :

nyassicus KIMMINS (1955) which has much broader foliations on the abdomen; *viridior* PINHEY (1961); *moka* LONGFIELD (1936); *alluaudi* (MARTIN) (1915) and the group of *cognatus* (RAMBUR, 1842). From all these it differs in its yellow coloration (green in these others) and in the armature at the end of the superior appendages. In thoracic markings, especially the ante-humeral stripes, it is nearer *cognatus* (RAMBUR) which, however, is much blacker in markings on the face and body. The abdominal foliations are also larger in the *cognatus* group.

The specific name « xanthus » is selected because of the colour. Types in the Institut des Parcs Nationaux, Bruxelles.

Adults (see p. 84).

3. — **Paragomphus** spp.

Larvae (see p. 85).

Family AESHNIDAE

KEY TO GENERA.

1. IR_3 forked proximally to pterostigma. Anal margin of hindwing in ♂ excised. Eyes very large ..... *Gynacantha* SELYS.

— IR_3 forked beyond middle of pterostigma. Anal margin and tornus in ♂ rounded. Eyes not excessively large 2

2. Vein *1A* in hindwing runs more or less parallel to Cu_2. *Anax* LEACH.

— Vein *1A* in hindwing forms a loop soon after its origin ..... *Hemianax* SELYS.

ANAX LEACH.

Anax LEACH, 1815, in BREWSTER'S Edinb. Encycl. (9) **1** : 137; PINHEY, 1962*a* : 191.

Two adult females of this genus were amongst the material, as well as a large number of larvae.

KEY.

1. Abdomen extensively marked with blue. Superior appendage of ♂ not very broad ..... *imperator* LEACH.
— Abdomen extensively black. Superior appendage of ♂ broadly triangular ..... *chloromelas* RIS.

1. — **Anax chloromelas** RIS.

RIS, 1911, Ann. Soc. ent. Belg. **55** : 321; PINHEY, 1962*a* : 191.

As so far known this is a scarce species, found locally in tropical Africa. The single female in this collection is, however, uncertain. It agrees with this species in the marking on the frons and in discernible markings on the abdomen, but the anal cerci are lost.

Adult (see p. 85).

2. — **Anax imperator** LEACH.

LEACH, 1815, in BREWSTER'S Edinb. Encycl. (9) **1** : 137; PINHEY, 1962*a* : 195.

Widespread and abundant.

Adult (see p. 85).

3. — **Anax** spp.

Larvae (see p. 85) : At least two species, with different shaped masks.

HEMIANAX SELYS.

Hemianax SELYS, 1883, Bull. Acad. Belg. (3) **5** : 723 (40 sep.); PINHEY, 1962*a* : 193.

Hemianax ephippiger (BURMEISTER).

BURMEISTER, 1839, Handb. Ent. **2** : 840; PINHEY, 1962*a* : 193.

Common in most parts of Africa; also Southern Europe and Western Asia.

No adults found in the Garamba collection, but many larvae.

Larvae (see p. 86) : Separated from *Anax* LEACH by the shorter, unconstricted mask, and by tracing the anal vein on the hindwing (in the later instars).

GYNACANTHA Selys.

Gynacantha Selys, 1883, Bull. Acad. Belg. (3) **5** : 745; Pinhey, 1962*a* : 197.
Acanthagyna Kirby, 1890, Cat.-Odon. 94.

In reverting to the name *Gynacantha* the author is following the trend of other workers on African Odonata.

Fraser (1962 : 1) in the preface to his paper on *Gynacantha* Rambur reiterates the habit he had frequently noticed in Asia of resting by day in some numbers, close together in « dormitories », and concludes that this gregarious habit must also occur in Africa. In tropical African forests, however, where *Gynacantha* (and *Heliaeschna* Selys) are common the present author has invariably found them resting individually, not gregariously.

KEY.

1. Smallish, short-winged species, the hindwing shorter than the abdomen. *manderica* Grünberg.
— Large species, the hindwing as long as or longer than the abdomen. 2
2. Anal triangle of ♂ with over 4 cells. Superior appendage massive ... *cylindrata* Karsch.
— Anal triangle of 4 cells. Superior appendage not massive ..... *villosa* Grünberg.

1. — Gynacantha cylindrata Karsch.

Karsch, 1891, Ent. Nachr. **17** : 308; Pinhey, 1962*a* : 198.

Moderately common in equatorial Africa.

Adult (see p. 86).

2. — Gynacantha manderica Grünberg.

Grünberg, 1902, S. B. Ges. naturf. Fr. Berl. 234; Pinhey, 1962*a* : 199.

A small species common in tropical and subtropical Africa.

Adults (see p. 86).

3. — Gynacantha villosa Grünberg.

Grünberg, 1902, loc. cit. 233; Pinhey, 1962*a* : 199.

Widespread in tropical and subtropical Africa.

Adults (see p. 86).

4. — **Gynacantha** spp.

Larvae (see p. 86) : Darker in colour than *Anax* larvae, more like some *Aeshna*, which the larva also resembles in the more prominent, anteriorly placed eyes. In no. E481, the larvae have 4 lateral setae on each side of the mask, close to the moveable hook. The projection of the lateral lobe is rectangular, as it is in *Hemianax ephippiger* (BURMEISTER).

Family CORDULIIDAE

MACROMIA RAMBUR.

Macromia RAMBUR, 1842, Névr. 137; PINHEY, 1962*a* : 209.

Only a single adult example of this large genus was found in the Garamba material, but more than one species of larva.

1. — **Macromia flavimitella** spec. nov.

(Fig. 5.)

In general characters this species is nearest the common *M. picta* SELYS (1871) but in the accessory appendages it is quite distinct from all known African species.

Holotype male (mature) : Labium and face in front bright chrome yellow, rather paler on the genae. Frons yellow; in front with a diffuse ferruginous band having a violet sheen, and a narrow band of this colour at the base of frons above. Vertex entirely dark blue; occipital triangle black.

Prothorax ferruginous with slight violet sheen; anterior margin yellow. Synthorax also ferruginous with slight violet sheen, and with long yellow hairs. Three broad yellow bands, one on mesepisternum, continuing on to mesinfraepisternum; one across the spiracular region and the third on the metepimeron. Legs blackish, forefemora and coxae yellow.

Abdomen dark to blackish ferruginous, paler on distal segments, and marked with yellow : segment two with broad yellow basal band which covers the oreillets, which are plain rounded flaps without projections; segments 3-4 with a pair of basal and also medial triangles; segments 5-6 with these triangles linked up; the expanding segment 7 with basal yellow band and a trace of yellow on distal margin; segment 8 with only a slight ventral convexity, and having traces of yellow on distal and ventral edges; 9 with a lateral triangle on distal edge; 10 yellow mid-laterally and having well developed cone and single black spine (fig. 5). Superior appendages bright yellow. Accessory appendages (fig. 5) on segment

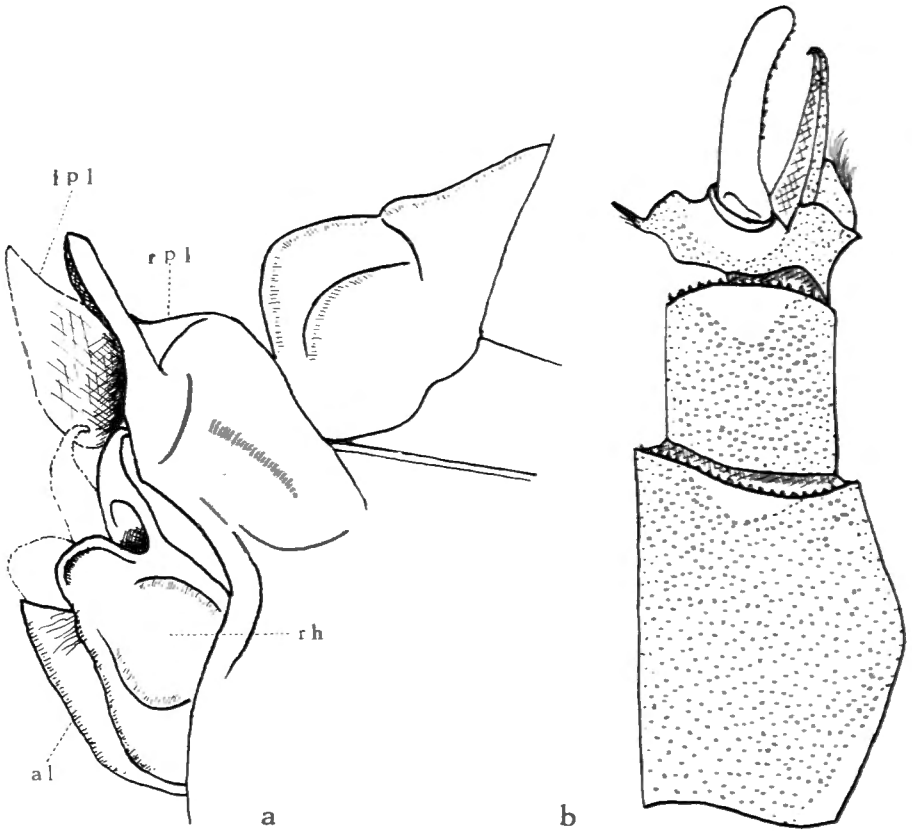


FIG. 5. — *Macromia flavimitella* spec. nov.

a) Accessory genitalia from right : a.l., anterior lamina; l.p.l., left posterior lobe; r.h., right hamule; r.p.l., right posterior lamina. — b) Abdominal segments 8-10 and appendages from left.

2 showing an extraordinary development of all the organs. Anterior lamina black and very elongate; hamules black with very well developed hook subtended as a distinct branch; posterior lobe very large (as in *pseudafricana* PINHEY), entirely yellow in colour.

Venation mainly pale to dark brown; pterostigma reddish brown; wings somewhat fumose; membranule grey-brown, white at base. Forewing with 12-13 *Ax*, 5-7 *Px*.

Abdomen 37 mm, hindwing 31 mm, pterostigma 2 mm.

Female unknown.

This species, of which there is the single type in the Institut des Parcs Nationaux du Congo, Bruxelles, resembles *picta* SELYS except in the accessory genitalia. Like *pseudafricana* PINHEY the posterior lobes are well developed, but more so in the new species, like yellow hoods above the peculiar hamules, hence the name « flavimitella ».

Adult (see p. 87).

2. — **Macromia nyanzana** GRÜNBERG.

GRÜNBERG, 1911, Ent. Rdsch. **28** : 104; PINHEY, 1962*a* : 212.
Macromia reginae LE ROI, 1915, Ergebn. deuts. Zentr. Afr. Exp. Zool. **1** : 348; PINHEY, 1962*a* : 213.

No adults found but some larvae are close to this species.

? Larvae (see p. 87).

3. — **Macromia** spp.

Larvae (see p. 87).

Family LIBELLULIDAE

KEY TO GENERA.

1. Triangle in forewing very broad; discoidal field of one row at start. Anal loop of 5-6 cellules ..... *Neodythemis* KARSCH.
— Triangle in forewing narrow or only moderately broad; discoidal field of two or more rows from start. Anal loop much larger 2
2. Arculus at or distal to second *Ax*. Triangles in forewing and hindwing almost on the same level 3
— Arculus distinctly proximal to second *Ax*. Triangle in forewing generally well distal to triangle in hindwing 6
3. Last *Ax* in forewing incomplete. Hindwing often with 2 *Cuq* ..... *Porpax* KARSCH.
— Last *Ax* in forewing complete. Hindwing with only 1 *Cuq* 4
4. Discoidal field normally of 2 rows ..... *Aethiothemis* MARTIN, *Oxythemis* RIS.
— Discoidal field normally of 3 rows 5
5. Vertex grooved; clypeus narrower than front of frons ..... *Orthetrum* NEWMAN.

— Vertex rounded; clypeus wider than front of frons ..... *Nesciothemis* LONGFIELD.

6. Costa with infraction before nodus ..... *Palpopleura* RAMBUR.
— Costa evenly curved or straight to nodus 7

7. Last *Ax* in forewing complete 8
— Last *Ax* in forewing incomplete 10

8. Abdomen swollen on basal half, slender on distal segments ..... *Acisoma* RAMBUR.
— Abdomen more or less uniformly slender or broad on most segments. 9

9. Discoidal field in forewing expanding distally; forewing with 9 or more *Ax*. Small or smallish insects ..... *Aethiothemis* MARTIN.
— Discoidal field not expanding distally; forewing with 7 *Ax*. Large, robust insects ..... *Urothemis* BRAUER.

10. Discoidal field in forewing expanding distally 11
— Discoidal field contracting or parallel 19

11. Abdomen swollen on basal half, slender on distal segments ..... *Acisoma* RAMBUR.
— Abdomen evenly broad or only swollen on segments 2-3 12

12. Discoidal field in forewing of 2 rows. Prothoracic hindlobe large ... 13
— Discoidal field of 3 rows 15

13. Discoidal field in forewing only weakly expanding, from nodal level; $6\frac{1}{2}$-$9\frac{1}{2}$ *Ax* ..... *Diplacodes* KIRBY.
— Discoidal field increasing *before* nodal level, expanding strongly. 14

14. Sectors of arculus in forewing on very long pedicel. Triangles in forewing and hindwing almost on the same level. Eye contact very short ..... *Porpax* KARSCH.
— Sectors of arculus in forewing on moderate pedicel. Triangle in forewing slightly distal to triangle in hindwing. Eye contact long ... *Chalcostephia* KIRBY.

15. Anal loop short. R_3 slightly curved. Red bodied species ..... *Crocothemis* BRAUER.
— Anal loop longer, extending at least 2 cellules or more beyond triangle in hindwing 16

16. Forewing with $6\frac{1}{2}$-$7\frac{1}{2}$ *Ax*. Pterostigma bicolorous ..... *Brachythemis* BRAUER.
— Forewing with $10\frac{1}{2}$ *Ax* 17

17. *R spl* of 1 row. Pterostigma bicolorous ..... *Hemistigma* KIRBY.
— *Rspl* of 2-3 rows. Pterostigma unicolorous 18

18. Eye contact long. Cu_2 in forewing strongly curved. Abdomen not elongate ..... *Bradinopyga* KIRBY.

— Eye contact short. Cu_2 in forewing slightly curved. Abdomen long and slender ..... *Limnetothemis* gen. nov.

19. Wings broadly marked with black, at least over the basal third. Body black ..... *Rhyothemis* HAGEN.

— Wings not marked broadly with black, at most with black spot or a distal band 20

20. Forewing with $6\frac{1}{2}$-$7\frac{1}{2}$ *Ax* 21

— Forewing with at least $8\frac{1}{2}$ *Ax* 22

21. Hindlobe of prothorax small. Abdomen short and broad. Pterostigma bicolorous ..... *Brachythemis* BRAUER.

— Hindlobe of prothorax large. Abdomen slender. Pterostigma unicolorous ..... *Philonomon* FÖRSTER.

22. Triangle in forewing and hindwing almost on the same level. Pterostigma of equal length in forewing and hindwing 23

— Triangle in forewing 3 or more cellules distal to triangle in hindwing. Pterostigma longer in forewing than in hindwing 24

23. Wings with broad apices. Anal loop open at margin. *Tholymis* HAGEN.

— Wings with narrow apices. Anal loop closed before margin ..... *Trithemis* BRAUER.

24. R_3 strongly bisinuous. Hindwing with 2 *Cuqs*. Base of wings with amber only ..... *Pantala* HAGEN.

— R_3 nearly straight. Hindwing with 1 Cuq. Base of hindwing with red and brown marking on the amber patch ... *Trapezostigma* HAGEN.

NEODYTHEMIS KARSCH.

Neodythemis KARSCH, 1889, Ent. Nachr. **15** : 250, 252; PINHEY, 1962*a* : 224.

The following species is the only member of the primitive *Tetratheminae* found in the collection.

Neodythemis africana FRASER.

FRASER, 1954, Rev. Zool. Bot. afr. **50** : 257; PINHEY, 1962*a* : 224.

Know so far only from the Congo region.

Adult (see p. 87).

ORTHETRUM GROUP.

Orthetrum NEWMAN, 1833, Ent. mon. Mag. **1** : 511; PINHEY, 1962*a* : 231. Type-species *Libellula coerulescens* FABRICIUS.

Aethiothemis RIS, 1908, Ann. Mus. Stor. nat. Genova **43** : 662; PINHEY, 1962*a* : 244. Type-species *Aethiothemis solitaria* RIS.

Oxythemis RIS, 1909, Coll. Zool. SELYS **9** : 22; PINHEY, 1962*a* : 230. Type-species *Oxythemis phoenicosceles* RIS.

As LONGFIELD (1959; and in correspondence with the author) has pointed out it is virtually impossible to separate *Oxythemis* and *Aethiothemis*, except for the type-species and nearest relatives, and, in fact, these again link up with *Orthetrum*.

The differences between these genera may be considered in tabular form (*vide* PINHEY, 1962*a*) :

Character	*Orthetrum*	*Aethiothemis*	*Oxythemis*
Head	medium to large	large	small
Frons	large, crest prominent	small, crest absent	small, crest slight
Synthorax	robust	narrow	narrow
Tibial spines	not numerous; stout	numerous, stoutish	numerous, fine
Claw spurs	at base or centre of claw	close to apex	at centre
Triangle in forewing	narrow, crossed	broad, crossed or free	narrow, crossed
Sectors of arculus	Long or longish pedicel	short pedicel	longish pedicel
Cu_2 in hindwing	at or distal to anal angle of triangle	at anal angle	distal to anal angle
Ax in forewing	12-21	9-11, usually	11
R_3 in forewing	strongly bisinuous	nearly straight	slightly curved
Cu_2 in forewing	strongly curved	strongly curved	rather curved
Discoidal field, forewing	normally 3 rows near start	partly 2 rows	partly 2 rows
Anal loop in hindwing	well developed, angled distally	blunt, scarcely angled	well developed, angled
Membranule	large	small	moderate

A few examples may be considered now :

OXYTHEMIS RIS.

Oxythemis phoenicosceles RIS. Typical examples of this have a small head, but in a pair taken in copula by the author at Douala, Cameroons, the head is large in both sexes; and R_3 is more strongly sinuous.

Other features which may be taken into account are the shape of the hindwing, which is narrower near the base than is the case in *Orthetrum*;

the abdomen is slightly shorter than the hindwing, as is the case generally in *Orthetrum*; the accessory genitalia are somewhat similar to many *Orthetrum*, but very robust and having a large hamular hook; peneal flagellum absent and the femora are mainly red, only partly black.

Obviously close to this is *O. gamblesi* LONGFIELD.

Oxythemis carpenteri FRASER [1] may be fairly close. The abdomen is also slender, rather shorter than the hindwing; the femora are apparently yellow posteriorly, otherwise black. Triangle in forewing crossed, discoidal field partly two rows. The accessory genitalia, however, seem to be less robust and more like many *Orthetrum.*

Oxythemis aequatorialis FRASER has a slender abdomen, slightly shorter than the hindwing. Femora mainly black and the forewing with as many as 13 *Ax.* Otherwise the characters are more or less typical.

ORTHETRUM NEWMAN.

The hindwing is broad or broadish near the base. The abdomen may be slender or broadly triquetral : in those with slender abdomen the hindwing tends to be only slightly longer; or in *trinacria* (SELYS), *icteromelas* RIS, *africanum* (SELYS) and *africanum sagitta* RIS the abdomen is longer than the wing. In those with stout abdomen such as the *coerulescens* section, *taeniolatum* (SCHNEIDER) and *austeni* (KIRBY) the abdomen is much shorter than the hindwing. The femora are almost entirely black.

In *rhodesiae* PINHEY, *taeniolatum* (SCHNEIDER), *abbotti* CALVERT and *monardi* SCHMIDT (Garamba Park material) the discoidal field in the forewing tends to be partly of 2 rows, not 3.

The frontal crest is normally well developed in all these *Orthetrum.*

AETHIOTHEMIS RIS.

In typical members, such as *solitaria* RIS and *mediofasciata* RIS (not readily separable) and *palustris* MARTIN the venation is very *open*, the forewing has 9-10 *Ax* (sometimes 11), the anal loop is blunt, not strongly angled; the triangle in forewing is broad, crossed. The abdomen is broadly triquetral, much shorter than the hindwing. The hamules are not elongate but have a very large hook. The frons is rounded without crest. In one male of this group from Nigeria, otherwise typical, the triangle in the forewing is distinctly narrow.

In another group, typified by a species which may be called here *Cirrothemis bequaerti* (RIS), the venation is also very open and the frons has little or no crest : but the abdomen is slender, only a little shorter than

[1] Recent examination of types indicates that *carpenteri* is near *Aeth. solitaria* RIS and *Aeth. paludinis* FRASER is a synonym of *Orthetrum hintzii* GRÜNBERG. (Author.)

the hindwing; the triangle in the forewing although broad is free, *ti* also free, and the hamules are *elongate*, but also having large hooks. Close to this species, evidently, is *Aethiothemis diamangae* LONGFIELD, which in markings, however, is said to be more like *Orthetrum abbotti* CALVERT. *A. basilewskyi* FRASER is evidently also near *bequaerti*. *A. watulikii* PINHEY, again, has a rounded frons, slender abdomen as long as the hindwing, and a broad free triangle in forewing; but *ti* is crossed, the anal loop is strongly developed, not blunt, and the venation is not open.

The species *Aethiothemis paludinis* FRASER is not adequately described and there is no mention or figure of the accessory genitalia. The measurements indicate, however, that the abdomen is distinctly longer than the hindwing and there are 13-14 *Ax* in the forewing. See footnote p. 36.

From these selected features it would appear impossible to retain *Oxythemis* and *Aethiothemis* as valid genera, even if applied in a more restricted sense than hitherto. The least significant is *Oxythemis* which may have to fall in synonymy to *Orthetrum*. Even retained as a subgenus the coloured femora of the male and the lack of frontal crest appear to be the only reliable characters. If subgeneric rank is accepted then *carpenteri* and *aequatorialis* would have to be transferred to *Orthetrum*.

Some of the *Aethiothemis* might be held distinct on account of the open venation, free, broad triangle and subtriangle, as well as the rounded frons. But the Nigerian exception, with narrow triangle reduces the predominant features.

Cirrothemis FISHER (1939), if separated, is still more of a miscellaneous group. In its open venation and free triangle it agrees with *Aethiothemis*, differing from it in the slender abdomen and free subtriangle. But *watulikii* PINHEY has the subtriangle crossed and venation compact so that if *Aethiothemis* is retained in a restricted sense it would seem that one of the few distinct features for diagnosis is the rounded frons, which, with the two rows in the discoidal field, it has as a common character with *Oxythemis*.

However, any definite decisions on these groups must involve examination of certain of the types. For the purposes of this report the present status will be retained for the few species involved. Recent examination of types has shed more light on this.

ORTHETRUM NEWMAN.

KEY TO SPECIES.

1. Hindwing c. 40 mm, pterostigma 5 mm, forewing with 3-4 rows in *Rspl* loop ..... *angustiventre* (RAMBUR).

— Hindwing 38 mm or less, pterostigma less than 4 mm, forewing with 1-2 rows in *Rspl* loop 2

2. Subcostal crossveins black 3
— Subcostal crossveins yellow 7

3. Two rows in *Rspl* loop ..... *stemmale kalai* LONGFIELD.
— One row in *Rspl* loop 4

4. Pterostigma 2.5 mm or less ..... *microstigma microstigma* RIS.
— Pterostigma 3 mm or more 5

5. Thorax either densely black with green stripes or with broad dark humeral bands. Non-pruinose ..... *saegeri* spec. nov.
— Thorax green with distinct narrow black stripes; occasionally pruinosed 6

6. Pterostigma black. ♂ with dark amber patch on hindwing ..... *julia* KIRBY.
— Pterostigma brown, rarely black in ♂. ♂ with light amber patch on hindwing ..... *falsum falsum* LONGFIELD.

7. One row in '*Rspl* loop 8
— Two rows in *Rspl* loop 11

8. Pterostigma short, usually 2.5 mm or less ..... *monardi* SCHMIDT.
— Pterostigma at least 3 mm 9

9. Small species, abdomen normally 25 mm or less. Pterostigma usually at least 3.5 mm. Synthorax pale with fine black lines *abbotti* CALVERT.
— Larger species, abdomen 26 mm or more 10

10. Pterostigma 3 mm or less; thorax in non-pruinose examples with black stripes; not densely black ..... *guineense* RIS.
— Pterostigma 3 mm or more; thorax in non-pruinose examples densely blackened, in male, or with very broad humeral band *hintzii* SCHMIDT.

11. Small species, abdomen 24-25 mm, pterostigma 3 mm. Thorax black or broadly marked with blackish ..... *latihami* spec. nov.
— Larger species, abdomen 28 mm or more, pterostigma normally 3.5 mm or more 12

12. Abdominal segments 4-10 slender. Thorax green with thick black stripes, no whitish lateral stripes ..... *icteromelas* RIS.
— Abdominal segments 4-10 less slender, triquetral. Thorax dull greenish with thin black stripes and with whitish lateral stripes ..... *brachiale* (BEAUVOIS).

1. — **Orthetrum abbotti** CALVERT.

CALVERT, 1892, Trans. Amer. ent. Soc. **19** : 162; PINHEY, 1962*a* : 232.

A common species in the Ethiopian region.

Adults (see p. 87).

2. — **Orthetrum angustiventre** (RAMBUR).

RAMBUR, 1842, Névr. 59; PINHEY, 1962*a* : 233.

A local species in Western tropical and subtropical Africa, from Angola to Sudan.

Adult (see p. 88).

3. — **Orthetrum brachiale** (BEAUVOIS).

BEAUVOIS, 1805, Ins. Afr. Amér. 171; PINHEY, 1962*a* : 233.

Abundant throughout the Ethiopian region.

Adults (see p. 88).

4. — **Orthetrum falsum falsum** LONGFIELD.

LONGFIELD, 1955, Publ. Cult. Cia Diamantes, Angola **27** : 26; PINHEY, 1962*a* : 235.

In most parts of continental Ethiopian Africa, but replaced in the south western Cape by the race *capicola* KIMMINS (1957).

Adults (see p. 88).

5. — **Orthetrum guineense** RIS.

RIS, 1909, Coll. Zool. SELYS **10** : 207; PINHEY, 1962*a* : 236.

Tropical and subtropical Africa.

Adults (see p. 89).

6. — **Orthetrum hintzii** SCHMIDT.

SCHMIDT, 1949 (1951), Arch. Mus. Bocage **20** : 174, 178; PINHEY, 1962*a* : 236.

Tropical and subtropical Africa. See footnote p. 36.

Adults (see p. 89).

7. — **Orthetrum icteromelas** Ris.

Ris, 1909, Coll. Zool. Selys **10** : 197; Pinhey, 1962*a* : 236.

Locally common in most parts of the Ethiopian region.

Adults (see p. 90).

8. — **Orthetrum julia** Kirby.

Kirby, 1900, Ann. Mag. nat. Hist. (7) **6** : 75; Pinhey, 1962*a* : 237.

An equatorial forest species which filters southwards in gallery forest as far as Northern Rhodesia and Angola.

Adults (see p. 90).

9. — **Orthetrum microstigma microstigma** Ris.

Ris, 1911, Rev. Zool. Bot. afr. **1** : 128; Pinhey, 1962*a* : 237.

Distribution similar to *julia* Kirby, but tends to prefer open swamps and streams to forest.

Adults (see p. 91).

10. — **Orthetrum stemmale kalai** Longfield.

Longfield, 1936, Trans. R. ent. Soc. Lond. **85** : 487, 493; Pinhey, 1962*a* : 239.

Evidently a very local but widely distributed species in tropical and subtropical Africa. Represented as distinctive races in islands in the Indian Ocean.

Adults (see p. 91).

11. — **Orthetrum latihami** spec. nov.

(Fig. 6.)

This is a puzzling species of *Orthetrum* with some of the characters of several species : *icteromelas* Ris, but more heavily marked on front of thorax; *macrostigma* Longfield, in thoracic markings, but not in the accessory genitalia; *chrysostigma* (Burmeister) and others in the broad gap below hamular hook; and in many respects it resembles *Oxythemis aequatorialis* Fraser.

Holotype male (mature; 2332). Labium yellow, face and frons pale green; vertex and a broad black basal band on frons black; occipital triangle black. Frontal crest well developed.

Prothorax black, posterior lobe yellow with black base; synthorax black to well below humeral suture (as in *hintzii* SCHMIDT) with green antehumeral bands; side of synthorax green with black suffusion on and between sutures. Legs black, forefemora mainly greenish.

Abdomen swollen on segments 1-3, which are yellow, with black carinal markings suffused; remaining segments and anal appendages black. Hamule (fig. 6) partly yellow, with wide gap, the hook small and turned slightly posteriad. Costal veins and subcostal crossveins yellow; pterostigma pale brown, the costal edge thickened and black. *Rspl* loop of two rows in middle portion; discoidal field of three rows. Forewing with 12 *Ax*. Membranule pale grey.

Abdomen 24 mm, hindwing 26.5 mm, pterostigma 3 mm.

Paratype males: Sometimes with thin pruinosity on sides of thorax and on abdomen. A less mature male has the lateral black on the thorax reduced to three short smears.

Abdomen 24-25 mm, hindwing 26-27 mm.

Old males have thorax and abdomen, and the hamules almost completely black; labium with central black patch.

In a teneral example (1474) the body is all yellow, with traces of brown on front of thorax and sides of abdomen.

Allotype female (4044): Face yellow; only a trace of latero-basal black on frons.

Synthorax yellow; with broad ferruginous band on humeral suture and a short smear on mesepimeron. Forefemora and posterior lines on mid- and hind-femora yellow.

Abdomen broader than in male. Segments 1-3 yellow with short lateral ferruginous bar. Segment 4 yellow dorsally, ferruginous laterally; 5 ferruginous with yellow dorsal stripe on basal two-thirds; 6 all ferruginous; 7 ferruginous with yellow dorsal stripe; 8-9 dark ferruginous; 10 dark ferruginous with yellow median band; cerci ferruginous.

Wings, including pterostigma as in male.

Abdomen 27 mm, hindwing 27 mm, pterostigma 3 mm.

This new species, named from the broad hamulus, is closest to *hintzii* SCHMIDT in coloration and marking of the body, but it is readily distinguished from that species by the accessory genitalia. The species *aequatorialis* (FRASER) which FRASER placed in *Oxythemis* may, in fact, be a true *Orthetrum*, despite having only two rows in the discoidal field (c.f. *O. monardi* SCHMIDT, in this paper). In markings it appears to be somewhat

like one of the less mature examples of *latihami*, but it is a larger insect, with 13 *Ax* in the forewing; hook of hamule turned apparently outward, not slightly backward as in *latihami*.

Holotype, allotype and six male paratypes of the new species in Institut des Parcs Nationaux, Bruxelles, one paratype male in National Museum, Bulawayo.

Adults (see p. 91).

12. — **Orthetrum monardi** SCHMIDT.

(Fig. 7.)

SCHMIDT, 1949 (1951), Arch. Mus. Bocage **20** : 179; PINHEY, 1962*a* : 237.

The examples in this collection agree closely with the descriptions of *monardi* by SCHMIDT (1949, supra) and LONGFIELD (1955), but the hamular hook is more massive and more strongly curved anteriad (fig. 7) than in the figures so far illustrated for this species. The face and frons of the male are unmarked except a basal black band on the frons. The thorax is only sparsely marked with black along the sutures and with a slender black antehumeral stripe.

The subcostal crossveins and the costal edge are yellow, the pterostigma brown and very short (up to 2.3 mm.). The discoidal field on the forewing is only occasionally three rows to nodus (then expanding), more often of two rows for a short distance after the cells adjacent to the triangle.

The abdomen is coated in pale blue pruinosity in some but others have lost this in preservation. In these latter, segments 1-3 are pale, with black carinal marking; remaining segments black with paired pale central patches, diminishing in size to submedial streaks on the terminal segments.

Size variation : abdomen 23-28 mm, hindwing 25.5-31 mm.

Allotype female (No. 85) : It appears that this sex has not yet been described. Lips, face, frons and vertex ochreous; only a trace of latero-basal black on frons; occipital triangle brown.

Thorax greenish, with sparse black marking as in male : on synthorax a short, fine blackish antehumeral stripe; a humeral line, curving ventrally around the mesepimeron; ventral traces on first and second lateral sutures.

Forefemora mainly pale, mid- and hind femora mainly black; tibiae black with pale stripe on extensor surface.

Abdomen marked as in the male but with the pale fasciae more extensive; segments 8-9 with two pairs of pale lateral streaks. Ventrally, segments 4-10 more extensively black with pale central patches. Cerci blackish.

Costal veins in front and subcostal crossveins yellow; pterostigma short, brown. *Rspl* loop partially two rows (4 cells doubled in centre). Discoidal

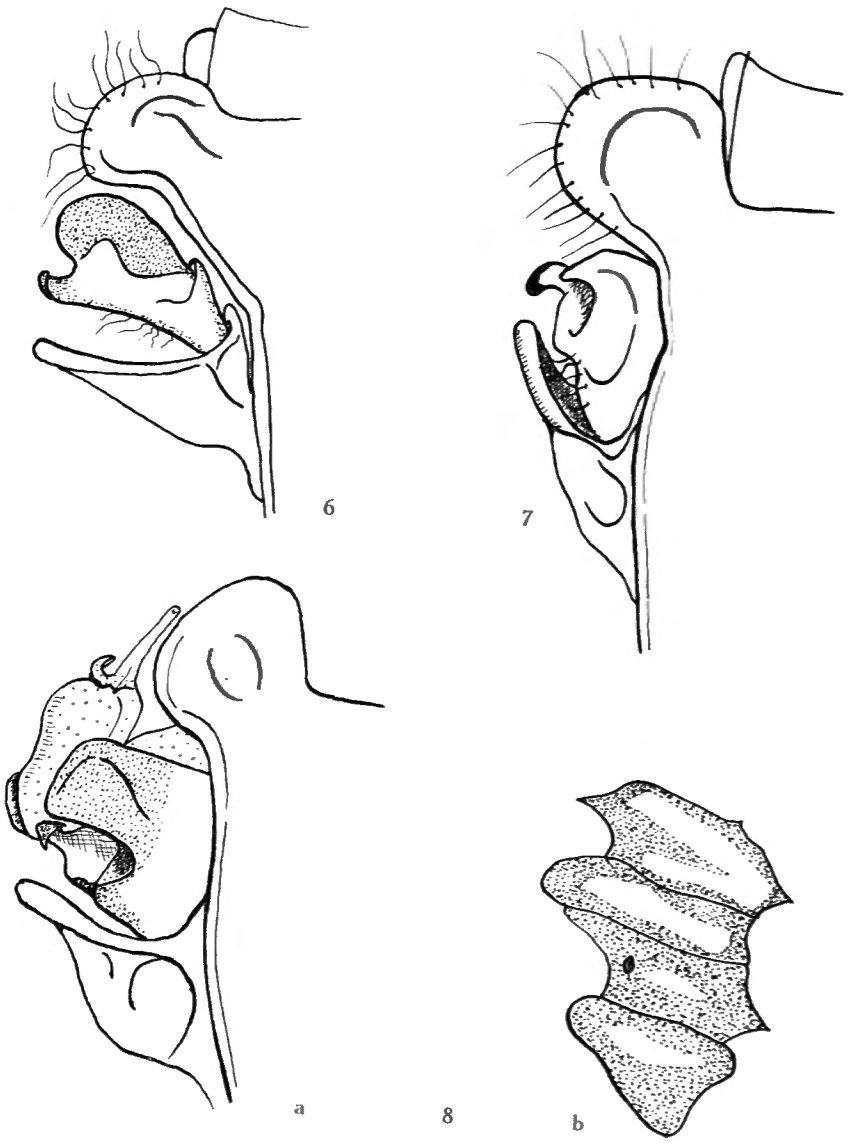


FIG. 6. — *Orthetrum latihami* spec. nov.
Accessory genitalia from right.

FIG. 7. — *Orthetrum monardi* SCHMIDT.
Accessory genitalia from right.

FIG. 8. — *Orthetrum saegeri* spec. nov.
a) accessory genitalia from right; b) synthorax from left.

field partly two rows after the first two vertical rows of three cells. Traces of amber at bases of all wings, as in males. Abdomen 26 mm, hindwing 29,5 mm, pterostigma 2,5 mm.

Allotype ♀, in the collections of the National Parks, Bruxelles.

Adults (see p. 91).

13. — **Orthetrum saegeri** spec. nov.

(Fig. 8.)

Holotype male (mature) : Labium ochreous with black postmedial fascia; labrum yellowish with black anterior border; rest of face ochreous, frontal coriaceous zone blue-grey; frons above dark brown; vertex black; occipital triangle dark brown.

Prothorax black, posterior lobe green with small black lateral dot; synthorax (fig. 8*b*) black with only a trace of ventral pruinosity, and with green bands; two broad green antehumeral bands joined at an angle at dorsal end; a band on mesepimeron; a trace on middle of metepisternum and another on metepimeron. Legs entirely black. Tibial spines few in number, robust. Claw spur just distal to middle of claw. Abdomen swollen on segments 2-3, the remainder slender; all black, with small yellow medial spots discernible on segments 5-6; anal appendages brown with black apices. Accessory genitalia of *Orthetrum* form but the hamules massive (fig. 8), the hook very broad, turned outwards.

Venation black; pterostigma brown, between black veins. Forewing with 13-14 *Px*. Triangle in forewing narrow, crossed; ti of three cellules; discoidal field of 3 cellules for 2 vertical rows; then of two rows for 4 vertical rows, then expanding. R_3 somewhat sinuous, *Rspl* loop of one row only. Cu_2 in forewing convex. Anal loop well developed, as in other *Orthetrum*. Membranule grey. Only the merest trace of basal amber on hindwings.

Abdomen 27 mm, hindwing 30 mm, pterostigma 3 mm.

Of the genus *Orthetrum* this species is perhaps closest to *falsum* Longfield in general features; but it is a much darker insect with the hamules far more massive. In shape and in the narrow discoidal field of the forewing it is like species placed in *Oxythemis* Ris. It might conceivably he compared to the inadequately described *Aethiothemis paludinis* Fraser (1954) which, however, is described as having the abdomen (29 mm) longer than the hindwing (see footnote p. 36). The labium of *paludinis* is described as being black (not partially so). Thorax black, with narrow white anthumeral stripes. There are also 13-14 *Ax* in the forewing; discoidal field similar; abdomen also black, and evidently of similar shape and also, as in *saegeri*, strongly carinate.

Holotype male in Institut des Parcs Nationaux, Bruxelles.

Adult (see p. 91).

14. — **Orthetrum** spec. indet.

Adult (see p. 91).

Larvae (see p. 92) : As was to be expected there were a large number of *Orthetrum* larvae in the Garamba material. Some, however, are relegated here to « *Orthetrum group* » and it is possible that these might be examples of *Aethiothemis* or *Oxythemis*. For example, in number E 359 some examples only have 3 lateral setae on each lateral lobe of the mask; whilst in number E 674, others only have 4 lateral setae.

One « *Orthetrum* group » larva in number E 579 must have only moulted shortly before capture since the eyes lack the black pigment and are still yellowish brown like the general colour of this larva.

KEY TO OXYTHEMIS — AETHIOTHEMIS.

1. Abdomen slender. Legs of male marked with red ..... *Oxythemis phoenicosceles* Ris.

— Abdomen broad, flattened. Legs not partly red ..... *Aethiothemis solitaria* Ris (Martin), *A. mediofasciata* Ris.

15. — **Oxythemis phoenicosceles** Ris.

Ris, 1909, Coll. Zool. Selys **10** : 163; Pinhey, 1962*a* : 231.

Among Ethiopian *Libellulidae* this species is easily recognized in the male by the red femora.

Teneral male (1425). Labium with brown central suffusion; labrum brown on anterior half; frons above with brown basal band, with metallic reflection, the vertex also of this colour.

Thorax ferruginous with yellow median stripe and two narrow lateral stripes. Mid- and hind femora yellow (not bright red), dark brown distally. Abdominal segments 1-2 and all but the distal end of 3 yellow; rest of abdomen blackish, anal appendages brown. Accessory genitalia typical. Wings slightly fumose. Pterostigma yellowish brown, between brown veins. The mature male is much blacker on labium, thorax and base of abdomen, with thin white pruinosity. And the femora are mainly vermilion red.

Cameroons and Congo.

Adult (see p. 94).

AETHIOTHEMIS Martin.

1. — **Aethiothemis solitaria** (Martin MS) Ris.

Ris, 1908, Ann. Mus. Stor. nat. Genova **43** : 663; Pinhey, 1962*a* : 245.

A local, gregarious swampland species of tropical Africa, extending as far south as Angola and Northern Rhodesia. See footnote p. 36.

Adults (see p. 94).

2. — **Aethiothemis mediofasciata** Ris.

Ris, 1931, Rev. suisse Zool. **38** : 106; Pinhey, 1962*a* : 245.

Described from a female, it is not yet entirely clear whether this is distinct from *solitaria* or a form of that species.
Habitat similar.

Adults (see p. 94).

NESCIOTHEMIS Longfield.

Nesciothemis Longfield, 1955, Publ. cult. Cia Diamantes Angola **27** : 59; Pinhey, 1962*a* : 240.

One species in the collection.

Nesciothemis farinosum (Förster).

Förster, 1898, Ent. Nachr. **24** : 169; Pinhey, 1962*a* : 240.

Common throughout the African Continent.

Adults (see p. 94).

PALPOPLEURA Rambur.

Palpopleura Rambur, 1842, Névr. 26, 129; Pinhey, 1962*a* : 242.

All the well known continental African species were represented in the Garamba material.

KEY.

1. Side of thorax blackish with two oblique yellow or whitish stripes; face brown to blackish ..... *lucia* (Drury) and *lucia* f. *portia* (Drury).
— Side of thorax mainly yellow; face pale yellowish 2

2. Small species, hindwing 20 mm or less. Wings with amber, brown and black patches ..... *jucunda* RAMBUR.
— Large species, hindwing 26 mm or more. Wings with dark streaks near costa only ..... *deceptor* (CALVERT).

1. — **Palpopleura deceptor** (CALVERT).

CALVERT, 1899, Proc. Acad. nat. Sci. Phil. 241; PINHEY, 1962*a* : 242.

Widespread but somewhat local.

Adults (see p. 94).

2. — **Palpopleura jucunda** RAMBUR.

RAMBUR, 1842, Névr. 134; PINHEY, 1962*a* : 243.

Widespread, but in the equatorial region this species is much less common than *P. lucia* (DRURY).

Adult (see p. 95).

3. — **Palpopleura lucia** (DRURY).

DRURY, 1773, Ill. Exot. Ins. **2** : 82; PINHEY, 1962*a* : 243.
f. portia DRURY, 1773, ibid. **2** : 86; PINHEY, 1962*a* : 243.

Both forms, as well as large numbers of intermediate varieties, were well represented in this collection.

Adults (see p. 95).

4. — **Palpopleura** spp.

Larvae (see p. 97).

CHALCOSTEPHIA KIRBY.

Chalcostephia KIRBY, 1889, Trans. Zool. Soc. Lond. **12** : 258, 263, 293; PINHEY, 1962*a* : 247.

Chalcostephia flavifrons KIRBY.

KIRBY, 1889, loc. cit. **12** : 337; PINHEY, 1962*a* : 247.

Widespread in tropical and subtropical Ethiopian Africa, sometimes uncommon.

The characteristic forked process on the base of the abdomen is less deeply bifid than in many examples seen from tropical Africa but in this respect it resembles examples from Northern Rhodesia. It is possible that there is some racial significance. In specimens from equatorial Africa there is generally a more definite brown apex to the wing.

Adults (see p. 98).

PORPAX KARSCH.

Porpax KARSCH, 1896, Ent. Nachr. **22** : 17; PINHEY, 1962*a* : 251.

A single male in the Garamba material has proved rather an enigma. It differs from the normal diagnosis of *Porpax* (vide PINHEY, supra) in certain respects, particularly in having *no* accessory Cuq in the hindwings, which is a characteristic of the genus, and the forewing has only $9\frac{1}{2}$ Ax instead of the usual $11\frac{1}{2}$ (sometimes $10\frac{1}{2}$, $12\frac{1}{2}$). Such differences, although important, do not appear to validate the erection of a new genus. In this case it would be advisable to widen the diagnosis of the genus in the following respects, based on the revision of the genus as a whole.

Additional Characters for the genus. — Femoral spines numerous, long or short; hindlegs generally very hirsute. Abdomen short or shortish, slender or stoutish.

Forewing with $9\frac{1}{2}$-$12\frac{1}{2}$ *Ax*; Cu_2 variable, straightish or strongly curved. Hindwing with 1-2 *Cuq*. Post-discoidal field of two rows but sometimes with 3 cellules at triangle.

Porpax asperipes KARSCH, 1896, Ent. Nachr. **22** : 18; PINHEY, 1962*a* : 251.

For some time the author has been dubious about the conspecificity of some of the examples placed in *P. asperipes* KARSCH (1896), since some have the appearance described by RIS (1911), with very slender abdomen in the male, but Calabar region males have the abdomen stout in this sex.

The examples mentioned or described by RIS (1911) were from Calabar, Cameroons and Sierra Leone. KARSCH's type was described from Yaoundé in the Cameroons but this was, unfortunately, a female, and distinguishing characters in this sex are harder to find.

In the collection of the National Museum, Bulawayo, the examples from Mamfe and Ikom, near the Calabar region, differ rather remarkably from specimens from the Congo and elsewhere. The abdomen is shorter and broader in the male, not slender as in the male described by RIS for *asperipes* KARSCH and the legs are not densely hairy. The difficulty of assessing, however, which is the true *asperipes* of these two lies in distinguishing the Cameroons type female. In the specimens from Calabar region the females are similar in build to those from elsewhere and the legs in all the females are not characteristically hirsute. One feature, however, is common to both

sexes of the series (4 ♂♂ 2 ♀♀) from the Mamfe-Ikom region; the presence of two small green or yellow dots at the base of the labrum. In all the other males and females — from both Congo Republics, from Northern Rhodesia, and a female from Carnot, Cameroons, about 400 miles east of the type locality (450 miles by road), Yaoundé, the labrum is entirely black. It seems reasonable to conclude that typical *asperipes* has an entirely black labrum in the adult and that the Mamfe-Ikom examples represent another new species.

KEY TO GENUS PORPAX KARSCH.

1. Small species, abdomen less than 19 mm, the hindwing with only 1 *Cuq*, the forewing with 9½ *Ax*. Cu_2 strongly curved ..... Garamba N.P. *garambensis* spec. nov.

— Hindwing with 2 *Cuq*, forewing usually with 11½ *Ax*, sometimes 10½. 2

2. Small species, abdomen 19 mm or less; labrum mainly yellow or green. Legs of ♂ very hairy ..... Rhodesia *risi* PINHEY.

— Larger species, abdomen 20 mm or more; labrum mainly black 3

3. Labrum entirely black. Abdomen of ♂ slender; legs very hairy ..... Northern Rhodesia to equatorial Africa *asperipes* KARSCH.

— Labrum with two pale basal dots. Abdomen of ♂ not sharply constricted on third segment, stoutish; legs not hirsute ..... Mamfe-Ikom *bipunctus* spec. nov.

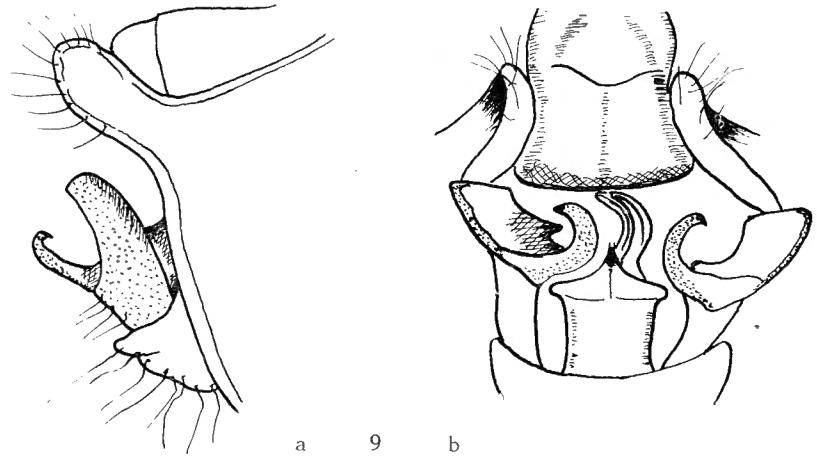
1. — **Porpax bipunctus** spec. nov.

(Fig. 9.)

Holotype male (mature; Mamfe): Labium broadly black in the middle, narrowly along the edges, yellow laterally. Labrum black with two triangular yellow basal spots; anteclypeus brown, postclypeus and genae yellow; frons typically prominent but rounded; black in front, green above, with black basal line, which projects along the furrow. Vertex large, black, green dorsally; occipital triangle black, yellow posteriorly.

Prothorax black in the middle, green on anterior and posterior lobes, the posterior typically large, thick. Synthorax black to below humeral suture, with broad green antehumeral stripe, slightly wider ventrally; a small green dorsal triangle; an elongate green spot in antealar sinus. Sides of synthorax mainly green; black stripes on both lateral sutures and a short streak in middle of metepimeron. Legs black. A green stripe on forefemur. Hindfemora with numerous very short spines; sparse hair on the legs. Tibiae with longish fine spines.

Abdomen short and rather robust; largely green on three basal segments, with some black marking: on segment 1 a dorsal band enclosing a green



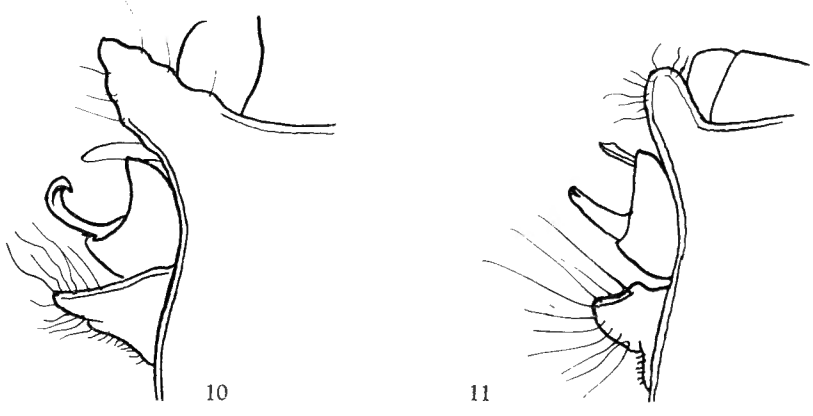


FIG. 9. — *Porpax bipunctus* spec. nov. (Mamfe).
Accessory genitalia. a) from right; b) from below.

FIG. 10. — *Porpax asperipes* KARSCH (Moyen Congo).
Accessory genitalia from right (showing apex of peneal flagellum).

FIG. 11. — *Porpax risi* PINHEY (Ikelenge, North Mwinilunga).
Accessory genitalia from right (showing apex of peneal flagellum).

spot; on segment 2 a short lateral bar and a distal annulus; on 3 with annuli at transverse carina and at distal end. Segment 4 black with elongate green basal triangle; the rest black, but with yellow basal dots on 5 and mainly pale on the middle of segment 6. Superior appendages brown, inferior dark. Accessory appendages on segment 2 (fig. 9) with broad hamule and long hook. Peneal flagellae with external longitudinal ridge.

Forewing with 11½ *Ax*: triangle narrow, crossed; discoidal field of two rows, but with three cellules at triangle; subtriangle of three cellules. Hindwing with 2 *Cuq* on left, 3 on right. Venation and pterostigma black. A trace of amber at base of hindwing; membranule small, blackish.

Abdomen (without appendages) 19 mm, hindwing 25 mm, pterostigma 1.75 mm.

Paratype males: Anal loop occasionally open at apex. Hindwing normally with 2 *Cuq*. Subtriangle in forewing may be sometimes free or only of 2 cellules. Otherwise similar.

In one male (Ntaali) the abdomen is 18 mm.

Allotype female (mature; Ikom): Head, face, thorax and legs as in male.

Abdomen broadly cylindrical. Three basal segments green marked as in male but with reduced blackish markings. The rest black with larger green triangles on segments 4 and 5, 6 mainly green. Cerci short, green. Forewing with 12½ *Ax*. Hindwing with 2 Cuq.

Otherwise as in holotype.

Abdomen 18 mm, hindwing 28 mm, pterostigma 2 mm.

Paratype female: Vertex nearly all black.

Forewing with 10½-11½ *Ax*, otherwise as in allotype.

Adults (see p. 98).

2. — **Porpax asperipes** KARSCH.

(Fig. 10.)

KARSCH, 1896, loc. cit. supra.

Mature male (Ketta Forest, Moyen Congo): Differs from ***bipunctus*** as follows: labrum all black. Side of thorax mainly black, rather than green, i.e. the black areas similar but much broader. Legs, particularly the hindlegs, very densely ***hairy***, the femora with fewer short spines. Forefemur without green stripe.

Abdomen slender, partially coated with whitish blue pruinosity. Basal segments more heavily marked with black, with green dorsal stripe and lateral spots. Posterior lobe of accessory genitalia more pointed (fig. 10). Peneal flagellae without external ridges.

Forewing with 11½ *Ax*. Hindwing with 2-3 *Cuq*. Otherwise as in the previous species.

Abdomen (without appendages) 21.5 mm, hindwing 27 mm, pterostigma 1.75 mm.

A non-pruinose male shows the abdominal segments 4-10 to be blacker than in *bipunctus*, with pale marking reduced.

In a series of males from Ikelenge, North-West Northern Rhodesia, the hindwing has 2-3 *Cuq*, but in one aberrant example there is only 1 *Cuq* in all wings.

Mature female (Mambili Forest, Moyen Congo) : Very like *bipunctus* female but labrum all black. Legs definitely hairy although not densely hirsute. Hindfemora with short and medium spines.

Abdomen as in *bipunctus*. Forewing with 11½ *Ax*. Hindwing with 2-3 *Cuq*.

Abdomen 18 mm, hindwing 26 mm, pterostigma 2.75 mm.

Female from Carnot : rather immature, with the pale markings yellower. Forewing with 11½ and 12 *Ax*, the last *Ax* in right forewing being complete. Hindwing with 2 *Cuq*.

Adults (see p. 98) : Series from Ketta, Etoumbi, Mambili and Fort Rousset Forests, Moyen Congo; ♂ from Bemboma, Congo; ♀ from Carnot; series of ♂♂ Ikelenge, N. Rhodesia.

3. — **Porpax risi** PINHEY (comb. nov.).

(Fig. 11.)

PINHEY, 1958, Occ. Pap. nat. Mus. S. Rhodesia **22** (b) : 115; idem, 1962*a* : 251.

Since the original description *risi* has been taken at Ikelenge, Northern Rhodesia, in the same locality as the series of *asperipes* mentioned above. Hence *risi* must be considered a distinct species.

Male (mature; Ikelenge) : A small species. Labium much more broadly black, but labrum green with black anterior border.

Prothorax with two green dorsal dots; the green posterior lobe grooved medially, with black median line. Antehumeral stripes narrower and more fusiform. Sides of thorax blacker, the green band on the mesepimeron broken into two isolated spots. The antehumeral is sometimes pruinose. Legs much less hirsute than *asperipes*. Abdomen of adult with continuous whitish blue pruinosity except on the last three segments. In a non-pruinose example segments 1-3 are yellow with irregular black lateral bands; 4 is yellow at base and with yellow distal spot; 5-7 with smaller yellow basal spot and more elongate yellow distal spot; on segments 7-8 this distal yellow extends to base; 10 all black. Superior appendage yellow. Accessory genitalia (fig. 11) very short; peneal flagellum more thickly chitinized and with external groove angled distally.

Wings shorter. Venation brown, not black; subcostal crossveins yellow. Forewing with $11\frac{1}{2}$ *Ax.* Cu_2 more strongly curved. Triangle slightly *broader*; discoidal field of 2 rows, not three cellules at the triangle. Subtriangle of 2-3 cellules. Hindwing with 2 *Cuq*. Pterostigma longer.

Abdomen (without appendages) 18 mm, hindwing 22 mm, pterostigma 2.5 mm.

These Ikelenge examples differ slightly from typical *risi* from Southern Rhodesia and may be a local race of *risi* : in true *risi* the labium has more yellow and the side of the thorax is paler, with less black, the mesepimeral band continuous.

Female (mature; Ikelenge) : Differs only in minor respects. Prothoracic hindlobe without black median line.

Abdominal segments 1-6 yellow, with black lateral band.

Abdomen 18 mm, hindwing 24 mm, pterostigma 3-3,5 mm.

A female from Southern Rhodesia has the thorax paler at the side but the abdomen blacker.

Adults (see p. 99) : Series from Ikelenge (N. Rhodesia) and Vumba (S. Rhodesia), in open swamps.

4. — **Porpax garambensis** spec. nov.

(Fig. 12.)

This one male is the only *Porpax* in the Garamba material.

Holotype male (not quite mature; no. 3431) : Labium black, with small yellowish lateral patch. Labrum all black. Rest of face and frons as in *asperipes*, etc. Occipital triangle *green*.

Prothorax black, with green anterior and posterior lobes, the posterior *not* grooved down centre, unlike *risi*. Synthorax dark brown, with pale yellow marking : antehumeral stripe wider than in *risi*, broader ventrally; and a narrow dorsal spot; narrow stripe on mesepimeron; traces on first lateral suture; a discontinuous row of three spots on metepisternum; a discontinuous stripe joined to dorsal bar on metepimeron.

Legs black, very hairy; posterior femora with only 3-4 short spines near distal end. Tibial spines few in number, longish, fine.

Abdomen thickish. Abdominal segment 1 black with middorsal and lateral yellowish spots; segment 2 black, with yellow baso-dorsal and lateral pale spot; segment 3 black with very large latero-ventral pale triangle, severed by a line on carina; rest of abdomen black; 4 with baso-ventral triangle; 5 with trace of basal and ventro-basal pale spots; 6 mainly pale in basal half; the other segments unmarked. Superior and inferior appendages yellow. Hamule (fig. 12) rather prominent, longitudinally

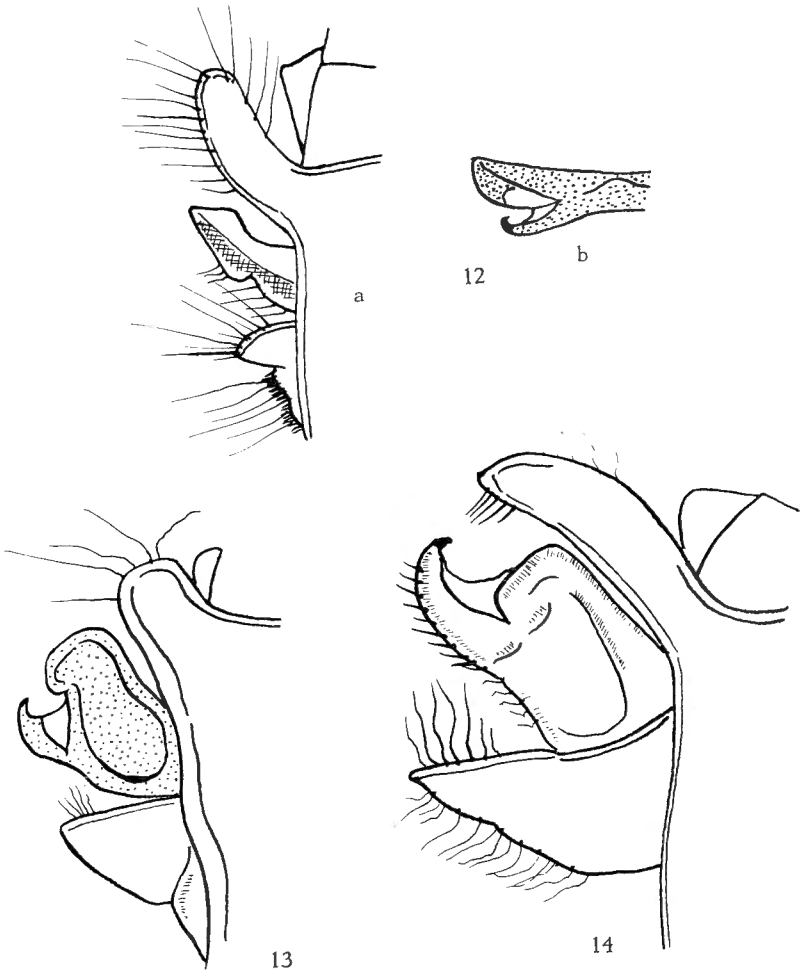


FIG. 12. — *Porpax garambensis* spec. nov.
a) Accessory genitalia from right, b) right hamule from below.

FIG. 13. — *Limnetothemis erythra* gen. and spec. nov.
Accessory genitalia from right (holotype).

FIG. 14. — *Trithemis leptosoma* spec. nov.
Accessory genitalia from right (holotype).

angled externally (not evenly rounded as in other species); anterior lamina with large number of very short spines as well as long hairs; posterior lobes elongated, rounded apically.

Wings shortish, venation black or blackish; pterostigma pale brown, between black veins (probably blacker at maturity); membranule small, dark brown with white basal dot; scarcely any trace of basal amber. Forewing with 9½ *Ax*, 7 *Px*. Arculus at or just distal to second Ax. Triangle slender, erect, crossed; discoidal field of two rows, starting with 3 cellules at triangle; *Cu_2 strongly* curved; 1 row *Rspl*, as usual; subtriangle of 3 cellules. Triangle in forewing almost on a level with triangle in hindwing. Sectors of arculus on long pedicel in forewing, still longer in hindwing. Hindwing with 1 *Cuq*. Anal loop short, reaching 1½ cellules beyond triangle and, on left hindwing, open at margin.

Abdomen (without appendages) 18.5 mm, hindwing 22 mm, pterostigma 2 mm.

Adult (see p. 99).

HEMISTIGMA KIRBY.

Hemistigma KIRBY, 1889, Trans. zool. Soc. Lond. **12** : 263, 295; PINHEY, 1962*a* : 248.

Hemistigma albipuncta (RAMBUR).

RAMBUR, 1842, Névr. 93; PINHEY, 1962*a* : 248.

Common in tropical and subtropical Africa. Two examples of a female form in the collection have the bases of the wings amber to the nodus and thence along the costa (var. *neurothemoides* FRASER).

Adults (see p. 99).

ACISOMA RAMBUR.

Acisoma RAMBUR, 1842, Névr. 26, 28; PINHEY, 1962*a* : 253.

KEY.

1. Abdomen swollen on basal segments but sharply contracted on segments 5-6. White band on thorax divided by the dark dorsal carina ..... *panorpoides ascalaphoides* (RAMBUR).

— Abdomen gradually tapering to the end. Mid-dorsal band on thorax and the carina all white ..... *trifidum* KIRBY.

1. — **Acisoma trifidum** KIRBY.

KIRBY, 1889, Trans. zool. Soc. Lond. **12** : 341; PINHEY, 1962*a* : 254.

A local species in West Central and Equatorial Africa.

Adult (see p. 99).

2. — **Acisoma panorpoides ascalaphoides** RAMBUR.

RAMBUR, 1842, Névr. 29; PINHEY, 1962*a* : 254.

Widespread in the Ethiopian region, with other races in North Africa and Asia.

Adults (see p. 99).

3. — **Acisoma** spp.

Larvae (see p. 100) : Two of the few larvae (no. E 1411) relegated to this genus were found to have only 8 lateral setae, instead of 10. Perhaps these are examples of *A. trifidum* KIRBY ?

DIPLACODES KIRBY.

Diplacodes KIRBY, 1889, Trans. zool. Soc. Lond. **1** : 263, 307; PINHEY, 1962*a* : 254.

KEY.

1. Abdomen over 21 mm. Face of adult ♂ black; thorax of immature ♂ black with yellow spots ..... *lefebvrei* (RAMBUR).
— Abdomen 18 mm or less. Face of adult ♂ yellow. Thorax of immature ♂ brown in front ..... *exilis* RIS.

1. — **Diplacodes exilis** RIS.

RIS, 1911, Coll. Zool. SELYS **12** : 464; PINHEY, 1962*a* : 255.

A small species of evidently wide distribution, but probably often confused with small examples of *D. lefebvrei* (RAMBUR).

Adults (see p. 100).

2. — **Diplacodes lefebvrei** (RAMBUR).

RAMBUR, 1842, Névr. 112, 117; PINHEY, 1962*a* : 255.

Common in most of the Ethiopian region and found also in Western Asia.

Adults (see p. 100).

CROCOTHEMIS BRAUER.

Crocothemis BRAUER, 1868, Verh. Zool. Bot. afr. **18** : 367, 736; PINHEY, 1962*a* : 257.

KEY.

1. Abdomen uniformly narrowish; forewing unmarked with basal amber. Forewing with 2 rows between IR_3 and Rspl ..... *divisa* BAUMANN.
— Abdomen broad, triquetral; forewing with small basal amber spot. Forewing with 1 row between IR_3 and Rspl 2
2. Pterostigma 3 mm or less, usually reddish. Lateral carina on abdominal segment 5 with less than 14 denticles ..... *sanguinolenta* (BURMEISTER).
— Pterostigma more than 3 mm, yellow. Lateral carina on segment 5 with 17 or more denticles ..... *erythraea* (BRULLÉ).

1. — **Crocothemis divisa** BAUMANN.

BAUMANN, 1898, Ent. Nachr. **24** : 242; PINHEY, 1962*a* : 257.

Moderately common, particularly in rocky areas, in tropical and subtropical Africa.

Adults (see p. 100).

2. — **Crocothemis erythraea** (BRULLÉ).

BRULLÉ, 1832, Exped. Sci. Morée **3** (1) : 102; PINHEY, 1962*a* : 258.

Common throughout Africa, southern Europe and Western Asia.

Adults (see p. 100).

3. — **Crocothemis sanguinolenta** (BURMEISTER).

BURMEISTER, 1839, Handb. Ent. **2** : 859; PINHEY, 1962*a* : 259.

Common throughout continental Ethiopian Africa and Madagascar.

Adults (see p. 101).

4. — **Crocothemis** spp.

Larvae (see p. 101).

BRADINOPYGA KIRBY.

Bradinopyga KIRBY, 1893, J. Linn. Soc. Zool. **24** : 553; PINHEY, 1962*a* : 259.

Bradinopyga strachani (KIRBY).

KIRBY, 1900, Ann. Mag. nat. Hist. (7) **6** : 74; PINHEY, 1962*a* : 260.

The known distribution of this species limits it to equatorial Africa.

Adults (see p. 101).

Larvae (see p. 101) : A number of larvae were similar in many respects to the larvae of *B. cornuta* RIS (1911) and are probably *B. strachani*. The cerci are not so long as in *cornuta*, only a little longer than the pyramid; cercoids very short. Mask with only 14-15 lateral setae (instead of 18).

BRACHYTHEMIS BRAUER.

Brachythemis BRAUER, 1868, Verh. zool. bot. Ges. Wien **18** : 367, 736; PINHEY, 1962*a* : 260.

KEY.

1. Wings without basal amber. ♂ with black post-nodal band across wings. Base of frons with distinct black band ..... *leucosticta* (BURMEISTER).

— Wings with large basal amber area. No black band on wings. Only a trace of black on frons 2

2. Basal amber very broad and sharply demarcated ... *lacustris* (KIRBY).

— Basal amber in the form of streaks ..... *wilsoni* PINHEY.

1. — **Brachythemis lacustris** (KIRBY).

KIRBY, 1889, Trans. zool. Soc. Lond. **12** : 329; PINHEY, 1962*a* : 261.

Gregarious in tropical and subtropical Africa, preferring swampy localities.

Adult (see p. 102).

2. — **Brachythemis leucosticta** (BURMEISTER).

BURMEISTER, 1839, Handb. Ent. **2** : 849; PINHEY, 1962*a* : 261.

Abundant nearly throughout the African Continent.

Adult (see p. 102).

Larva (see p. 102).

3. — **Brachythemis wilsoni** PINHEY.

PINHEY, 1952, Occ. Pap. Coryndon Mus. **3** : 16; idem, 1962*a* : 262.

Known only from southern Sudan, northern Uganda and Northern Nigeria, the records here extend the range into the north-eastern Congo.

? Larvae : Two *Brachythemis* larvae from No. E 579 may, perhaps, be *B. wilsoni* PINHEY. They are paler than normal for *B. leucosticta* (BURMEISTER), but have 4 lateral setae in the mask. There are only a few very short mental setae, situated well posteriorly. Spines on abdominal segments 8-9 shortish.

Adults (see p. 102).

Larva (see p. 102).

4. — **Brachythemis** spp.

Larvae (see p. 102).

PHILONOMON FÖRSTER.

Philonomon FÖRSTER, 1906, Jber. Ver. Naturk. Mannheim **71-72** : (10 sep.); PINHEY, 1962*a* : 264.

Philonomon luminans (KARSCH).

KARSCH, 1893, Berl. ent. Z. **38** : 22; PINHEY, 1962*a* : 264.

Locally common in tropical and subtropical Africa.

Adults (see p. 102).

Larvae (see p. 102).

LIMNETOTHEMIS gen. nov.

Characters. — A medium sized Libellulid, of the build of an *Atoconeura* KARSCH (1899) but the abdomen more uniformly slender, like *Thalassothemis* RIS (1909). Thorax ferruginous with slight sheen, marked with yellow. Abdomen red. Head small, eye contact short; frons large, prominent with crest. Prothoracic hindlobe narrow, somewhat erect. Synthorax broadish. Legs long, stout. Tibial spines not numerous, long and slender. Claw spurs not as short as in *Atoconeura* and slightly further from apex of claw. Abdomen swollen at base, then uniformly slender but triquetral. Hamulus robust with well developed hook, more like the *Orthetrum-Oxythemis* group. Anterior lamina broad but short, posterior lobes short, rounded. Superior appendages rather slender, slightly constricted near base.

Wings longish, broadly rounded at apices, with long pterostigma; base of hindwing moderately broad. Nodus in forewing nearer to apex than to base. Triangle in forewing narrow, crossed, its basal edge transverse but slightly sinuous almost on a level with triangle in hindwing. Sectors of arculus on a moderate pedicel in forewing, longer in hindwing. Arc proximal to 2nd *Ax*. Cu_2 in hinding slightly distal to anal angle of triangle. Forewing with 12 *Ax*, the last complete; 7-8 *Px*. Triangle in hindwing at arculus. R_3 in forewing slightly sinuous. IR_3-*Rspl* of two rows. Cu_2 slightly curved. No *Bsq* or accessory *Cuq*. Postdiscoidal field of three rows expanding strongly, just before nodal level. *Ht* free in all wings, *ti* of 3 cellules in forewing, triangle free in hindwing. Anal loop short, reaching only about two cellules beyond triangle; closed before margin. Anal field in hindwing of three rows. Membranule small.

Type-species : *Limnetothemis erythra* spec. nov.

This new genus, *Limnetothemis*, named from the habitat of the type, a marshland, is nearest to *Thalassothemis* RIS and *Trithemis* BRAUER (1868), more advanced than the former, more primitive than the latter; and also more advanced than *Atoconeura* KARSCH. Unlike *Trithemis*, in which the body is often highly coloured but usually without metallic sheen (except on the head) the body coloration is brownish with slight reflections. The head is smaller than in *Atoconeura* and the frontal crest is well developed, unlike most species of these other genera. There are fewer tibial spines but these are long, as in *Thalassothemis*. The hamular hooks are not elongate as they are in *Atoconeura*.

The wings are broader apically and have a longer pterostigma than in these other three genera. The narrow, erect triangle of the forewing is more like some *Trithemis*, and it is more on a level with the triangle in the hindwing than in its relatives. The arculus in *Atoconeura* is distinctive, for this group, in being at or beyond the second *Ax*. The last *Ac* is complete, unlike most *Trithemis*, but the two rows of the radial supplement, the

lack of accessory *Cuq* in the hindwing and the three rows in the discoidal field place the new genus nearer *Trithemis*. In the hindwing the small membranule and short anal loop also place it nearer the latter genus.

Considering all features the Mauritian genus *Thalassothemis* Ris is less primitive than *Atoconeura* Karsch, whilst the new genus, *Limnetothemis*, is a further advance towards the more highly specialized genus, *Trithemis* Brauer.

1. — **Limnetothemis erythra** spec. nov.

(Fig. 13.)

Holotype male (mature) : Labium black with small yellow lateral dot; labrum black; anteclypeus brown with central yellow spot; postclypeus dark brown below, yellow in dorsal half. Frons and vertex black with violet sheen. Occipital triangle black.

Prothorax blackish with yellow median band, anterior and posterior lobes yellow, with long yellow hair. Synthorax ferruginous with bright yellow stripe on median carina; and with faint yellow stripes or spots : antehumeral stripe, continuing on to mesinfraepisternum; narrow stripe on mesepimeron; one along first lateral suture and across spiracle; a yellow spot on metepisternum; a discontinuous stripe and a posterior spot on metepimeron. Legs black.

Abdominal segments 1-3 orange red; accessory appendages dark brown. Segment 4 reddish, with black lateral stripe; segments 5-9 all reddish; 10 ferruginous with orange dorsal spot; anal appendages dark ferruginous.

Wings hyaline, with only the faintest trace of basal amber on hindwing. Pterostigma yellowish brown, between dark brown veins, the costal edge thickened. Venation mainly pale brown. (Venation described above). Membranule dark brown. Abdomen (without appendages) 27 mm, hindwing 32 mm, pterostigma 4.5 mm in all wings.

Female : unknown.

Holotype male in Institut Parcs Nationaux, Bruxelles. The specific name relates to the red colour of the body.

Adult (see p. 103).

? Larva (see p. 103) : A peculiar Trithemine larva, rather near *Atoconeura* Karsch in characters, may perhaps be the unknown larva of *Limnetothemis erythra* ?

TRITHEMIS Brauer.

Trithemis Brauer, 1868, Verh. zool.-bot. Ges. Wien **18** : 176, 366, 735; Pinhey, 1962*a* : 267.

Seven species of this large genus were present in the Garamba material.

KEY TO MATURE MALES.

1. Thorax and abdomen entirely (or almost entirely) black 2
— Thorax and abdomen at most only partially black 3
2. Abdomen short, triquetral, frons blackish ..... *dichroa* KARSCH.
— Abdomen elongate, slender, frons bright metallic blue ..... *leptosoma* spec. nov.
3. Frons metallic blue; thorax entirely pale blue pruinose, abdomen mainly black ..... *stictica* (BURMEISTER).
— Frons red, not metallic blue; thorax non-pruinose or with thin purplish pruinosity; abdomen mainly red 4
4. Abdomen slender, strongly constricted at segment 3 5
— Abdomen broader, triquetral, scarcely constricted 6
5. Basal amber on wings not extensive, on hindwing scarcely reaching proximal edge of triangle and not covering anal loop ..... *arteriosa* (BURMEISTER).
— Basal amber reaching beyond triangle in hindwing and covering most of the anal loop ..... *monardi imitata* PINHEY.
6. Small species, the pterostigma 2-2.5 mm. Hook of hamule long, sickle-shaped ..... *kalula* KIRBY.
— Larger species, pterostigma more than 2.5 mm. Hook of hamule small. *annulata* (BEAUVOIS).

KEY TO FEMALES.

1. Abdomen mainly black, with short yellow streaks 2
— Abdomen mainly pale, with some black markings 3
2. Abdomen with single row of yellow streaks. Hindwing with a faint yellow clound in the anal loop region ..... *stictica* (BURMEISTER).
— Abdomen with double row of fine yellow streaks. Hindwing without yellow cloud ..... *leptosoma* spec. nov.
3. Abdomen with broad continuous black dorsal band; thorax with broad black median stripe 4
— Abdomen at most with a short black band on basal segments; thorax with only a narrow median stripe or none at all 5
4. Frons with broad black basal band. Venation dark brown, wing apices brown ..... *dichroa* KARSCH.
— Frons with narrow black basal band. Venation pale, wing apices clear. *kalula* KIRBY.

5. Abdomen with short black dorsal stripe on basal segments. Wings broadly amber at base, in hindwing to beyond triangle ..... *monardi imitata* PINHEY.

— Abdomen and thorax without median black bands; wings with restricted basal amber 6

6. Abdomen with short black subdorsal or lateral bands on basal and middle segments ..... *arteriosa* (BURMEISTER).

— Abdomen light brown with only vestigial black markings ..... *annulata* (BEAUVOIS).

1. — **Trithemis annulata** (BEAUVOIS).

BEAUVOIS, 1805, Ins. Afr. Amér. 69; PINHEY, 1962*a* : 268.

An abundant and variable species in the Ethiopian region.

Adult (see p. 103).

2. — **Trithemis arteriosa** (BURMEISTER).

BURMEISTER, 1839, Handb. Ent. **2** : 850; PINHEY, 1962*a* : 269.

Found throughout the African Continent.

Adults (see p. 103).

3. — **Trithemis dichroa** KARSCH.

KARSCH, 1893, Berl. ent. Z. **38** : 24; PINHEY, 1962*a* : 270.

A widespread species in Tropical Africa.

Adults (see p. 103).

4. — **Trithemis kalula** KIRBY.

KIRBY, 1900, Ann. Mag. nat. Hist. (7) **6** : 69; PINHEY, 1962*a* : 272.

In appearance like a small *annulata*, the male having the same purplish colour in the pruinosed state. Equatorial Africa, probably not recorded previously from the Congo. It is closely allied to *T. bredoi* FRASER (1953).

Adult (see p. 104).

5. — **Trithemis monardi imitata** PINHEY.

PINHEY, 1961, Publn., Brit. Mus. (Nat. Hist.) 164.

Described from the Kenya-Uganda border, and known from the South Western Sudan, this Garamba material is a new Congo record. Typical *monardi* RIS (1931) is found in south central Africa.

Adults (see p. 104).

6. — **Trithemis stictica** (BURMEISTER).

BURMEISTER, 1839, Handb. Ent. **2** : 850; PINHEY, 1962*a* : 273.

A widespread species in the Ethiopian region.

Adults (see p. 104).

7. — **Trithemis leptosoma** spec. nov.

(Fig. 14.)

This is another new black species of the genus, but with the abdomen more slender (hence the name « leptosoma ») than in *grouti* PINHEY (1960), *dichroa* KARSCH (1893) and *atra* PINHEY (1961); and more elongate than in the latter two.

Holotype male (mature) (no. 915). Labrum yellow with black median band along middle third, this black slightly extending along the anterior margins. Labrum black; rest of face in front and at sides yellow, with a dark brown diffuse band across the postclypeus. Vertex and frons above entirely bright blue with violet reflections. Occipital triangle black in anterior portion, yellow posteriorly with black median line. Back of occipital lobes black with latero-ventral yellow spots.

Entire thorax, legs, abdomen and all its appendages black; the abdomen swollen at base, tapering strongly on segment 3, the remaining segments slender. Hamule with large hook and short stout spines; posterior lobe narrow.

Venation black; pterostigma brown, between black veins. Forewing with $11\frac{1}{2}$-$12\frac{1}{2}$ *Ax* (one of the middle *Ax* incomplete on left wing); 9-10 *Px*. Only an extremely small trace of basal amber on hindwing. Membranule grey.

Abdomen (without appendages) 23 mm, hindwing 29 mm, pterostigma 3.3 mm.

Two Paratype males : Traces of one row of short yellow streaks on segments 4-8 of abdomen.

Abdomen 24 mm, hindwing 29.5 mm.

Allotype female (no. 891): Head similar, but with narrower, black median band on labium; frons above with the blue not quite reaching the anterior edge; vertex yellow with blue lateral patch.

Prothorax ferruginous. Mesepisternum ferruginous with broken yellow antehumeral band (like an inverted exclamation mark); yellow spot in the antealar sinus. Side of synthorax mainly yellow with the usual continuous black Trithemine, irregular stripe, sending short streaks along the suture. Legs black, coxae yellow; forefemur yellow on inner surface.

Abdomen broader than in male; black with two rows of short lateral yellow streaks on segments 3-6, diminishing posteriorly, particularly the more ventral row. Last four segments lost.

Wing characters as in male. Forewing with 10½ *Ax.*

Abdomen incomplete; hindwing 28 mm, pterostigma 3 mm.

This new species differs from *atra* PINHEY and *dichroa* KARSCH in its more elongate, slender abdomen; *dichroa* has a dull, non metallic frons, *atra* a more violet frons. From *grouti* PINHEY it differs in its still more slender abdomen; bluer frons; wing apices in *leptosoma* not slightly brown; pterostigma paler; anterior lamina larger. From *nuptialis* KARSCH (1894) it differs in lacking the strong blue pruinosity and in having a bluer metallic sheen on the frons.

Holotype, allotype and one paratype made in Institut Parcs Nationaux, Bruxelles; one paratype male in National Museum, Bulawayo.

Adults (see p. 104).

8. — **Trithemis** spp.

Larvae (see p. 104).

? Tritheminae.

Larvae (see p. 105).

ZYGONYX SELYS.

Zygonyx SELYS, 1866, C. R. Soc. ent. Belg. 9; HAGEN, 1867, Verh. zool.-bot. Ges. Wien **17** : 62; PINHEY, 1962*a* : 274.

Only a single widespread species (adult) of this genus was found in the material. The species breed in swiftly flowing waters.

1. — **Zygonyx torrida** (KIRBY).

KIRBY, 1889, Trans. zool. Soc. Lond. **12** : 299, 340; PINHEY, 1962*a* : 277.

Widespread and common in Africa; Western Asia.

Adult (see p. 105).

Larvae (see p. 105).

2. — **Zygonyx natalensis** (MARTIN).

MARTIN, 1900, Bull. Mus. Hist. nat. Paris : 106, 107; PINHEY, 1962*a* : 276.

Larvae only.

Larvae (see p. 105).

Zygonyx spp.

Larvae (see p. 105) : The larvae of this genus are rather characteristic, in their broad stance, the ventral surface well flattened, the antennae short, the mask short, pentagonal.

Possibly more than two species are represented.

RHYOTHEMIS HAGEN.

Rhyothemis HAGEN, 1867, Stettin. ent. Ztg. **28** : 232; PINHEY, 1962*a* : 279.

KEY.

1. Forewing hyaline, hindwing with large basal metallic black patch ..... *semihyalina* (DESJARDINS).

— Both wings mainly covered with metallic black... *fenestrina* (RAMBUR).

1. — **Rhyothemis fenestrina** (RAMBUR).

RAMBUR, 1842, Névr. 40; PINHEY, 1962*a* : 280.

Local in Central and West tropical Africa.

Adult (see p. 105).

2. — **Rhyothemis semihyalina** (DESJARDINS).

DESJARDINS, 1832, Rapport Soc. Maurice Isl. 1; PINHEY, 1962*a* : 281.

Nearly all Africa and neighbouring islands.

Adult (see p. 106).

THOLYMIS HAGEN.

Tholymis HAGEN, 1867, Stettin. ent. Ztg. **28** : 221; PINHEY, 1962*a* : 284.

Tholymis tillarga (FABRICIUS).

FABRICIUS, 1798, Suppl. Ent. Syst. 285; PINHEY, 1962*a* : 285.

Ethiopian region; tropical and subtropical Asia and Australasia. A crepuscular insect.

Adults (see p. 106).

PANTALA HAGEN.

Pantala HAGEN, 1861, Syn. Neur. N. Amer. 141; PINHEY, 1962*a* : 285.

Pantala flavescens (FABRICIUS).

FABRICIUS, 1798, Suppl. Ent. Syst. 285; PINHEY, 1962*a* : 286.

Distributed more or less throughout the tropics and subtropics of the World.

Adults (see p. 106).

Larvae (see p. 106).

The larvae are characteristic, with their wide masks, the lateral lobes with strongly serrated margins; the long lateral spines on the terminal segments of the abdomen. One larva in no. 631 had a dytiscid larva in its mouth.

TRAPEZOSTIGMA HAGEN.

Trapezostigma HAGEN, 1849, Stettin. ent. Ztg. **10** : 174; PINHEY, 1962*a* : 287.

Trapezostigma basilare (BEAUVOIS).

BEAUVOIS, 1805, Ins. Afr. Amér. 171; PINHEY, 1962*a* : 288.

Most of the Ethiopian region and parts of Asia.

Adults (see p. 107).

Larva (see p. 107).

UROTHEMIS BRAUER.

Urothemis BRAUER, 1868, Verh. zool. bot. Ges. Wien **18** : 175, 366, 737; PINHEY, 1962*a* : 291.

KEY.

1. ♂ thorax and abdomen largely black, developing a blue pruinosity; hindwing with small blackish basal spot. ♀ with yellow basal patch on hindwing enclosing a blackish band ..... *edwardsi* (SELYS).
— ♂ thorax brownish, abdomen red with narrow black median line; without blue pruinosity; hindwing with large basal yellow patch enclosing a reddish mark having a gold centre. ♀ with base of hindwing similar to ♂ ..... *assignata* (SELYS).

1. — **Urothemis assignata** (SELYS).

SELYS, 1872, Rev. Mag. Zool. (2) **23** : 176; PINHEY, 1962*a* : 291.

Tropical and subtropical Africa.

Adults (see p. 107).

2. — **Urothemis edwardsi** (SELYS).

SELYS, 1849, in Lucas, Algérie **3** : 124; PINHEY, 1962*a* : 292.

Distribution similar to *U. assignata* (SELYS).

Adults (see p. 107).

Family LIBELLULIDAE

Larvae incogn. (see p. 107).

ANISOPTERA

Larvae indet. (see p. 109).

ODONATA

Larvae indet. (see p. 109).

LIST OF LOCALITIES AND RECORDS

Lestes plagiatus (BURMEISTER).

Adults :

1 ♂, II/gc/6, 21.VI.1951, H. DE SAEGER, 1952, savane herbeuse, fond marécageux.

Lestes uncifer KARSCH.

Adults :

1 ♂, I/a/3, 5.V.1950, H. DE SAEGER, 497, bord de galerie sèche, taillis et strate herbeuse; 2 ♂♂, II/fc/3, 16.VII.1951, H. DE SAEGER, 2102, savane herbeuse à ligneux rares; 1 ♀, II/fd/17, 5.IX.1951, H. DE SAEGER, 2379, galerie forestière dense; 1 ♂, II/fc/14, 14.IX.1951, H. DE SAEGER, 2408, végétation paludicole.

Lestes spp.

Larvae :

4, Akam, 23.VI.1950, n° 631, G. DEMOULIN, rivière; 2, I/a/2, 26.VI.1950, n° 637, G. DEMOULIN, crique temporaire; 2, I/b/2″, n° 646, G. DEMOULIN, 28.VI.1950, mares permanentes; 1, I/b/1, 28.VI.1950, G. DEMOULIN, savane arborescente, n° 648; 18, I/a/2-I/a/3, 10.VII.1950, G. DEMOULIN, crique temporaire en crue, n° 682; 7, I/a/2, 17.VII.1950, n° 702, G. DEMOULIN, mare temporaire; 4, I/a/1, 14.VIII.1950, n° 755, G. DEMOULIN, « Ndiwili » inondé; 4, I/b/3′, 18.VIII.1950, n° 759, G. DEMOULIN, rivière à courant rapide; 1, I/o/2, 25.VIII.1950, n° 788, G. DEMOULIN, ruisseau sous galerie; 1, Napokomweli, 31.VIII.1950, n° 796, G. DEMOULIN, « Ndiwili »; 7, I/b/1, 6.IX.1950, n° 803, G. DEMOULIN, « Ndiwili »; 5, Napokomweli, 6.IX.1950, n° 805, G. DEMOULIN, « Ndiwili »; 126, Napokomweli, n° 821, 15.IX.1950, G. DEMOULIN, « Ndiwili »; 3, I/a/1, 18.IX.1950, n° 828, G. DEMOULIN, « Ndiwili »; 11, Napokomweli, 19.IX.1950, n° 830, G. DEMOULIN, « Ndiwili »; 7, Napokomweli, 22.IX.1950, n° 834, G. DEMOULIN, « Ndiwili »; 7, I/b/2, 27.IX.1950, n° 847, G. DEMOULIN, « Ndiwili »; 1, Napokomweli, 28.IX.1950, n° 850, G. DEMOULIN, « Ndiwili »; 20, Napokomweli, 4.X.1950, n° 870, G. DEMOULIN, « Ndiwili »; 13, Napokomweli, 13.X.1950, n° 889, G. DEMOULIN, « Ndiwili », bas-fond marécageux; 11, Napokomweli, 17.X.1950, n° 892, G. DEMOULIN, « Ndiwili », bas-fond marécageux; 4, Napokomweli, 18.X.1950, n° 893, G. DEMOULIN, « Ndiwili », bas-fond marécageux.

Elattoneura nigra KIMMINS.

Adults :

1 ♂, I/o/2, 23.III.1950, H. DE SAEGER, 324, rivière, eau courante; 1 ♂, 1 ♀, Km 17, 2.VIII.1950, G. DEMOULIN, 740, eau stagnante sous galerie de tête de source; 1 ♂, I/o/2, 6.X.1950, G. DEMOULIN, 874, sur les fleurs et inflorescences au bord de l'eau; 1 ♂, I/o/1, 16.X.1950, G. DEMOULIN, 891, savane de pente; 2 ♂♂, Nagero/18, 11.IV.1952, H. DE SAEGER, 3320, berges de la Dungu.

Chlorocnemis flavipennis SELYS.

Adults :

1 ♂, Aka, 14.V.1952, H. DE SAEGER, 3454, galerie forestière dense (type guinéen); 1 ♀, Aka, 15.V.1952, H. DE SAEGER, 3463, galerie forestière dense (type guinéen).

? Protoneurid larvae :

2, Nalugwambala, 2.VI.1950, n° 574, G. DEMOULIN, ruisseau sous galerie.

Metacnemis (Mesocnemis) singularis (KARSCH).

Adults :

1 ♂, I/o/2, 23.III.1950, H. DE SAEGER, 324, rivière, eaux courantes; 1 ♂, I/o/2, 22.III.1950, G. DEMOULIN, 359, rapides et anses calmes de la rivière; 3 ♂♂, Nagero/17, 24.III.1952, J. VERSCHUREN, 3254, galerie de la Dungu; 1 ♂, 1 ♀, Nagero/18, 11.IV.1952, H. DE SAEGER, 3320, berges de la Dungu; 1 ♀, Nagero, 10.V.1952, H. DE SAEGER, 3500, galerie forestière de la Dungu.

Larvae :

3, I/a/2, 26.XII.1949, n° 143, G. DEMOULIN, boue au fond d'une mare; 2, I/b/2″, 18.I.1950, n° 161, G. DEMOULIN, ruisseau marécageux; 2, I/c/2′, 17.II.1950, n° 255, G. DEMOULIN, tête de source sous galerie forestière; 1, I/a/2, 17.VII.1950, n° 702, G. DEMOULIN, mare temporaire; 1?, I/o/2, 28.VII.1950, n° 732, G. DEMOULIN, rivière sur barres granitiques; 1, I/o/2, 12.X.1950, n° 886, G. DEMOULIN, rivière affluent de I/o/2, cours inférieur; 1 ?, Napokomweli, 17.X.1950, n° 892, G. DEMOULIN, « Ndiwili », bas-fond marécageux.

Ceriagrion bidendatum FRASER.

Adults :

1 ♀, II/dd/8, 6.IX.1951, H. DE SAEGER, 2383, tête de source densément boisée; 1 ♀, II/fc/6, 10.X.1951, H. DE SAEGER, 2575, savane herbeuse; 1 ♀, II/ke/9, 12.X.1951, H. DE SAEGER, 2602, galerie forestière très dégradée; 1 ♂, II/hc/8, 12.XII.1951, H. DE SAEGER, 2902, tête de source à boisement dégradé; 1 ♀, I/o/3, 31.III.1950, H. DE SAEGER, 352, partie herbeuse en bordure de galerie forestière humide, 2 ♀♀, II/fd/17, 5.IX.1951, H. DE SAEGER, 2379, galerie forestière dense.

Ceriagrion corallinum CAMPION.

Adults :

1 ♂, I/c/2″, 30.XII.1949, H. DE SAEGER, 79, lisière de galerie forestière humide; 2 ♂♂, II/be/9, 19.III.1951, J. VERSCHUREN, 1425, herbes courtes; 4 ♂♂, 1 ♀, II/hc/8, 5.IV.1951, H. DE SAEGER, 1501, tête de source; 1 ♂, II/fd/17, 14.V.1951, H. DE SAEGER, 1723, galerie forestière; 1 ♂, II/hc/8, 5.VI.1951, H. DE SAEGER, 1872, tête de source à boisement dégradé; 1 ♂, II/fd/17, 5.IX.1951, H. DE SAEGER, 2379, galerie forestière dense; 1 ♂, II/cc/9, 17.IX.1951, H. DE SAEGER, 2446, galerie forestière dégradée; 1 ♂, II/fc/17, 25.IX.1951, H. DE SAEGER, 2471, galerie forestière claire; 1 ♂, PpK/52/g, 16 X.1951, H. DE SAEGER, 2614, galerie forestière très dégradée; 1 ♂, II/hc/8, 12.XII.1951, H. DE SAEGER, 2902, tête de source à boisement dégradé; 1 ♂, II/le/8, 8.IX.1952, H. DE SAEGER, 4040, tête de source boisée; 1 ♂, I/b/2″, 29.III.1950, G. DEMOULIN, 364, mare permanente ensoleillée.

Ceriagrion glabrum (BURMEISTER).

Adults :

1 ♂, Nagero 1, 30.VI.1954, 62, C. NEBAY; 1 ♂, 1 ♀, Nagero 4, 30.VII.1954, C. NEBAY, 72, 1 ♂, Nagero 4, 30.VII.1954, C. NEBAY, 73; 1 ♂, I/a/3, 8.V.1950, H. DE SAEGER, 497, bord de galerie sèche, taillis et strate herbeuse; 1 ♂, Km 17, 10.V.1950, H. DE SAEGER, 509, affleurement rocheux sous arbustes; 1 ♂, I/o/2, 30.X.1950, H. DE SAEGER, 915, lisière de galerie forestière; 2 ♂♂, II/gc/11, 31.III 1951, H. DE SAEGER, 1474, marécage; 2 ♂♂, II/gc/7, 14.IV.1951, H. DE SAEGER, 1537, prairie; 1 ♂, II/fb/18, 18.IV.1951, J. VERSCHUREN, 1506, cyperaie; 1 ♂, II/gd/4, 13.IV.1951, H. DE SAEGER, 1527, savane herbeuse; 3 ♂♂, 1 ♀, II/gc/7, 14.IV.1951, H. DE SAEGER, 1537, prairie; 1 ♂, II/fb/18, 18.IV.1951, J. VERSCHUREN, 1561, volant au-dessus de la Garamba; 1 ♂, II/gc/4, 1.VI.1951, H. DE SAEGER, 1853, savane herbeuse à ligneux rares; 2 ♂♂, II/fd/17, 25.VI.1951, H. DE SAEGER, 1970, galerie forestière; 1 ♂, II/fd/15, 7.VIII.1951, H. DE SAEGER, 2225, marécage à strate d'Herbacées paludicoles; 1 ♂, 1 ♀, II/gd/8, 14.VIII.1951, H. DE SAEGER, 2250, tête de source peu arborée; 3 ♂♂, II/gd/10, 25.VIII.1951, J. VERSCHUREN, 2316, cours marécageux de la Nambirima; 5 ♂♂, 9 ♀♀, II/fd/17, 5.IX.1951, H. DE SAEGER, 2379, galerie forestière dense; 1 ♂, 1 ♀, II/dd/8, 6.IX.1951, H. DE SAEGER, 2383, tête de source densément boisée; 1 ♂, II/ic/10, 7.IX.1951, H. DE SAEGER, 2391, rivière à cours dénudé; 1 ♂, 1 ♀, II id/17, 8.IX.1951, H. DE SAEGER, 2392, galerie forestière dégradée; 1 ♂, 2 ♀♀, II/gd/10, 10.IX.1951, H. DE SAEGER, 2397, végétation paludicole; 21 ♂♂, 5 ♀♀. II/fc/14, 14.IX.1951, H. DE SAEGER, 2408, végétation paludicole; 1 ♂, II/gd/7", 20.IX.1951, H. DE SAEGER, 2448, frange de Graminées ripicoles; 5 ♂♂, 2 ♀♀, II/id/10, 11.IX.1951, H. DE SAEGER, 2419, rivière à cours dénudé; 3 ♂♂, II/fd/17, 24.IX 1951, H. DE SAEGER, 2468, galerie forestière dense; 8 ♂♂, 3 ♀♀, II/fc/17, 25.IX.1951, H. DE SAEGER, 2471, galerie forestière claire; 1 ♂, 1 ♀, II/gc/9, 28.IX.1951, H. DE SAEGER, 2481, rivière marécageuse; 3 ♂♂, II/gd/4, 24.IX.1951, H. DE SAEGER, 2482, savane herbeuse; 3 ♂♂, II/fc/18, 22.X.1951, H. DE SAEGER, 2653, berges-alluvions sablonneuses récentes: 3 ♂♂, 5 ♀♀, II/fd/6, 28.XI.1951, H. DE SAEGER, 2817, savane herbeuse; 1 ♂, II/gd/8, 13.XII.1951, H. DE SAEGER, 2901, tête de source dénudée; 9 ♂♂, 13 ♀♀, II/hc/8, 12.XII.1951, H. DE SAEGER, 2902, tête de source à boisement dégradé; 1 ♂, II/fd/17, 14.XII.1951, H. DE SAEGER, 2910, galerie forestière très claire; 1 ♂, 3 ♀♀, II/fd/18, 21 XII.1951, H. DE SAEGER, 2939, berge, boisement relique de galerie; 1 ♂, I/o/3, 31.III.1950, H. DE SAEGER, 352, partie herbeuse en bordure de la galerie forestière humide; 1 ♂, II/fd/17, 19.I.1952, H. DE SAEGER, 3030, galerie forestière; 1 ♂, II/ke/8, 12.II.1952, H. DE SAEGER, 3105, tête de source à boisement dégradé; 2♂♂, Ndelele/K/117/11, 19.III.1952, H. DE SAEGER, 3196, marais partiellement asséché; 1 ♂, PFSK/17/d/10, 26.III.1952, H. DE SAEGER, 3224, rivière à cours dénudé; 2 ♂♂, 1 ♀, Nagero/17, 24.III.1952, J. VERSCHUREN, 3254, galerie de la Dungu; 4 ♂♂, 3 ♀♀, II gc/11, 29.IV.1952, H. DE SAEGER, 3399, ruisseau dans un vallon dénudé; 3 ♂♂, 3 ♀♀, II gc/8, 30.IV.1952, H. DE SAEGER, 3402, tête de source faiblement boisée; 1 ♂, II/fd/7", 5.V.1952, H. DE SAEGER. 3424, abords marécageux; 3 ♂♂, 12 ♀♀, II/fd/17, 7.V.1952, H. DE SAEGER, 3431, galerie forestière (massif); 4 ♂♂, 1 ♀, II/id/9, 16.VII.1952, H. DE SAEGER, 3805, galerie forestière; 1 ♂, II/id/14, 16.VII.1952, H. DE SAEGER, 3806, mare alimentée par les crues; 1 ♂, II/gc/17, 14.VIII.1952, H. DE SAEGER, 3940, savane herbeuse paludicole; 1 ♂, 1 ♀, Gangala-na-Bodio, 14.XI.1949, H. DE SAEGER, 1; 1 ♂, I/a/3, 13.III.1950, H. DE SAEGER, 304, taillis de galerie forestière; 1 ♀, Source de la Duru, 12.IV.1950. H. DE SAEGER, 409, lisière de galerie forestière; 1 ♀, Napokomweli, 18.X.1950, G. DEMOULIN, 895, « Ndiwili », bas-fond marécageux; 1 ♀, II/fd/17, 1.III.1951, H. DE SAEGER, 1305, galerie forestière; 1 ♀, II/hc/4, 20.IV.1951, J. VERSCHUREN, 1588, hautes graminées; 1 ♀, II/gd/4, 6.VII.1951, H. DE SAEGER 2055, savane herbeuse à ligneux rares; 1 ♀, II/gd/8, 12.VII.1951, H. DE SAEGER, 2061, tête de source faiblement arborée: 1 ♀, II/fc/3, 16 VII.1951, H. DE SAEGER, 2102, savane herbeuse à ligneux rares; 1 ♀, II/gd/4, 20.VII.1951, H. DE SAEGER, 2134, savane herbeuse à ligneux rares; 1 ♂, 1 ♀, II/gd/10, 1.IX.1951, H. DE SAEGER, 2345, rivière à cours

dénudé; 1 ♀, II/ge/13s, 3.IX.1951, H. De Saeger, 2361, herbacées paludicoles; 1 ♀, II/fd/17, 4.IX.1951, H. De Saeger, 2380, galerie forestière claire; 1 ♀, II/cc/9, 17.IX.1951, H. De Saeger, 2446, galerie forestière dégradée; 1 ♀, II/gd/10, 24.IX.1951, H. De Saeger, 2483, vallon marécageux; 3 ♀♀, II/fc/6, 10.X.1951, H. De Saeger, 2575, savane herbeuse; 2 ♀♀, II/gc/9, 20.X.1951, H. De Saeger, 2651, petite galerie forestière à boisement dégradé; 1 ♀, II/fc/6, 30.X.1951, H. De Saeger, 2699, savane de bas-fond marécageux; 1 ♀, PpK/60/d/8, 18.XII.1951, H. De Saeger, 2924, galerie forestière dégradée; 1 ♀, Mt-Embe, 21.IV.1952, H. De Saeger, 3381, savane arborescente; 2 ♀♀, II/fd/18, 6.V.1952, H. De Saeger, 3429, berges sablonneuses; 1 ♀, Nagero, 10.V.1952, H. De Saeger, 3500, galerie forestière de la Dungu; 3 ♀♀, II/id/9, 11.VII.1952, H. De Saeger, 3773, ruisseau à galerie très dégradée; 1 ♀, PpK/9/g/9, 10.IX.1952, H. De Saeger, 4044, galerie forestière très dégradée; 1 ♀, II/gc/17, 16.IX.1952, H. De Saeger, 4057, marais à *Jussiaea*.

Ceriagrion rubellocerinum Fraser.

Adults :

2 ♂♂, I/o/2, 13.IX.1950, G. Demoulin, 818, feuilles des arbres en galerie humide; 2 ♂♂, 3 ♀♀, II/fd/17, 14.V.1951, H. De Saeger, 1726, galerie forestière; 1 ♂, 1 ♀, II/fd/17, 5.IX.1951, H. De Saeger, 2379, galerie forestière dense; 1 ♂, 3 ♀♀, II/dd/8, 6.IX.1951, H. De Saeger, 2383, tête de source densément boisée; 1 ♂, II/cc/9, 17.IX.1951, H. De Saeger, 2446, galerie forestière dégradée; 1 ♂, II/fd/11, 18.IX.1951, H. De Saeger, 2447, expansion marécageuse; 3 ♂♂, II/fd/17, 24.IX.1951, H. De Saeger, 2468, galerie forestière claire; 2♂♂, II/fc/17, 25.IX.1951, H. De Saeger, 2471, galerie forestière claire; 3♂♂, 1♀, II/gc/9, 28.IX.1951, H. De Saeger, 2481, rivière marécageuse; 3 ♂♂, 1 ♀, II/hc/9, 28.IX.1951, H. De Saeger, 2491, rivière à cours boisé peu dense; 11 ♂♂, 5 ♀♀, II/je/8, 15.X.1951, H. De Saeger, 2600, tête de source à boisement dégradé; 53 ♂♂, 50 ♀♀, II/ke/9, 12 X.1951, H. De Saeger, 2602, galerie forestière très dégradée; 2 ♂♂, 1 ♀, II/fd/5, 25.X.1951, H. De Saeger, 2678, savane de vallée; 2 ♂♂, 1 ♀, II/PpK/52/d/9, 28.X.1951, H. De Saeger, 2679, galerie forestière; 2 ♂♂, II/fd/6, 29.X.1951, H. De Saeger, 2697, savane herbeuse de bas-fond marécageux; 1 ♂, II/fd/16, 28.XI.1951, H. De Saeger, 2814, massif forestier au bord de la Garamba; 2 ♂♂, 6 ♀♀, II/fd/6, 28.XI.1951, H. De Saeger, 2817, savane herbeuse; 4 ♂♂, 14 ♀♀, II/hc/8, 12.XII.1951, H. De Saeger, 2902, tête de source à boisement dégradé; 6 ♂♂, 3 ♀♀, II/gc/8, 30.IV.1952, H. De Saeger, 3402, tête de source faiblement boisée; 1 ♂, II/le/8, 3.V.1952, H. De Saeger, 3416, tête de source boisée; 2 ♂♂, 3 ♀♀, Aka, 14.V.1952, H. De Saeger, 3454, galerie forestière dense (type guinéen); 2 ♂♂, 2 ♀♀, PFSK/22/8, 10.VI.1952, H. De Saeger, 3608, tête de source à boisement clair; 1 ♂, II/gd/11, 4.IX.1952, H. De Saeger, 4036, vallon marécageux sans ombrage; 1 ♀, II/gc/4, 1.VI.1951, H. De Saeger, 1855, savane herbeuse à ligneux rares; 1 ♀, II/hc/8, 5.VI.1951, H. De Saeger, 1872, tête de source à boisement dégradé; 1 ♀, II/fc/6, 13.VI.1951, H. De Saeger, 1911, savane herbeuse; 1 ♀, II/cd/9, 22.VI.1951, H. De Saeger, 1968, galerie forestière dégradée; 1 ♀, II/fd/17, 13.VIII.1951, H. De Saeger, 2242, galerie forestière; 2 ♀♀, PpK/52/g, 16.X.1951, H. De Saeger, 2614, galerie forestière très dégradée; 2 ♀♀, II/fd/17, 14.XI.1951, H. De Saeger, 2761, galerie forestière; 1 ♀, II/fd/18, 6.V.1952, H. De Saeger, 3429, berges sablonneuses; 2 ♀♀, II/fd/17, 7.V.1952, H. De Saeger, 3431, galerie forestière (massif): 2 ♀♀, Aka, 15.V.1952, H. De Saeger, 3463, galerie forestière dense (type guinéen); 1 ♀, PFNK/7/9, 28.VII.1952, H. De Saeger, 3842; 1 ♀, II/le/8, 8.IX.1952, H. De Saeger, 4040, tête de source boisée; 1 ♀, II/gc/8, 9.IX.1952, H. De Saeger, 4042, tête de source à boisement très dégradé.

Ceriagrion suave Ris.

Adults :

1 ♂, 2 ♀♀, I/o/2, 23 III.1950, H. De Saeger, 324, rivière, eau courante; 2 ♂♂, I/a/2, 23.I.1950, H. De Saeger, 176, sur les herbes de la mare; 1 ♂, II/hc/11, 31.V.1951,

J. VERSCHUREN, 1845, végétation herbacée sur marais; 6 ♂♂, 1 ♀, II/fc/14, 14.IX.1951, H. DE SAEGER, 2408, végétation paludicole; 1 ♂, II/cc/9, 17.IX.1951, H. DE SAEGER, 2446, galerie forestière dégradée; 1 ♀, Napokomweli, 19.IX.1950, 831, G. DEMOULIN, sur les herbes d'un « Ndiwili »; 1 ♀, II/gg/8, 10.IV.1951, H. DE SAEGER, 1514, galerie forestière; 1 ♀, II/fb/18, 18.IV.1951, J. VERSCHUREN, 1561, volant au-dessus de la Garamba; 1 ♀, II/gd/8, 14.VIII.1951, H. DE SAEGER, 2250, tête de source peu arborée; 1 ♀, II/fd/6, 28 XI.1951, H. DE SAEGER, 2817, savane herbeuse; 1 ♀, Dedegwa, 17.V.1952, H. DE SAEGER, 3468, galerie forestière dense (type guinéen).

Ceriagrion whellani LONGFIELD.

Adults :

2 ♀♀, I/c/2″, 4.III.1950, H. DE SAEGER, 265, taillis de galerie forestière; 3 ♂♂, I/o/3, 31.III.1950, H. DE SAEGER, 352, partie herbeuse en bordure de galerie forestière humide; 5 ♂♂, 2 ♀♀, Km 17, 10.V.1950, H. DE SAEGER, 509, affleurement rocheux sous arbustes; 1 ♂, Napokomweli, 15.IX.1950, G. DEMOULIN, 823, feuilles des arbres autour du « Ndiwili »; 1 ♂, I/o/2, 30 X.1950, H. DE SAEGER, 915, lisière de galerie forestière; 1 ♀, II/fb/16, 6.III.1951, J. VERSCHUREN, 1344, sous écorce d'*Irvingia*; 2 ♂♂, 1 ♀, II/gc/11, 31.III.1951, H. DE SAEGER, 1474, marécage; 1 ♂, 1 ♀, II/gf/10, 6.IV.1951, H. DE SAEGER, 1506, Cyperaie; 1 ♂, 2 ♀♀, II/gg/8, 10.IV.1951, H. DE SAEGER, 1514, galerie forestière; 4 ♂♂, II/gc/7, 14.IV.1951, H. DE SAEGER, 1537, prairie; 1 ♂, II/fb/18, 18.IV.1951, J. VERSCHUREN, 1561, volant au-dessus de la Garamba; 1 ♂, II/gc/11, 4.V.1951, H. DE SAEGER, 1645, végétation paludicole; 1 ♂, II/gd/11, 26.V.1951, H. DE SAEGER, 1806, fond marécageux (Nambirima); 2 ♂♂, II/ge/13s, 12.VII.1951, H. DE SAEGER, 2059, mare aux abords marécageux; 3 ♂♂, II/gd/10, 25.VIII.1951, J. VERSCHUREN, 2316, cours marécageux de la Nambirima; 1 ♀, II/gd/10, 1.IX.1951, H. DE SAEGER, 2345, rivière à cours dénudé; 1 ♀, II/fc/6, 10.X.1951, H. DE SAEGER, 2575, savane herbeuse; 1 ♀, II/ke/9, 12.X.1951, H. DE SAEGER, 2602, galerie forestière très dégradée; 5 ♂♂, 1 ♀, PpK/52/g, 16.X.1951, H. DE SAEGER, 2614, galerie très dégradée; 1 ♂, II/id/9, 16.VII.1952, H. DE SAEGER, 3805, galerie forestière; 2 ♂♂, II/gc/17, 16.IX.1952, H. DE SAEGER, 4057, marais à *Jussiaea*; 1 ♀, II/fd/17, 4.IX.1951, H. DE SAEGER, 2380, galerie forestière claire.

Larvae :

1 (no number); 2, I/a/2, 26.XII.1949, n° 143, G. DEMOULIN, boue au fond d'une mare; 1, I/a/2, 2.I.1950, n° 146, G. DEMOULIN, mare; 2, I/c/2‴, 6.I.1950, n° 150, G. DEMOULIN, mare et marécage; 4, I/a/2, 16.I.1950, n° 159, G. DEMOULIN, mare; 1, I/b/2″, 25.I.1950, n° 232, G. DEMOULIN, rivière Aka; 1, I/a/2, 30.I.1950, n° 240, G. DEMOULIN, crique temporaire et plantes riveraines; 3, I/c/2‴, 3.II.1950, n° 245, G. DEMOULIN, marécage sur affleurement granitique; 3, I/a/3, 13.II.1950, n° 272, G. DEMOULIN; 1, I/c/4, 15.III.1950, n° 354, G. DEMOULIN, ruisseau à eau courante. en aval d'une galerie forestière; 6, I/a/2, 22.V.1950, n° 539, G. DEMOULIN, mare temporaire; 1, I/b/2″, 24.V.1950, n° 550, G. DEMOULIN, mares permanentes; 18, I/a/2, 12.VI.1950, n° 592, G. DEMOULIN, crique temporaire; 6, I/b/3″, 16.VI.1950, n° 608, G. DEMOULIN, mare permanente; 1, I/b/3″, 16.VI.1950, n° 614, G. DEMOULIN, mare sous *Irvingia*; 2, Akam, 23.VI.1950, n° 631, G. DEMOULIN, rivière; 29, I/a/2, 26.VI.1950, n° 637, G. DEMOULIN, crique temporaire; 1, Nalugwambala, 6.VII.1950, n° 674, G. DEMOULIN, ruisseau sous galerie; 1, I/a/2-I/a/3, 10.VII.1950, n° 682, G. DEMOULIN, crique temporaire en crue; 2, I/a/2, 17.VII.1950, n° 702, G. DEMOULIN, mare temporaire; 3, Km 17, 20.VII.1950, n° 711, G. DEMOULIN, tête de source sous galerie; 1, I/a/3 amont, 24.VII.1950, n° 716, G. DEMOULIN, bras mort en communication avec Aka; 2, I/o/2, 7.VIII.1950, n° 746, G. DEMOULIN, rivière sur barres granitiques; 6, I/a/1, 14.VIII.1950, n° 755, G. DEMOULIN, « Ndiwili » inondé; 1, I/o/2, 21.VIII.1950, n° 765, G. DEMOULIN, ruisseau sous galerie; 1, I/o/2, 4.IX.1950, n° 799, G. DEMOULIN, rivière sur barres granitiques; 1, Napokomweli, 6.IX.1950, n° 805, G. DEMOULIN,

« Ndiwili »; 2, I/o/2, 13.IX.1950, n° 816, G. DEMOULIN, rivière sous galerie; 1, Napokomweli, 15.IX.1950, n° 821, G. DEMOULIN, « Ndiwili »; 2, I/b/2, 27.IX.1950, n° 847, G. DEMOULIN, « Ndiwili »; 2, I/o/2, 5.X.1950, n° 867, G. DEMOULIN, rivière sous galerie; 2, I/o/2, 12.X.1950, n° 886, G. DEMOULIN, rivière affluent de I/o/2, cours inférieur; 2, Napokomweli, 17.X.1950, n° 892, G. DEMOULIN, « Ndiwili », bas-fond marécageux; 4, II/gc/11, 14.VI.1951, n° 1935, P. SCHOEMAKER; 1, II/ge/13s, 11.VII.1951, n° 2058, H. DE SAEGER, mare aux abords marécageux; 2, II/gc/11, 11.VII.1951, n° 2114, H. DE SAEGER, expansion marécageuse; 2, II/gd/14s, 29.V.1952, H. DE SAEGER, n° 1886, mare temporaire.

Pseudagrion kersteni (GERSTAECKER).

Adults :

1 ♂, I/o/1, 16.X.1950, G. DEMOULIN, 891, savane de pente; 1 ♂, I/o/2, 26.X.1950, H. DE SAEGER, 904, rivière marécageuse; 1 ♂, II/gd/11, 26.V.1951, H. DE SAEGER, 1806, fond marécageux (Nambirima); 3 ♂♂, 2 ♀♀, II/gd/10, 1.IX.1951, H. DE SAEGER, 2345, rivière à cours dénudé: 2 ♂♂, 1 ♀, II/fd/17, 8.IX.1951, H. DE SAEGER, 2392, galerie forestière dégradée; 3 ♂♂, 2 ♀♀, II/fd/11, 18.IX.1951, H. DE SAEGER, 2447, expansion marécageuse; 2 ♂♂, I/o/2, 23.III.1950, H. DE SAEGER, 324, rivière, eau courante; 1 ♀, II/dg/10, 10.IX.1951, H. DE SAEGER, 2397, végétatoin paludicole.

Pseudagrion coeruleiceps LONGFIELD.

Adults :

1 ♂, 1 ♀, II/dd/8, 6.IX.1951, H. DE SAEGER, 2383, tête de source densément boisée; 1 ♂, 1 ♀, I/o/2, 23.III.1950, H. DE SAEGER, 324, rivière, eau courante; 1 ♂, I/a/3-b/3, 24.III.1950, H. DE SAEGER, 327, petite galerie forestière sèche; 1 ♂, I/o/2, 21.IX.1950, G. DEMOULIN, 838, feuilles des arbres en galerie humide.

Pseudagrion melanicterum SELYS.

Adults :

2 ♂♂, I/o/2, 13.IX.1950, G. DEMOULIN, 818, feuilles des arbres en galerie humide; 2 ♂♂, 2 ♀♀, I/o/2, 21.IX.1950, G. DEMOULIN, 838, feuilles des arbres en galerie humide; 2 ♂♂, I/o/1, 5.X.1950, G. DEMOULIN, 869, savane arbustive de pente; 1 ♂, 1 ♀, I/o/2, 26.X.1950, H. DE SAEGER, 904, rivière marécageuse; 2 ♂♂, 3 ♀♀, I/o/2, 29.X.1950, H. DE SAEGER, 913, galerie humide; 1 ♂, 1 ♀, I/o/1, 9.XI.1950, H. DE SAEGER, 944, savane arborescente; 1 ♂, II/gd/11, 26.V.1951, H. DE SAEGER, 1806, fond marécageux (Nambirima); 1 ♂, II/gd/11, 28.VII.1951, H. DE SAEGER, 2160, expansion marécageuse; 15 ♂♂, 14 ♀♀, II/dd/8, 6.IX.1951, H. DE SAEGER, 2383, tête de source densément boisée; 2 ♂♂, 2 ♀♀, II/gc/8, 30.IV.1952, H. DE SAEGER, 3402, tête de source faiblement boisée; 1 ♂, 2 ♀♀, Aka, 14.V.1952, H. DE SAEGER, 3454, galerie forestière dense (type guinéen); 2 ♂♂, 3 ♀♀, Aka, 15.V.1952, H. DE SAEGER, 3463, galerie forestière dense (type guinéen); 1 ♂, II/id/9, 11.VII.1952, H. DE SAEGER, 3773, ruisseau à galerie très dégradée; 1 ♂, 2 ♀♀, II/id/9, 16.VII.1952, H. DE SAEGER, 3805, galerie forestière; 1 ♂, I/o/2, 14.VII.1950, G. DEMOULIN, 700, galerie humide; 1 ♂, 1 ♀, PFNK/7/9, 28.VII.1952, H. DE SAEGER, 3842; 1 ♀, I/o/1, 16.IX.1950, G. DEMOULIN, 827, savane arbustive autour du camp; 3 ♀♀, I/o/2, 23.X.1950, H. DE SAEGER, 899, franche galerie forestière humide; 1 ♀, I/o/2, 6.XI.1950, H. DE SAEGER, 936, galerie forestière; 2 ♀♀, II/fd/11, 18.IX.1951, H. DE SAEGER, 2447, expansion marécageuse; 3 ♀♀, Dedegwa, 17.V.1952, H. DE SAEGER, 3468, galerie forestière dense (type guinéen); 1 ♀, PFSK/22/8, 10.VI.1952, H. DE SAEGER, 3608, tête de source à boisement clair; 1 ♀, Mabanga, 28.VII.1952, H. DE SAEGER, 3827, plateau herbeux sur dalle latéritique.

Pseudagrion kibalense LONGFIELD.

Adults :

2 ♂♂, Aka, 14.V.1952, H. DE SAEGER, 3454, galerie forestière dense (type guinéen); 9 ♂♂, 1 ♀, Aka, 15.V.1952, H. DE SAEGER, 3463, galerie forestière dense (type guinéen); 1 ♂, Aka, 19.V.1952, H. DE SAEGER, 3482; 1 ♀, II/fd/6, 29.XI.1951, H. DE SAEGER, 2697, savane herbeuse de bas-fond marécageux.

Pseudagrion glaucescens SELYS.

Adults :

1 ♂, I/b/3, 14.IV.1950, H. DE SAEGER, 412, lisière galerie forestière sèche; 1 ♂, 2 ♀♀, II/gd/11, 12.III.1951, H. DE SAEGER, 1361, prairie à Cypéracées; 1 ♂, 1 ♀, II/fc/5, 27.III.1951, H. DE SAEGER, 1458, savane herbeuse brûlée; 1 ♂, II/fc/18, 28.III.1951, H. DE SAEGER, 1461, anse sablonneuse de la Garamba; 1 ♂, II/fd/17, 8.IV.1951, H. DE SAEGER, 1518, galerie forestière; 2 ♂♂, II/gd/4, 13.IV.1951, H. DE SAEGER, 1527, savane herbeuse; 8 ♂♂, 6 ♀♀, II/fb/18, 18.IV.1951, J. VERSCHUREN, 1561, volant au-dessus de la Garamba; 1 ♂, 1 ♀, II/fd/17, 14.V.1951, H. DE SAEGER, 1726, galerie forestière; 1 ♂, 1 ♀, II/fd/15, 24.V.1951, H. DE SAEGER, 1798, plaine marécageuse; 2 ♂♂, Nagero/17, 24.III.1952, J. VERSCHUREN, 3254, galerie de la Dungu; 2 ♂♂, II/gd/11, 10.IV.1952, H. DE SAEGER, 3314, petit vallon marécageux à découvert; 1 ♂, 3 ♀♀, II/gc/8, 30.IV.1952, H. DE SAEGER, 3402, tête de source faiblement boisée; 1 ♂, II/fd/17, 7.V.1952, H. DE SAEGER, 3431, galerie forestière (massif); 1 ♂, Dedegwa, 17.V.1952, H. DE SAEGER, 3468, galerie forestière dense (type guinéen); 1 ♀, II/gf/10, 6.IV.1951, H. DE SAEGER, 1506, Cyperaie; 1 ♀, II/hc/4, 20.IV.1951, J. VERSCHUREN, 1588, hautes Graminées; 1 ♀, II/fd/18, 6.V.1952, H. DE SAEGER, 3429, berges sablonneuses.

Pseudagrion glaucescens f. zambeziensis PINHEY.

Adults :

1 ♂, II/hc/8, 5.VI.1951, H. DE SAEGER, 1872, tête de source à boisement dégradé; 1 ♂, 1 ♀, II/fc/14, 14.IX.1951, H. DE SAEGER, 2408, végétation paludicole; 1 ♀, II/gd/4, 13.IV.1951, H. DE SAEGER, 1527, savane herbeuse.

Pseudagrion sjöstedti sjöstedti FÖRSTER.

Adults :

1 ♂, II/fb/18, 18.IV.1951, J. VERSCHUREN, 1561, volant au-dessus de la Garamba; 1 ♂, II/fd/17, 14.V.1951, H. DE SAEGER, 1726, galerie forestière; 1 ♂, II/gc/6, 21.VI.1951, H. DE SAEGER, 1952, savane herbeuse, fond marécageux; 1 ♂, 1 ♀, II/fe/73, 23.VIII.1951, H. DE SAEGER, 2291, bas-fond à herbacées paludicoles; 1 ♂, Nagero/18, 11.IV.1952, H. DE SAEGER, 3320, berges de la Dungu; 1 ♂, II/gc/8, 30.IV.1952, H. DE SAEGER, 3402, tête de source faiblement boisée; 6 ♂♂, 7 ♀♀, Nagero, 10.V.1952, H. DE SAEGER, 3500, galerie forestière de la Dungu; 2 ♀♀, Gangala-na-Bodio, 14.XI.1949, H. DE SAEGER, 1; 1 ♀, I/o/2, 29.X.1950, H. DE SAEGER, 913, galerie humide; 1 ♀, II/fc/5, 27.III.1951, H. DE SAEGER, 1458, savane herbeuse brûlée; 1 ♀, II/fc/18, 28.III.1951, H. DE SAEGER, 1461, anse sablonneuse de la Garamba; 2 ♀♀, II/fd/17, 14.V.1951, H. DE SAEGER, 1726, galerie forestière; 1 ♀, II/gd/11, 12.VI.1951, H. DE SAEGER, 1903, végétation herbacée; 3 ♀♀, II/fd/17, 5.IX.1951, H. DE SAEGER, 2379, galerie forestière dense; 1 ♀, II/ke/9, 12.X.1951, H. DE SAEGER, 2602, galerie forestière très dégradée; 1 ♀, PpK/14/2, 1.V.1952, H. DE SAEGER, 3501, savane boisée à Crossopteryx; 1 ♀, II/id/9, 11.VII.1952, H. DE SAEGER, 3773, ruisseau à galerie très dégradée; 1 ♀ (no label).

Pseudagrion whellani PINHEY.

Adults :

1 ♂, I/o/2, 22.III.1950, G. DEMOULIN, 359, rapides et anses calmes de la rivière; 2 ♂♂, 3 ♀♀, I/b/2″, 29.III.1950, G. DEMOULIN, 364, mare permanente ensoleillée; 2 ♂♂, Nagero/18, 11.IV.1952, H. DE SAEGER, 3320, berges de la Dungu; 2 ♂♂, Ndelele/R, 22.IX.1952, H. DE SAEGER, 4068, savane herbeuse à *Loudetia simplex*.

Pseudagrion spp.

Larvae :

2 (no number); 1, Bagbele, n° 27, H. DE SAEGER; 1, I/b/2, 21.XII.1949, n° 140, G. DEMOULIN, ruisseau, surface et boue du fond, feuilles mortes immergées; 1, I/c/2, 23.XII.1949, n° 142, G. DEMOULIN, ruisseau; 1, I/c/2‴, 6.I.1950, n° 150, G. DEMOULIN, mare et marécage; ?1, I/c/2″, 3.III.1950, n° 295, G. DEMOULIN, mare permanente; 3, I/b/2″, 29.III.1950, n° 364, G. DEMOULIN, mare permanente ensoleillée; 1, I/a/2, 22.V.1950, n° 539, G. DEMOULIN, mare temporaire; 1, I/b/2″, 24.V.1950, n° 550, G. DEMOULIN, mares permanentes; ?1, I/b/2, 14.VI.1950, n° 603, G. DEMOULIN, eau courante et mares permanentes; 1, I/b/3″, 16.VI.1950, n° 608, G. DEMOULIN, galerie sèche; 1, Akam, 23.VI.1950, n° 631, G. DEMOULIN, rivière; 2, I/b/2″, 28.VI.1950, n° 646, G. DEMOULIN, mares permanentes; 1, I/b/1, 28.VI.1950, n° 648, G. DEMOULIN, savane arborescente; 1, I/o/2, 30.VI.1950, n° 654, G. DEMOULIN, rivière, anses calmes; 1, I/o/2, 1.VII.1950, n° 660, G. DEMOULIN, rivière sur barres granitiques; 2, I/o/2, 1.VII.1950, n° 661, G. DEMOULIN, anses calmes; 4, Nalugwambala, 6.VII.1950, n° 674, G. DEMOULIN, ruisseau sous galerie; 1, I/o/2, 14.VII.1950, n° 699, G. DEMOULIN, ruisseau sous galerie; 19, I/a/2, 17.VII.1950, n° 702, G. DEMOULIN, mare temporaire; 1, I/o/2, 19.VII.1950, n° 708, G. DEMOULIN, ruisseau sous galerie; 1, I/o/2, 21.VII.1950, n° 714, G. DEMOULIN, rivière sur barres granitiques; 1, I/a/3 amont, 24.VII.1950, n° 716, G. DEMOULIN, bras mort en communication avec Aka; 2, I/o/2, 26.VII.1950, n° 723, G. DEMOULIN, rivière sur barres granitiques; 2, Akam, 28.VII.1950, n° 728, G. DEMOULIN, Mogbwamu; 5, I/o/2, 7.VIII.1950, n° 746, G. DEMOULIN, rivière sur barres granitiques; 1, I/a/1, 14.VIII.1950, n° 755, G. DEMOULIN, « Ndiwili » inondé; 1, Napokomweli, 24.VIII.1950, n° 773, G. DEMOULIN, « Ndiwili »; 2, I/o/2, 30.VIII.1950, n° 791, G. DEMOULIN, ruisseau sous galerie; 2, I/b/1, 6.IX.1950, n° 803, G. DEMOULIN, « Ndiwili »; 1, Napokomweli, 6.IX.1950, n° 805, G. DEMOULIN, « Ndiwili »; 2, I/o/2, 8.IX.1950, n° 810, G. DEMOULIN, ruisseau sous galerie; 10, I/o/2, 11.IX.1950, n° 811, G. DEMOULIN, rivière sur barres granitiques; 1, Napokomweli, 15.IX.1950, n° 821, G. DEMOULIN, « Ndiwili »; 7, Nalugwambala, 25.IX.1950, n° 839, G. DEMOULIN, rivière sous galerie; 1, Km 17, 25.IX.1950, n° 842, G. DEMOULIN, tête de source; 4, I/b/2, 27.IX.1950, n° 847, G. DEMOULIN, « Ndiwili »; 3, I/o/2, 29.IX.1950, n° 854, G. DEMOULIN, rivière sous galerie; 2, I/o/2, 6.X.1950, n° 872, G. DEMOULIN, rivière sur barres granitiques; 2, I/a/1, 9.X.1950, n° 876, G. DEMOULIN, « Ndiwili »; 1, I/o/2, 12.X.1950, n° 886, G. DEMOULIN, rivière affluent de I/o/2, cours inférieur; 1, Napokomweli, 13.X.1950, n° 889, G. DEMOULIN, « Ndiwili », bas-fond marécageux; 4 (one of them very large), I/o/2, 30.X.1950, n° 922, H. DE SAEGER, rivière à eau courante; 1, II/gc/13ª, 21.VI.1951, n° 1953, H. DE SAEGER, mare permanente; ?1, II/fd/12, 10.X.1951, inv. 1289.

Aciagrion africanum MARTIN.

Adults :

1 ♂, Napokomweli, 26.VIII.1950, G. DEMOULIN, 789, sur la strate herbacée d'un « Ndiwili »; 2 ♂♂, Napokomweli, 14.IX.1950, G. DEMOULIN, 823, feuilles des arbres autour

du « Ndiwili »; 1 ♂, Napokomweli, 19.IX.1950, G. DEMOULIN, 831, sur les herbes d'un « Ndiwili »; 1 ♀, II/fd/17, 5.IX.1951, H. DE SAEGER, 2379, galerie forestière dense; 1 ♂, II/fc/14, 14.IX.1951, H. DE SAEGER, 2408, végétation paludicole; 1 ♂, II/id/9, 11.VII.1952, H. DE SAEGER, 3773, ruisseau à galerie très dégradée.

Aciagrion attenuatum FRASER.

Adults :

1 ♀, Km 17, 10.V.1950, H. DE SAEGER, 509, affleurement rocheux sous arbustes; 1 ♀, II/gc/11, 31.III.1951, H. DE SAEGER, 1474, marécage: 1 ♀, II fc/3, 16.VII.1951, H. DE SAEGER, 2102, savane herbeuse à ligneux rares; 1 ♂, II/fd/17, 9.VII.1951, H. DE SAEGER, 2056, strate herbeuse; 1 ♀, II/gc/8, 30.IV.1952, H. DE SAEGER, 3402, tête de source faiblement boisée.

Ischnura senegalensis (RAMBUR).

Adults :

1 ♂, I/a/2, 2.I.1950, no. 146, G. DEMOULIN, a pool; 1 ♀, I/c/1, 24.II.1950, no. 217, G. DEMOULIN, tree savannah with young burnt shoots.

Larvae :

2, I/a/2, 26.XII.1949, n° 143, G. DEMOULIN, boue au fond d'une mare; 1, I/c/4, 15.III.1950, n° 354, G. DEMOULIN, ruisseau à eau courante, en aval d'une galerie forestière; 7, I/a/2, 8.V.1950, n° 494, G. DEMOULIN, crique temporaire, sur les plantes immergées; 2, I/a/2, 22.V.1950, n° 539, G. DEMOULIN, mare temporaire; 32, I/a/2, 12.VI.1950, n° 592, G. DEMOULIN, crique temporaire; 1, I b/3″, 16.VI.1950, n° 614, G. DEMOULIN, mare sous *Irvingia*; 2, Akam, 23.VI.1950, n° 631, G. DEMOULIN, rivière; 27, I/a/2, 26.VI.1950, n° 637, G. DEMOULIN, crique temporaire; 3, I/a/2-I/a/3, 10.VII.1950, n° 682, G. DEMOULIN, crique temporaire en crue; 7, I/a/2, 17.VII.1950, n° 702, G. DEMOULIN, mare temporaire; 1, I/o/2, 19.VII.1950, n° 708, G. DEMOULIN, ruisseau sous galerie; 1, I/o/2, 26.VII.1950, n° 723, G. DEMOULIN, rivière sur barges granitiques; 18, I/a/1, 14.VIII 1950, n° 755, G. DEMOULIN, « Ndiwili » inondé; 15, I, b/3′, 18.VIII.1950, n° 759, G. DEMOULIN, rivière à courant rapide; 8, I/b/1, 6.IX.1950, n° 803, G. DEMOULIN, « Ndiwili »; 13, Napokomweli, 6.IX.1950, n° 805, G. DEMOULIN, « Ndiwili »; 75, Napokomweli, 15.IX.1950, n° 821, G. DEMOULIN, « Ndiwili »; 7, I/a/1, 18.IX.1950, n° 828, G. DEMOULIN, « Ndiwili »; 4, Napokomweli, 19.IX.1950, n° 830, G. DEMOULIN, « Ndiwili »; 8, Napokomweli, 22.IX.1950, n° 834, G. DEMOULIN, « Ndiwili »; ?80, I/b/2, 27.IX.1950, n° 847, G. DEMOULIN, « Ndiwili »; 43, Napokomweli, 4.X.1950, n° 870, G. DEMOULIN, « Ndiwili »; 4, I/a/1, 9.X.1950, n° 876, G. DEMOULIN, « Ndiwili »; 13, Napokomweli, 13.X 1950, n° 889, G. DEMOULIN, « Ndiwili », bas-fond marécageux; 48, Napokomweli, 17.X.1950, n° 892, G. DEMOULIN, « Ndiwili », bas-fond marécageux; 38, Napokomweli, 18.X.1950, n° 893, G. DEMOULIN, « Ndiwili », bas-fond marécageux; 1, II/gc/11, 18.IV.1951, n° 1678, P. SCHOEMAKER; 1, II/gc/11, 14.VI.1951, P. SCHOEMAKER, n° 1935; 16, II/gc/11, 11.VII.1951, n° 2114, H. DE SAEGER, expansion marécageuse; 2, II/gd/14ª, 18.VII.1951, n° 2203, P. SCHOEMAKER, mare temporaire; 1, II/gc/14, 26.VI.1952, n° 1878, H. DE SAEGER; 2, II/fc/14, 14.VIII.1952, inv. 2030/2.

Enallagma subtile RIS.

Adults :

1 ♂, I/b/3, 21.XII.1949, H. DE SAEGER, 63, partie herbeuse immergée en période de crue; 1 ♂, I/b/3, 28.XII.1949, H. DE SAEGER, 75, galerie forestière (taillis); 1 ♀, I/a/1,

13.II.1950, G. DEMOULIN, 205, savane brûlée, sur nouvelles pousses; 1 ♂, II/gg/8, 10.IV.1951, H. DE SAEGER, 1514, galerie forestière; 7 ♂♂, 1 ♀, II/gd/4, 13.IV.1951, H. DE SAEGER, 1527, savane herbeuse; 3 ♂♂, 1 ♀, II/gd/4, 25.IV.1951, J. VERSCHUREN, 1618, graminées, parcelles 7 et 8; 1 ♂, 2 ♀♀, II/gd/11, 26.IV.1951, H. DE SAEGER, 1632, prairie paludicole; 1 ♂, II/gc/13s, 19.V.1951, H. DE SAEGER, 1751, mare permanente de savane; 1 ♂, II/gc/6, 8.VI.1951, H. DE SAEGER, 1877, savane à Graminées paludicoles; 1 ♀, I/b/2, 28.XII.1949, H. DE SAEGER, 74, galerie forestière sur sol feuilles mortes; 1 ♀, Km 17, 10.V.1950, H. DE SAEGER, 509, affleurement rocheux sous arbustes; 1 ♀, II/hd/4, 23.III.1951, H. DE SAEGER, 1444, savane herbeuse brûlée; 1 ♀, II/gc/11, 31.III.1951, H. DE SAEGER, 1474, marécage; 1 ♀, II/gd/4, 8.V.1951, H. DE SAEGER, 1672, savane herbeuse à ligneux rares; 1 ♀, II/gd/4, 7.V.1951, H. DE SAEGER, 1684, savane herbeuse, strate herbacée; 1 ♀, II/gd/8, 9.V.1951, H. DE SAEGER, 1700, tête de source arborée; 2 ♀♀, II/gd/11, 23.VIII.1951, H. DE SAEGER, 2134, expansion marécageuse; 1 ♀, II/fe/6, 16.I.1952, J. VERSCHUREN, 3012, savane herbeuse; 2 ♂♂, 2 ♀♀, II/fc/14, 14.IX.1951, H. DE SAEGER, 2408, végétation paludicole; 3 ♂♂, 3 ♀♀, II/hd/6, 30.V.1952, H. DE SAEGER, 3567, savane herbeuse de fond de vallée.

Larvae :

1, I/c/2″, 27.I.1950, n° 237, G. DEMOULIN, ruisseau sous galerie forestière; 3, I/a/2, 22.V.1950, n° 539, G. DEMOULIN. mare temporaire; 17, I/a/2, 12.VI.1950, n° 592, G. DEMOULIN, crique temporaire; 1, I/o/2, 19.VI.1950, n° 616, G. DEMOULIN, ruisseau sous galerie; 23, I/a/2, 26.VI.1950, n° 637, G. DEMOULIN, crique temporaire; 2, I/b/3′, 9.VIII.1950, n° 748, G. DEMOULIN, rivière Mogbwamu; 1, I/a/1, 14.VIII.1950, n° 755, G. DEMOULIN, « Ndiwili » inondé; 2, I/b/3′, 18.VIII 1950, n° 759, G. DEMOULIN, rivière à courant rapide; 1, Napokomweli, 18.VIII.1950, n° 762, G. DEMOULIN, « Ndiwili »; 2, Napokomweli, 6.IX.1950, n° 805, G. DEMOULIN, « Ndiwili »; 1, Napokomweli, 15.IX.1950, n° 821, G. DEMOULIN, « Ndiwili »; 1, Napokomweli, 22.IX.1950, n° 834, G. DEMOULIN, « Ndiwili »; 1, I/b/2, 27.IX 1950, n° 847, G. DEMOULIN, « Ndiwili »; 2, I/a/1, 9.X.1950, n° 876, G. DEMOULIN, « Ndiwili »; 5, Napokomweli, 13.X.1950, n° 889, G. DEMOULIN, « Ndiwili », bas-fond marécageux; 1, Napokomweli, 18.X.1950, n° 893, G. DEMOULIN, « Ndiwili », bas-fond marécageux; 1, II/gc/11, 14.VI.1951, n° 1935, P. SCHOEMAKER; 1, II/gd/14[s], 1.IX.1951, H. DE SAEGER, 1099.

Agriocnemis exilis SELYS.

Adults :

2 ♀♀ (no label); 3 ♀♀, I/b/2, 28.XII.1949, H. DE SAEGER, 74, galerie forestière sur sol feuilles mortes; 3 ♀♀, I/b/3, 28.XII.1949, H. DE SAEGER, 75, galerie forestière (taillis); 1 ♀, L/b/3, 8.II.1950, H. DE SAEGER, 204, galerie forestière; 2 ♂♂, 2 ♀♀, I/a/1, 13.II.1950, G. DEMOULIN, 205, savane brûlée sur nouvelles pousses; 1 ♀, I/c/1, 24.II.1950, G. DEMOULIN, 217, savane arborescente, jeunes pousses endroits brûlés; 7 ♀♀, I/a/M, 17.III.1950, H. DE SAEGER, 314, savane; partie herbeuse en bordure d'une mare stagnante; 1 ♀, I/o/2, 22.III.1950, G. DEMOULIN, 359, rapides et anses calmes de la rivière; 1 ♀, I/b/2″, 29.III.1950, G. DEMOULIN, 364, mare permanente ensoleillée; 1 ♂, 1 ♀, I/a/4, 31.III.1950, G. DEMOULIN, 365, marais et eau d'infiltration sous galerie forestière; 1 ♀, I/a/3, 17.VII.1950, G. DEMOULIN, 707, feuilles des arbres de galerie sèche; 1 ♂, I/b/3″, 16.VI.1950, G. DEMOULIN, 610, savane arborescente; 2 ♂♂, 1 ♀, I/b/2, 27.IX.1950, G. DEMOULIN, 848, « Ndiwili », strate herbacée; 5 ♂♂, 12 ♀♀, II/fc/5, 31.I.1951, H. DE SAEGER, 1167, savane herbeuse de vallée; 1 ♀, II/gd/11, 19.II.1951, H. DE SAEGER, 1276, végétation paludicole; 1 ♀, II/gf/10, 6.IV.1951, H. DE SAEGER, 1506, Cyperaie; 1 ♂, 4 ♀♀, II/gc/11, 4.V.1951, H. DE SAEGER, 1645, végétation paludicole; 2 ♂♂, 2 ♀♀, II/gd/11, 5.V.1951, H. DE SAEGER, 1663, végétation paludicole; 3 ♂♂, 1 ♀, II/gd/8, 12.VII.1951, H. DE SAEGER, 2061, tête

de source faiblement arborée; 1 ♀, II/gd/4, 25.VIII.1951, J. VERSCHUREN, 2315, savane à graminées; 1 ♂, 1 ♀, II/ge/13s, 3.IX.1951, H. DE SAEGER, 2361, herbacées paludicoles; 2 ♂♂, 4 ♀♀, II/gd/7", 20.IX.1951, H. DE SAEGER, 2448, frange de Graminées ripicoles; 1 ♀, II/fd/15, 22.IX.1951, H. DE SAEGER, 2464, marécage à végétation dense; 3 ♂♂, 1 ♀, II/gc/11, 5.X.1951, H. DE SAEGER, 2521, expansion marécageuse; 1 ♀, II/fc/6, 30.X.1951, H. DE SAEGER, 2699, savane de bas-fond marécageux; 1 ♀, II/gd/4, 23.XI.1951, H. DE SAEGER, 2780, savane herbeuse; 1 ♀, II/fc/14, 10.XII.1951, H. DE SAEGER, 2881, mare temporaire en cours de dessiccation; 1 ♂, 1 ♀, II/gc/10, 11.XII.1951, H. DE SAEGER, 2882, ruisseau sans couvert; 1 ♀, II/gc/15, 17.XII.1951, H. DE SAEGER, 2917, partie herbeuse dans une plaine marécageuse; 1 ♀, II/ic/10, 7.IX.1951, H. DE SAEGER, 2391, rivière à cours dénudé; 2 ♀♀, Nagero/18, 11.IV.1952, H. DE SAEGER, 3320, berges de la Dungu; 1 ♂, 2 ♀♀, II/hd/6, 30.V.1952, H. DE SAEGER, 3567, savane herbeuse de fond de vallée; 1 ♂, II/fd/12, 5.VIII.1952, H. DE SAEGER, 3884, chenal dépendant de la Garamba; 1 ♂, 1 ♀, II/gc/17, 14.VIII.1952, H. DE SAEGER, 3940, savane herbeuse paludicole; 2 ♂♂, 7 ♀♀, II/gc/17, 16.IX.1952, H. DE SAEGER, 4057, marais à *Jussiaea*; 1 ♂, II/e, 4.I.1951, J. VERSCHUREN, 1040, savane basse; 2 ♂♂, II/gd/8, 14.VIII.1951, H. DE SAEGER, 2250, tête de source peu arborée; 1 ♂, II/id/10, 11.IX.1951, H. DE SAEGER, 2419, rivière à cours dénudé; 2 ♂♂, II/gc/15, 17.XII.1951, H. DE SAEGER, 2916, partie marécageuse récemment asséchée; 2 ♂♂, II/gd/6, 19.VIII.1952, H. DE SAEGER, 3952, savane herbeuse.

Agriocnemis forcipata LE ROI.

Adults :

1 ♀, I/a/2, 2.I.1950, G. DEMOULIN, 146, mare; 1 ♂, 3 ♀♀, I/a/2, 23.I.1950, H. DE SAEGER, 176, sur les herbes de la mare; 1 ♀, I/o/3, 31.III.1950, H. DE SAEGER, 352, partie herbeuse en bordure de galerie forestière humide; 1 ♀, I/a/4, 31.III.1950, G. DEMOULIN, 365, marais et eau d'infiltration sous galerie forestière; 1 ♂, II/gd/11, 12.VI.1951, H. DE SAEGER, 1903, végétation herbacée; 2 ♂♂, 7 ♀♀, II/gd/8, 12.VII.1951, H. DE SAEGER, 2061, tête de source faiblement arborée; 2 ♂♂, 2 ♀♀, II/gd/8, 14.VIII.1951, H. DE SAEGER, 2250, tête de source peu arborée; 4 ♂♂, 4 ♀♀, II/lf/9, 21.VIII.1951, H. DE SAEGER, 2299, galerie à boisement très dégradé; 1 ♂, 3 ♀♀, II/ge/13s, 3.IX.1951, H. DE SAEGER, 2361, herbacées paludicoles; 4 ♂♂, 3 ♀♀, PpK/52/g, 16.X.1951, H. DE SAEGER, 2614, galerie forestière très dégradée; 1 ♀, I/c/2", 30.XII.1949, G. DEMOULIN, 145, ruisseau; 3 ♀♀, I/b/2, 27.IX.1950, G. DEMOULIN, 848, « Ndiwili » strate herbacée; 1 ♀, II/gd/11, 19.II.1951, H. DE SAEGER, 1276, végétation paludicole; 1 ♀, II/hc/10, 28.II.1951, H. DE SAEGER, 1299, végétation ripicole; 1 ♀, II/gc/11, 4.V.1951, H. DE SAEGER, 1645, végétation paludicole; 1 ♀, II/fd/15, 24.V.1951, H. DE SAEGER, 1798. plaine marécageuse; 1 ♀, II/gd/4, 24.VII.1951, H. DE SAEGER, 2133; 2 ♀♀, II/fd/17, 6.VIII.1951, H. DE SAEGER, 2224, lisière de galerie forestière; 1 ♀, II/gd/11, 23.VIII.1951, H. DE SAEGER, 2314, expansion marécageuse; 3 ♀♀, II/gd/4, 25.VIII.1951, J. VERSCHUREN, 2315, savane à Graminées; 1 ♀, II/fd/14, 5.XII.1951, H. DE SAEGER, 2846, herbacées paludicoles; 8 ♀♀, Ndelele/K/117/11, 19.III.1952, H. DE SAEGER, 3196, marais partiellement asséché; 1 ♀, II/hd/6, 30.V.1952, H. DE SAEGER, 3507, savane herbeuse de fond de vallée; 1 ♂, II/gd/10, 10.IX.1951, H. DE SAEGER, 2397, végétation paludicole; 1 ♂, II/fc/14, 14.IX.1951, H. DE SAEGER. 2408, végétation paludicole.

Agriocnemis forcipata LE ROI f. **victoria** FRASER.

Adults :

1 ♂, I/a/2, 23.I.1950, H. DE SAEGER, 176, sur les herbes de la mare; 1 ♂, Napokomweli, 15.IX.1950, G. DEMOULIN, 823, feuilles des arbres autour du « Ndiwili »; 1 ♂, I/b/2, 27.IX.1950, G. DEMOULIN, 848, « Ndiwili » strate herbacée; 6 ♂♂, 6 ♀♀, II/d, 24.I.1951,

J. VERSCHUREN, 1136, herbes courtes: 6 ♂♂, 5 ♀♀, II/gd/11, 19.II.1951, H. DE SAEGER, 1276, végétation paludicole; 37 ♂♂, 21 ♀♀, II/gc/11, 4.V.1951, H. DE SAEGER, 1645, végétation paludicole; 3 ♂♂, 2 ♀♀, II/gd/11, 5.V.1951, H. DE SAEGER, 1663, végétation paludicole; 1 ♂, 3 ♀♀, II/gd/11, 12.VI.1951, H. DE SAEGER, 1903, végétation herbacée; 1 ♂, 4 ♀♀, II/gc/6, 21.VI.1951, H. DE SAEGER, 1952, savane herbeuse, fond marécageux; 2 ♂♂, 4 ♀♀, II/gd/10, 27.VI.1951, J. VERSCHUREN, 1988, dans terrain marécageux; 6 ♂♂, 6 ♀♀, II/ge/13s, 12.VII.1951, H. DE SAEGER, 2059, mare aux abords marécageux; 14 ♂♂, 18 ♀♀, II/gd/8, 12.VII.1951, H. DE SAEGER, 2061, tête de source faiblement arborée; 13 ♂♂, 16 ♀♀, II/gd/8, 14.VIII.1951, H. DE SAEGER, 2250, tête de source peu arborée; 1 ♂, 1 ♀, II/nf/2, 13.VIII.1951, H. DE SAEGER, 2263, savane arborescente; 3 ♂♂, 2 ♀♀, II/hc/8, 17.VIII.1951, J. VERSCHUREN, 2265, tête de source à Mitragynes; 2 ♂♂, 4 ♀♀, II/lf/9, 21.VIII.1951, H. DE SAEGER, 2299, galerie à boisement très dégradée; 12 ♂♂, 9 ♀♀, II/gd/11, 23.VIII.1951, H. DE SAEGER, 2314, expansion marécageuse; 10♂♂, 12♀♀, II/gd/4, 25.VIII.1951, J. VERSCHUREN, 2315, savane à Graminées; 4 ♂♂, 2 ♀♀, II/gd/10, 25.VIII.1951, J. VERSCHUREN, 2316, cours marécageux de la Nambirima; 4 ♂♂, 6 ♀♀, II/ic/10, 7.IX.1951, H. DE SAEGER, 2391, rivière à cours dénudé; 1 ♂, 3 ♀♀, PpK/52/g, 16.X.1951, H. DE SAEGER, 2614, galerie forestière très dégradée; 2 ♂♂, Mabanga/9″′, 19.II.1952, H. DE SAEGER, 3134, rivière marécageuse à cours dénudé; 1 ♂, 1 ♀, Ndelele/2, 21.II.1952, H. DE SAEGER, 3141, savane arborescente; 1 ♂, Ndelele/K/117/11, 19.III.1952, H. DE SAEGER, 3196, marais partiellement asséché; 2 ♂♂, 2 ♀♀, II/gd/11, 24.VI.1952, H. DE SAEGER, 3701, vallon marécageux; 2 ♂♂, 2 ♀♀, II/gc/17, 16.IX.1952, H. DE SAEGER, 4057, marais à *Jussiaea*; 4 ♂♂, 2 ♀♀ (no label); 1 ♂, II/fc/5, 31.I.1951, H. DE SAEGER, 1167, savane herbeuse de vallée; 1 ♀, I/a/M, 17.III.1950, H. DE SAEGER, 314, savane; partie herbeuse en bordure d'une mare stagnante; 1 ♀, I/c/2″′, 23.VIII.1950, G. DEMOULIN, 768, savane herbeuse autour du marais; 1 ♀, Napokomweli, 26.VIII.1950, G. DEMOULIN, 789, sur la strate herbacée d'un « Ndiwili »; 1 ♀, Napokomweli, 13.X.1950, G. DEMOULIN, 888, « Ndiwili », strate herbacée; 1 ♂, 1 ♀, II/gf/10, 6.IV.1951, H. DE SAEGER, 1506, Cyperaie; 3 ♀♀, II/me/15, 9.II.1951, J. VERSCHUREN, 1240, graminées courtes; 1 ♀, II/hc/9, 10, 20 IV.1951, J. VERSCHUREN, 1593, volant au-dessus de la galerie, très dégradée; 1 ♀, II/gd/11, 23.VI.1951, H. DE SAEGER, 1969, expansion marécageuse; 1 ♂, 2 ♀♀, II/fd/17, 6.VIII.1951, H. DE SAEGER, 2224, lisière de galerie forestière; 1 ♀, II/gd/11, 18.I.1952, H. DE SAEGER, 3024, petit marécage découvert; 1 ♀, II/gd/4, 22.VIII.1952, H. DE SAEGER, 3964, savane herbeuse à *Loudetia* sur plateau; 1 ♂, II/hd/6, 30.V.1952, H. DE SAEGER, 3567, savane herbeuse de fond de vallée; 1 ♀, Napokomweli, 18.X.1950, G. DEMOULIN, 895, « Ndiwili », bas-fond marécageux; 1 ♀, I/o/1, 4.IX.1950, G. DEMOULIN, 800, savane herbeuse; 4 ♀♀, II/gc/11, 31.III.1951, H. DE SAEGER, 1474, marécage.

Agriocnemis maclachlani SELYS.

Adults :

1 ♂, I/o/2, 13.IX.1950, G. DEMOULIN, 818, feuilles des arbres en galerie humide; 4 ♀♀, I/o/2, 21.IX.1950, G. DEMOULIN, 838, feuilles des arbres en galerie humide; 1 ♀, I/o/1, 5.X 1950, G. DEMOULIN, 869, savane arbustive de pente; 1 ♀, II/gf/10, 6.IV.1951, H. DE SAEGER, 1506, Cyperaie; 1 ♀, II/gd/11, 26.V.1951, H. DE SAEGER, 1806, fond marécageux (Nambirima); 3 ♂♂, 2 ♀♀, II/gd/8, 12.VII.1951, H. DE SAEGER, 2061, tête de source faiblement arborée; 1 ♀, II/lf/9, 21.VIII.1951, H. DE SAEGER, 2299, galerie à boisement très dégradé; 5 ♂♂, 4 ♀♀, II/gd/11, 24.VIII.1951, H. DE SAEGER, 2314, expansion marécageuse; 1 ♂, 3 ♀♀, II/gd/10, 25.VIII.1951, J. VERSCHUREN, 2316, cours marécageux de la Nambirima; 1 ♂, 1 ♀, II/gd/10, 1.IX.1951, H. DE SAEGER, 2345, rivière à cours dénudé; 2 ♀♀, II/ic/10, 7.IX.1951, H. DE SAEGER, 2391, rivière à cours dénudé; 1 ♀, II/hd/6, 30.V.1952, H. DE SAEGER, 3567, savane herbeuse de fond de vallée; 2 ♀♀, II/gd/11, 24.VI.1952, H. DE SAEGER, 3701, vallon marécageux; 9 ♂♂, 2 ♀♀, PFNK/7/9, 28.VII.1952, H. DE SAEGER, 3842; 1 ♂, 1 ♀, II/gd/11, 4.IX.1952, H. DE SAEGER, 4036, vallon marécageux

sans ombrage; 1 ♂, 1 ♀, II/gc/17, 16.IX.1952, H. De Saeger, 4057, marais à *Jussiaea*; 1 ♂, II/gd/11, 26.V.1951, H. De Saeger, 1808, fond marécageux (Nambirima); 1 ♂, II/gd/10, 27.VI.1951, J. Verschuren, 1988, dans terrain marécageux; 1 ♂, 1 ♀, II/dd/8, 6.IX.1951, H. De Saeger, 2383, tête de source densément boisée; 1 ♂, II/fc/17, 25.IX.1951, H. De Saeger, 2471, galerie forestière claire; 1 ♂, II/id/9, 16.VII.1952, H. De Saeger, 3805, galerie forestière; 1 ♂, II/fd/12, 5.VIII.1952, H. De Saeger, 3884, chenal dépendant de la Garamba; 1 ♂, PFSK/22/8, 10.VI.1952, H. De Saeger, 3608, tête de source à boisement clair; 1 ♀, II/gd/11, 12.VI.1951, H. De Saeger, 1903, végétation herbacée.

Family COENAGRIIDAE

Larvae incogn. :

3 (without number); 1, I/a/2, 13.XII.1949, n° 131, G. Demoulin, mare; 2, I/c/2, 23.XII.1949, n° 142, G. Demoulin, ruisseau; 6, I/a/2, 26.XII.1949, n° 143, G. Demoulin, boue au fond d'une mare; 2, I/c/2‴, 30.XII.1949, n° 145, G. Demoulin, ruisseau; 3, I/c/2‴, 6.I.1950, n° 150, G. Demoulin, mare et marécage; 8, I/a/2, 16.I.1950, n° 159, G. Demoulin, mare; 2, I/c/2′, 20.I.1950, n° 164, G. Demoulin, ruisseau et abords; 2, I/b/2″, 25.I.1950, n° 232, G. Demoulin, mare permanente et ses abords marécageux; 2, I/b/3′, 8.II.1950, n° 249, G. Demoulin, rivière Mogbwamu; 2, I/o/2, 22.III.1950, n° 359, G. Demoulin, rapides et anses calmes de la rivière; 21, I/b/2″, 29.III.1950, n° 364, G. Demoulin, mare permanente ensoleillée; 1, I/a/4, 31.III.1950, n° 367, G. Demoulin, galerie forestière; 1, Akam, 21.IV.1950, n° 461, G. Demoulin, rapides et anses calmes des rivières Aka et Mogbwamu; 2, I/a/2, 8.V.1950, n° 494, G. Demoulin, crique temporaire sur les plantes immergées; 20, I/a/2, 22.V.1950, n° 539, G. Demoulin, mare temporaire; 1, I/a/M, 7.VI.1950, n° 584, G. Demoulin, mare sub-permanente semi-ombragée; 90, I/a/2, 12.VI.1950, n° 592, G. Demoulin, crique temporaire; 5, I/b/3″, 16.VI.1950, n° 608, G. Demoulin, mare permanente; 2, I/o/2, 19.VI.1950, n° 616, G. Demoulin, ruisseau sous galerie; 7, Akam, 23.VI.1950, n° 631, G. Demoulin, rivière; 43, I/a/2, 26.VI.1950, n° 637, G. Demoulin, crique temporaire; 4, I/b/2″, 28.VI.1950, n° 646, G. Demoulin, mares permanentes; 1, I/b/1, 28.VI.1950, n° 648, G. Demoulin, savane arborescente; 1, I/o/2, 14.VII.1950, n° 699, G. Demoulin, ruisseau sous galerie; 2, I/a/2, 17.VII.1950, n° 702, G. Demoulin, mare temporaire; 2, 21.VII.1950, n° 714, G. Demoulin, rivière sur barres granitiques; 10, I/a/3 amont, 24.VII.1950, n° 716, G. Demoulin, bras mort en communication avec l'Aka; 1, I/o/2, 28.VII.1950, n° 732, G. Demoulin, rivière sur barres granitiques; 10, I/o/2, 7.VIII.1950, n° 746, G. Demoulin, rivière sur barres granitiques; 3, I/o/2, 9.VIII.1950, n° 750, G. Demoulin, ruisseau sous galerie; 2, I/o/2, 10.VIII.1950, n° 752, G. Demoulin, ruisseau sous galerie; 4, I/a/1, 14.VIII.1950, n° 755, G. Demoulin, « Ndiwili » inondé; 1, I/b/3′, 18.VIII.1950, n° 759, G. Demoulin, rivière à courant rapide; 2, Napokomweli, 31.VIII.1950, n° 796, G. Demoulin, « Ndiwili »; 5, I/o/2, 4.IX.1950, n° 799, G. Demoulin, rivière sur barres granitiques; 5, I/b/1, 6.IX.1950, n° 803, G. Demoulin, « Ndiwili »; 3, Napokomweli, 6.IX.1950, n° 805, G. Demoulin, « Ndiwili »; 1, I/o/2, 11.IX.1950, n° 811, G. Demoulin, rivière sur barres granitiques; 15, I/a/1, 18.IX.1950, n° 823, G. Demoulin, « Ndiwili »; 10, I/b/2, 27.IX.1950, n° 847, G. Demoulin, « Ndiwili »; 1, I/o/3 aval, 29.IX.1950, n° 852, G. Demoulin, « Ndiwili » isolé; 2, I/o/2, 5.X.1950, n° 867, G. Demoulin, rivière sous galerie; 3, Napokomweli, 4.X.1950, n° 870, G. Demoulin, « Ndiwili »; 23, I/a/1, 9.X.1950, n° 876, G. Demoulin, « Ndiwili »; 3, I/o/2, 12.X.1950, n° 886, G. Demoulin, rivière affluent de I/o/2, cours inférieur; 1, I/o/2, 11.X.1950, n° 857, G. Demoulin, rivière sur barres granitiques; 83, Napokomweli, 13.X.1950, n° 889, G. Demoulin, « Ndiwili », bas-fond marécageux; 2, I/o/2, 16.X.1950, n° 890, G. Demoulin, rivière sous galerie; 27, Napo-

komweli, 17.X.1950, n° 892, G. DEMOULIN, « Ndiwili », bas-fond marécageux; 19, Napo-komweli, 18.X.1950, n° 893, G. DEMOULIN, « Ndiwili », bas-fond marécageux; 4, II/fc/12, 28.IV.1951, n° 1677, P. SCHOEMAKER; 4, II/ge/13[s], 11.VII.1951, n° 2058, H. DE SAEGER, mare aux abords marécageux; 42, II/gc/11, 11.VII.1951, n° 2114, H. DE SAEGER, expansion marécageuse; 1, II/gd/14[s], 18.VII.1951, n° 2203, P. SCHOEMAKER, mare temporaire; 1, Aka, 14.V.1952, n° 3464, H. DE SAEGER, ruisseau d'eau claire; 1, II/gd/14[s], 1.IX.1951, n° 1099, H. DE SAEGER; 1, II/gd/14, 26.VI.1952, n° 1878, H. DE SAEGER; 1, II/id/8, 16.VII.1952, inv. n° 1932; 3, II/gd/8, 28.VIII.1952, n° 2046.

Phaon iridipennis (BURMEISTER).

Adults :

1 ♀, Nagero/4, 30.VII.1954, 66, C. NEBAY; 1 ♀, Nagero/1, 30.VI.1954, 54, C. NEBAY; 1 ♂, I/o/2, 14.IV.1950, H. DE SAEGER, 458, savane arborescente; 1 ♂, I/a/3, 8.V.1950, G. DEMOULIN, 496, berge de l'Aka; 1 ♀, Akam, 3.V.1950, G. DEMOULIN, 473, galerie de la Mogbwamu, sur les feuilles; 2 ♂♂, 1 ♀, I/a/3, 8.V.1950, H. DE SAEGER, 497, bord de la galerie sèche, taillis et strate herbeuse; 2 ♂♂, Kpaika, 20.VI.1950, G. DEMOULIN, 666, sur les herbes et plantes basses de la rive; 4 ♂♂, Akam, 21.IV et 1.V 1950, G. DEMOULIN, 859, galerie sèche; 1 ♂, II/gg/8, 10.IV.1951, H. DE SAEGER, 1514, galerie forestière; 2 ♀♀, II/fd/17, 5.IX.1951, H. DE SAEGER, 2379, galerie forestière dense; 1 ♀, II/dd/8, 6.IX.1951, H. DE SAEGER, 2383, tête de source densément boisée; 1 ♂, II/gc/9, 28.IX 1951, H. DE SAEGER, 2481, rivière marécageuse; 1 ♂, II/id/8, 31.X.1951, H. DE SAEGER, 2708, tête de source à boisement dégradé; 2 ♂♂, II/fd/6, 28.XI.1951, H. DE SAEGER. 2817, savane herbeuse; 1 ♂, Ndelele/R, 22 IX.1952, H. DE SAEGER, 4067, éboulis rocheux; 1 ♂, II/fe/73, 23.VIII.1951, H. DE SAEGER, 2291, bas-fond à herbacées paludicoles.

Larvae :

1, I/o/2, 7.VIII.1950, n° 746, G. DEMOULIN, rivière sur barres granitiques; 2, I/o/2, 11.IX.1950, n° 811, G. DEMOULIN, rivière sur barres granitiques; 1, I/o/2, 12.X.1950, n° 886, G. DEMOULIN, rivière affluent de I/o/2, cours inférieur.

Chlorocypha aphrodite (LE ROI).

Adults :

1 ♂, I/o/2, 13.IX.1950, G. DEMOULIN, 818, feuilles des arbres en galerie humide; 2 ♀♀, I/o/2, 21.IX.1950, G. DEMOULIN, 838, feuilles des arbres en galerie humide; 1 ♂, 2 ♀♀, I/o/1, 5.X.1950, G. DEMOULIN, 869, savane arbustive de pente; 4 ♀♀, I/o/1, 16.X.1950, G. DEMOULIN, 891, savane de pente; 5 ♂♂, 6 ♀♀, I/o/2, 26.X.1950, H. DE SAEGER, 904, rivière marécageuse; 2 ♂♂, 2 ♀♀, I/o/2, 29.X.1950, H. DE SAEGER, 913, galerie humide; 1 ♂, I/o/1, 9.XI.1950, H. DE SAEGER, 944, savane arborescente; 1 ♀, II/id/8, 17.XI.1951, H. DE SAEGER, 2765, tête de source; 1 ♂, 1 ♀, Aka, 14.V.1952, H. DE SAEGER, 3454, galerie forestière dense (type guinéen); 1 ♀ (no label); 1 ♂, I/o/2, 23.III.1950, H. DE SAEGER, 324, rivière, eau courante.

Chlorocypha rubida (SELYS).

Adults :

1 ♀, I/a/3-b/3, 24.III.1950, H. DE SAEGER, 327, petite galerie forestière sèche; 1 ♀, I/o/2, 14.IV.1950, H. DE SAEGER, 458, savane arborescente; 1 ♂, I/o/2, 26.X.1950, H. DE SAEGER, 904, rivière marécageuse; 1 ♂, I/o/2, 29.X.1950, H. DE SAEGER, 913, galerie

humide; 1 ♀, II/fd/6, 23.VIII.1951, H. De Saeger, 2290, savane herbeuse de fond; 2 ♀♀, II/fe/73, 23.VIII.1951, H. De Saeger, 2291, bas-fond à herbacées paludicoles; 1 ♂, Dedegwa, 21.V.1952, H. De Saeger, 3499, galerie forestière dense (type guinéen); 1 ♀, Bagbele, 16.XII.1949, H. De Saeger, 55; 1 ♀, I/c/1, 24.II.1950, G. Demoulin, 217, savane arborescente, jeunes pousses endroits brûlés; 1 ♀, I/o/2, 23.III.1950, H. De Saeger, 324, rivière, eau courante; 1 ♀, I/b/3, 14.IV.1950, H. De Saeger, 412, lisière galerie forestière sèche; 1 ♀, I/a/1, 1.V.1950, G. Demoulin, 469, savane arborescente, sur les graminées.

Chlorocypha spp.

Larvae :

2, I/b/3′, 8.II.1950, G. Demoulin, n° 249, rivière Mogbwamu; 28, I/b/3′, 15.II.1950, G. Demoulin, n° 253, rivière; 1, I/a/3, 20.II.1950, G. Demoulin, n° 257, rivière, sous les branches mortes et les pierres; 3, I/b/2″, 1.III.1950, G. Demoulin, n° 294, mare permanente; 6, I/b/3″, 8.III.1950, G. Demoulin, n° 298, rivière Mogbwamu; 1, I/o 2, 25.VII.1950, G. Demoulin, n° 721, ruisseau sous galerie; 2, I/o/2, 7.VIII.1950, G. Demoulin, n° 746, rivière sur barres granitiques; 1, Nalugwambala, 25.IX.1950, G. Demoulin, n° 839, rivière sous galerie; 2, I/o/1, IX.1950, G. Demoulin, n° 857; 1, ed/17, 6.II.1951, P. Schoemaker, n° 1235; 1, Aka, 14.V.1952, H. De Saeger, n° 3464, ruisseau d'eau claire.

Chlorocypha wittei Fraser.

Adults :

1 ♂, Akam, 21.IV et 1.V.1950, G. Demoulin, 859, galerie sèche; 5 ♂♂, II/fe/73, 23.VIII 1951, H. De Saeger, 2291, bas-fond à herbacées paludicoles.

Zygoptera larvae indet :

1, I/a/2, 19.XII.1949, n° 136, G. Demoulin, mare; faune de la boue du fond; 1, I/a/3, 13.II.1950, n° 272, G. Demoulin; 2, I/o/2, 23.III.1950, n° 324, H. De Saeger, rivière, eau courante; 5, I/b/2″, 24.V.1950, n° 550, G. Demoulin, mares permanentes; 5, I/o 2, 30.VI.1950, n° 654, G. Demoulin, rivière, eaux calmes; 3, Nalugwambala, 6.VII.1950, n° 674, G. Demoulin, ruisseau sous galerie; 32, I/a/2, 17.VII.1950, n° 702, G. Demoulin, mare temporaire; 7, I/o/2, 26.VII.1950, n° 723, G. Demoulin, rivière sur barres granitiques; 2, I/o/2, 25.VIII.1950, n° 788, G. Demoulin, ruisseau sous galerie; 59, Napokomweli, 15.IX.1950, n° 821, G. Demoulin, « Ndiwili »; 12, Napokomweli, 19.IX.1950, n° 830, G. Demoulin, « Ndiwili »; 1, I/o/2, 8.XI.1950, n° 942, P. Schoemaker, galerie forestière humide; 2, II/gc/11, 14.II.1951, n° 1681, P. Schoemaker; 7, II/gc/13, 21.VI.1951, n° 1953, H. De Saeger, mare permanente; 1, II/gc/13, 20.VII.1951, n° 2184, P. Schoemaker; 6, II/gd/11, 22.X.1951, n° 2655, H. De Saeger, fond marécageux; 3, II/gd/11, 25.X.1951, n° 2696, H. De Saeger, expansion marécageuse découverte.

2, I/z/3″, 17.V.1950, no. 749, H. De Saeger; 1, II/gc/13, 4.V.1951, inv. no. 762; 1, II/ge/13, 14.IX.1951, no. 1132, H. De Saeger; 1, II/fd/14s, 7.X.1951, no. 1272, H. De Saeger; 3, II/fd/12, 10.X.1951, no. 1290, H. De Saeger; 2, II/fd/14, 11.X.1951, no. 1299, H. De Saeger; 2, II/gd 14, 15.X.1951, no. 1329, H. De Saeger; 2, II/ge/13, 15.X.1951, no. 1332, H. De Saeger; 2, II/gc/8, 16.X.1951, no. 1333, H. De Saeger; 1, PpK/10/d/10, 4.III.1952, inv. no. 1672; 2, Ndelele, K117/135, 19.III.1952, no. 1685; 1, II/gd/11, 24.VI.1952, inv. no. 1874; 3, II/fc/12, 25 VI.1952, inv. no. 1876/1; 1, II/gc/14, 26.VI.1952, no. 1878, H. De Saeger; 1, II/gc/14, 26 VI.1952, inv. no. 1878/1; 6, II/gd/14s, 29.V.1952, no. 1886, H. De Saeger; 1, II/fd/11, 3.VI 1952, inv. no. 1888/2; 2, Utukuru, 10, 26.VII.1952, inv. no. 1945; 1, II/gd/9, 7.VIII.1952, inv. no. 1980; 2, II/gd/19s, 22.VIII.1952, no. 2036, H. De Saeger; 2, II/gd/10, 23.VIII.1952, inv. no. 2038; 3, II/gd/14s, 2.IX.1952, no. 2055, H. De Saeger.

Ictinogomphus COWLEY.

Larvae :

1, I/b/3′, 15.II.1950, n° 253, G. DEMOULIN, rivière; 2, I/a/3, 20.II.1950, n° 257, G. DEMOULIN, rivière, sous les branches mortes et les pierres; 3, I/a/3, 24.III.1950, n° 360, G. DEMOULIN, rapides et anses calmes de la rivière Aka; 1, I/o/2, 30.VI.1950, n° 654, G. DEMOULIN, rivière, anses calmes; 1, I/o/2, 7.VIII.1950, n° 746, G. DEMOULIN, rivière sur barres granitiques.

Lestinogomphus MARTIN.

Larvae :

1, I/b/2, 21.XII.1949, n° 140, G. DEMOULIN, ruisseau, surface et boue du fond, feuilles mortes immergées; 1, I/c/4, 13.I.1950, n° 158, G. DEMOULIN, ruisseau sans galerie; 1, I/b/3′, 8.II.1950, n° 249, G. DEMOULIN, rivière Mogbwamu; 3, I/b/3′, 15.II.1950, n° 253, G. DEMOULIN, rivière; 4, I/b/2″, 1.III.1950, n° 294, G. DEMOULIN, mare permanente; 1, I/c/4, 15.III.1950, n° 354, G. DEMOULIN, ruisseau à eau courante, en aval d'une galerie forestière; 2, I/a/3, 24.III.1950, n° 360, G. DEMOULIN, rapides et anses calmes de la rivière Aka; 1, I/o/2, 30.VI.1950, n° 653, G. DEMOULIN, rivière, rapides sur roches; 1, I/o/2, 25.VII.1950, n° 721, G. DEMOULIN, ruisseau sous galerie; 1, I/o/2, 12.X.1950, n° 886, G. DEMOULIN, rivière, affluent de I/o/2, cours inférieur; 1, I/o/2, 11.X.1950, n° 887, G. DEMOULIN, rivière sur barres granitiques.

Neurogomphus KARSCH.

Larvae :

1, I/b/2, 21.XII.1949, n° 140, G. DEMOULIN, ruisseau, surface et boue de fond, feuilles mortes immergées; ?1, I/b/3′, 15.II.1950, n° 253, G. DEMOULIN, rivière; 1, II/e, 2.I.1951, n° 1218, P. SCHOEMAKER, mare communiquant avec la rivière Garamba.

Phyllogomphus SELYS.

Larva :

1, I/a/3, 20.II.1950, n° 213, H. DE SAEGER, savane arborescente.

Notogomphus HAGEN.

Larva :

1, I/c/4, 13.I.1950, n° 158, G. DEMOULIN, ruisseau à découvert.

Paragomphus hageni (SELYS).

Adult :

1 ♂, Nagero/17, 24.III.1952, J. VERSCHUREN, 3254, galerie de la Dungu.

Paragomphus xanthus spec. nov.

Adults :

Holotype ♂, II/hc/8, 5.IV.1951, H. DE SAEGER, 1501, tête de source; allotype ♀, II/ge/9, 12.III.1951, H. DE SAEGER, 1360, bords de rivière; paratype ♀, II/ge/11, 12.III.1951, H. DE SAEGER, 1361, prairie à Cyperacées.

Paragomphus spp.

Larvae :

1, I/b/3′, 8.II.1950, n° 249, G. DEMOULIN, rivière Mogbwamu; 2, I/b/3′, 15.II.1950, n° 253, G. DEMOULIN, rivière; 1, I/a/3, 20.II.1950, n° 257, G. DEMOULIN, rivière, sous les branches mortes et les pierres; 2, II/fd/14, 10.II.1951, n° 1248, P. SCHOEMAKER; 1, Aka, 14.V.1952, n° 3464, H. DE SAEGER, ruisseau d'eau claire.

Anax chloromelas RIS.

Adult :

1 ♀, Nagero/1, 30.VI.1954, C. NEBAY, 53.

Anax imperator LEACH.

Adult :

1 ♀, Km 17, 10.V.1950, no. 509, H. DE SAEGER, rocky outcrops below shrubs.

Anax spp.

Larvae :

3, I/a/2, 26.XII.1949, n° 143, G. DEMOULIN, boue au fond d'une mare; 5, I/a/2, 2.I.1950, n° 146, G. DEMOULIN, mare; 6, I/a/2, 16.I.1950, n° 159, G. DEMOULIN, mare; 7, I/a/2, 30.I.1950, n° 240, G. DEMOULIN, crique temporaire et plantes riveraines; 1, I/o/2, 22.III.1950, n° 359, G. DEMOULIN, rapides et anses calmes de la rivière; 4, I/a/2, 8.V.1950, n° 494, G. DEMOULIN, crique temporaire, sur les plantes immergées; 62, I/a/2, 22.V.1950, n° 539, G. DEMOULIN, mare temporaire; 17, I/a/2, 12.VI.1950, n° 592, G. DEMOULIN, crique temporaire; 2, I/b/3″, 16.VI.1950, n° 608, G. DEMOULIN, mare permanente; 7, Akam, 23.VI.1950, n° 631, G. DEMOULIN, rivière; 31, I/a/2, 26.VI.1950, n° 637, G. DEMOULIN, crique temporaire; 7, I/a/2-I/a/3, 10.VII.1950, n° 682, G. DEMOULIN, crique temporaire en crue; 35, I/a/2, 17.VII.1950, n° 702, G. DEMOULIN, mare temporaire; 2, I/a/3 amont, 24.VII.1950, n° 716, G. DEMOULIN, bras mort en communication avec l'Aka; 1, I/o/2, 26.VII.1950, n° 723, G. DEMOULIN, rivière sur barres granitiques; 12, I/b/1, 28.VII.1950, n° 735, J. MARTIN, bas-fond inondé « Ndiwili »; 5, I/o/1, 10.VIII.1950, n° 753, G. DEMOULIN, savane arbustive en deça de I/o/2; 8, I/a/1, 14.VIII.1950, n° 755, G. DEMOULIN, « Ndiwili » inondé; 3, I/b 3′, 18.VIII.1950, n° 759, G. DEMOULIN, rivière à courant rapide; 6, Napokomweli, 18.VIII.1950, n° 762, G. DEMOULIN, « Ndiwili »; 12, Napokomweli, 30.VIII.1950, n° 795, G. DEMOULIN, « Ndiwili »; 60, Napokomweli, 31.VIII.1950, n° 796, G. DEMOULIN, « Ndiwili »; 14, I/b/1, 1.IX.1950, n° 798, G. DEMOULIN, « Ndiwili »; 9, I/b/1, 6.IX.1950, n° 803, G. DEMOULIN, « Ndiwili »; 61, Napokomweli, 6.IX.1950, n° 805, G. DEMOULIN, « Ndiwili »; 106, Napokomweli, 14.IX.1950, n° 820, G. DEMOULIN, « Ndiwili »; 118, Napokomweli, 15.IX.1950, n° 821, G. DEMOULIN, « Ndiwili »; 7, I/a/1, 18.IX.1950, n° 828, G. DEMOULIN, « Ndiwili »; 41, Napokomweli, 19.IX.1950, n° 830, G. DEMOULIN, « Ndiwili »; 17, I/b/2, 27.IX.1950, n° 847, G. DEMOULIN, « Ndiwili »; 19, Napokomweli, 4.X.1950, n° 870, G. DEMOULIN, « Ndiwili »; 1, I/a/1, 9.X.1950, n° 876, G. DEMOULIN, « Ndiwili »; 53, Napokomweli, 13.X.1950, n° 889, G. DEMOULIN, « Ndiwili », bas-fond marécageux; 19, Napokomweli, 17.X.1950, n° 892, G. DEMOULIN, « Ndiwili », bas-fond marécageux; 16, Napokomweli, 18.X.1950, n° 893, G. DEMOULIN, « Ndiwili », bas-fond marécageux; 1, II/gc/13[3], 3.IX.1951, n° 2359, H. DE SAEGER, mare permanente; 4, II/gd/14, 29.V.1952, H. DE SAEGER, n° 3568, mare temporaire; 2, II/gd/14[3], 29.V.1952, n° 1836, H. DE SAEGER, plancton.

Hemianax ephippiger (BURMEISTER).

Larvae :

5, I/a/2, 22.V.1950, n° 539, G. DEMOULIN, mare temporaire; 1, I/a/2, 26.VI.1950, n° 637, G. DEMOULIN, crique temporaire; 5, I/a/2, 17.VII.1950, n° 702, G. DEMOULIN, mare temporaire; 2, I/b/1, 28.VII.1950, n° 735, J. MARTIN, bas-fond inondé « Ndiwili »; 1, I/o/2, 11.VIII.1950, n° 754, G. DEMOULIN, rivière en crue, sur barres granitiques; 7, I/a/1, 14.VIII.1950, n° 755, G. DEMOULIN, « Ndiwili » inondé; 1, Napokomweli, 18.VIII.1950, n° 762, G. DEMOULIN, « Ndiwili »; 2, Napokomweli, 30.VIII.1950, n° 795, G. DEMOULIN, « Ndiwili »; 13, Napokomweli, 31.VIII.1950, n° 796, G. DEMOULIN, « Ndiwili »; 1, I/b/1, 6.IX.1950, n° 803, G. DEMOULIN, « Ndiwili »; 25, Napokomweli, 6.IX.1950, n° 805, G. DEMOULIN, « Ndiwili »; 30, Napokomweli, 14.IX.1950, n° 820, G. DEMOULIN, « Ndiwili »; 27, Napokomweli, 15.IX.1950, n° 821, G. DEMOULIN, « Ndiwili »; 9, Napokomweli, 19.IX.1950, n° 830, G. DEMOULIN, « Ndiwili »; 1, I/b/2, 27.IX.1950, n° 847, G. DEMOULIN, « Ndiwili »; 1, Napokomweli, 4.X.1950, n° 870, G. DEMOULIN, « Ndiwili »; 3, II/gd/14^s, 18.VII.1951, n° 2203, P. SCHOEMAKER, mare temporaire; 1, II/hd/17, 13.X.1951, n° 2595, H. DE SAEGER, mare alimentée par les crues de la Garamba.

Gynacantha cylindrata KARSCH.

Adult :

1 ♀, II/fd/4, 13.IX.1951, H. DE SAEGER, 2422, savane herbeuse non brûleé.

Gynacantha manderica GRÜNBERG.

Adults :

1 ♂, II/fd/17, 5 IX.1951, H. DE SAEGER, 2379, galerie forestière dense; 1 ♀, II/fc/17, 25.IX.1951, H. DE SAEGER, 2471, galerie forestière claire.

Gynacantha villosa GRÜNBERG.

Adults :

1 ♂, Nagero/1, 30.VI.1954, C. NEBAY, 42; 1 ♂, II/gd/4, 6.VII.1951, H. DE SAEGER, 2055, savane herbeuse à ligneux rares.

Gynacantha spp.

Larvae :

17, I/a/4‴, 5.V.1950, n° 481, G. DEMOULIN, eau d'infiltration et de pluie; 1, I/a/4″, 5.V.1950, n° 482, G. DEMOULIN, bras mort sous galerie dans les feuilles mortes; 1, I/a/4′, 15.V.1950, n° 522, G. DEMOULIN, bras mort, sous galerie, dans les feuilles mortes; 3, I/o/2, 29.V.1950, n° 565, G. DEMOULIN, ruisseau sous galerie; 1, Km 31, 31.V.1950, n° 567, G. DEMOULIN, marais à *Cyperus*; 8, I/a/4″, 5.VI.1950, n° 579, G. DEMOULIN, galerie forestière, bras mort; 2, I/a/M, 7.VI.1950, n° 584, G. DEMOULIN, mare sub-permanente semi-ombragée; 1, I/o/2, 19.VI.1950, n° 616, G. DEMOULIN, ruisseau sous galerie; 1, I/o/2, 12.VII.1950, n° 689, G. DEMOULIN, ruisseau sous galerie; 1, I/o/2, 14.VII.1950, n° 699, G. DEMOULIN, ruisseau sous galerie; 1, I/o/2, 19.VII.1950, n° 708, G. DEMOULIN, ruisseau sous galerie; 4, Km 17, 20.VII.1950, n° 711, G. DEMOULIN, tête de source sous galerie; 1, I/a/3 amont, 24.VII.1950, n° 716, G. DEMOULIN, bras mort en communication avec Aka; 1, Akam, 28.VII.1950, n° 728, G. DEMOULIN, Mogbwamu; 1, I/b/1, 28.VII.1950.

J. MARTIN, n° 735, bas-fond inondé « Ndiwili »; 1, Napokomweli, 8.VIII.1950, n° 747, G. DEMOULIN, « Ndiwili », dans l'eau; 1, I/o/2, 25.VIII.1950, n° 788, G. DEMOULIN, ruisseau sous galerie; 2, I/o/2, 13.IX.1950, n° 816, G. DEMOULIN, rivière sous galerie; 1, Km 17, 25.IX.1950, n° 842, G. DEMOULIN, tête de source; 2, I/o/2, 29.IX.1950, n° 854, G. DEMOULIN, rivière sous galerie; 43, II/fd/14ª, 18.VI.1951, n° 1946, H. DE SAEGER, petite mare temporaire; 3, II/fd/17, 5.IX.1951, n° 2393, H. DE SAEGER, galerie forestière dense; 1, II/gd/14ª, 29.V.1952, n° 1886, H. DE SAEGER, en plancton.

Macromia flavimitella spec. nov.

Adult :

1 ♂, Nagero/2, 29.IX.1954, C. NEBAY, 83.

Macromia nyanzana GRÜNBERG.

Larvae :

1, Gangala-na-Bodio, n° 27, H. DE SAEGER; 1, I/b/2, 21.XII.1949, n° 140, G. DEMOULIN, ruisseau, surface et boue de fond, feuilles mortes immergées; 1, I/b/2", 1.III.1950, n° 294, G. DEMOULIN, mare permanente; 2, I/o/2, 12.X.1950, n° 886, G. DEMOULIN, rivière affluent de I/o/2, cours inférieur.

Macromia spp.

Larvae :

?4, I/o/2, 22.III.1950, n° 359, G. DEMOULIN, rapides et anses calmes de la rivière; 4, Km 31, 31.V.1950, n° 567, G. DEMOULIN, marais à *Cyperus*; 1, I/b/2", 28.VI.1950, n° 646, G. DEMOULIN, mares permanentes; 1, I/o/2, 25.VII.1950, n° 721, G. DEMOULIN, ruisseau sous galerie; 1, II/fd/13, 1.X.1951, n° 1232.

Neodythemis africana FRASER.

Adult :

1 ♂, Aka, 14.V.1952, H. DE SAEGER, 3450, lisière de galerie forestière dense.

Orthetrum abbotti CALVERT.

Adults :

6 ♂♂, 2 ♀♀, Km 17, 10.V.1950, H. DE SAEGER, 509, affleurement rocheux sous arbustes; 2 ♂♂, I/o/2, 30.X.1950, H. DE SAEGER, 915, lisière de la galerie forestière; 1 ♂, 1 ♀, II/hc/10, 28.II.1951, H. DE SAEGER, 1299, végétation ripicole; 2 ♂♂, II/ke/10, 2.III.1951, H. DE SAEGER, 1314, Kalangata, cours dénudé; 1 ♀, II/gc/11, 31.III.1951, H. DE SAEGER, 1474, marécage; 2 ♀♀, II/gc/7, 14.IV.1951, H. DE SAEGER, 1537, prairie; 1 ♂, II/gd/11, 26.V.1951, H. DE SAEGER, 1806, fond marécageux (Nambirima); 1 ♂, II/gd/4, 6.VII.1951, H. DE SAEGER, 2055, savane herbeuse à ligneux rares; 1 ♂, II/gc/8, 27.VII.1951, H. DE SAEGER, 2158, fond marécageux dénudé; 1 ♂, II/gd/10, 1 IX.1951, H. DE SAEGER, 2345, rivière à cours dénudé; 1 ♂, II/fc/18, 12.X.1951, H. DE SAEGER, 2653, berges-alluvions sablonneuses récentes; 1 ♀, Ndelele/11, 21.II.1952, H. DE SAEGER, 3142, fond marécageux (à sec).

Orthetrum angustiventre (RAMBUR).

Adult :

1 ♂, II/gd/4, 20.VI.1951, H. DE SAEGER, 2008, savane herbeuse.

Orthetrum brachiale (BEAUVOIS).

Adults :

13 ♂♂, Nagero/1, 30.VI.1954, C. NEBAY, 62; 1 ♀, Nagero/4, 30.VII.1954, C. NEBAY, 66; 4 ♂♂, Nagero/4, 30.VII.1954, C. NEBAY, 72; 1 ♀, Nagero/9, 31.III.1954, C. NEBAY, 13; 1 ♂, 1 ♀, Nagero/12, 27.VIII.1954, C. NEBAY, 81; 1 ♂, Nagero/2, 29.IX.1954, C. NEBAY, 87; 2 ♂♂, Nagero/12, 27.X.1954, C. NEBAY, 88; 1 ♂, I/a/3, 8.V.1950, H. DE SAEGER, 497, bord de galerie sèche, taillis et strate herbeuse; 1 ♂, I/o/1, 16.V.1950, H. DE SAEGER, 526; 1 ♀, Akam, 19.V.1950, H. DE SAEGER, 529, galerie forestière sèche; 1 ♂, I/o/1, 16.X.1950. G. DEMOULIN, 891, savane de pente; 1 ♂, Napokomweli, 18.X.1950, G. DEMOULIN, 895, « Ndiwili », bas-fond marécageux; 1 ♂, I/o/1, 9.XI.1950, H. DE SAEGER, 944, savane arborescente; 1 ♀, II/gc/4, 1.VI.1951, H. DE SAEGER, 1853, savane herbeuse à ligneux rares; 1 ♀, II/gc/4, 1.VI.1951, H. DE SAEGER, 1855, savane herbeuse à ligneux rares; 1 ♂, II/gc/6, 21.VI.1951, H. DE SAEGER, 1952, savane herbeuse, fond marécageux; 1 ♀, II/gd/4, 20.VI.1951, H. DE SAEGER, 2008, savane herbeuse; 1 ♂, 1 ♀, II/gc/6, 29.VI.1951, J. VERSCHUREN, 2015, hautes graminées non brûlées « Kpokpogi »; 1 ♂, II/gd/4, 6.VII.1951, H. DE SAEGER, 2055, savane herbeuse à ligneux rares; 2 ♀♀, II/ge/13s, 12.VII.1951, H. DE SAEGER, 2059, mare aux abords marécageux; 3 ♀♀, II/fc/3. 16.VII.1951, H. DE SAEGER, 2102, savane herbeuse à ligneux rares; 1 ♂, II/fd/17, 13.VIII.1951, H. DE SAEGER, 2242, galerie forestière; 14 ♂♂, 4 ♀♀, II/fd/6, 23.VIII.1951, H. DE SAEGER, 2290, savane herbeuse de fond; 8 ♂♂, 1 ♀, II/fd/17, 31.VIII.1951, H. DE SAEGER, 2341, galerie forestière claire; 1 ♂, 1 ♀, II/gd/10, 1.IX.1951, H. DE SAEGER, 2345, rivière à cours dénudé; 1 ♂, 1 ♀, II/fc/14, 14.IX.1951, H. DE SAEGER, 2408, végétation paludicole; 1 ♂, II/fd/11, 18.IX.1951, H. DE SAEGER, 2447, expansion marécageuse; 5 ♂♂, 2 ♀♀, II/fc/17, 25.IX.1951, H. DE SAEGER, 2471, galerie forestière claire; 1 ♂, II/fd/15, 2.X.1951, H. DE SAEGER, 2485, plaine marécageuse; 10 ♂♂, 1 ♀, PpK/14/g/14s, 4.IV.1952, H. DE SAEGER, 3284, mare temporaire; 1 ♀, Mt Embe, 21.IV.1952, H. DE SAEGER, 3381, savane arborescente; 6 ♂♂, 3 ♀♀, II/gc/11, 29.IV.1952, H. DE SAEGER, 3399, ruisseau dans un vallon dénudé; 2 ♀♀, II/gd/4, 2.V.1952, H. DE SAEGER, 3410, savane herbeuse; 11 ♂♂, II/fd/7", 5.V.1952, H. DE SAEGER, 3424, abords marécageux; 1 ♂, 1 ♀, II/fd/17, 7.V.1952, H. DE SAEGER, 3431, galerie forestière (massif); 2 ♂♂, 1 ♀, II/hd/6, 30.V.1952, H. DE SAEGER. 3567, savane herbeuse de fond de vallée; 3 ♂♂, Iso, II/11, 16.VI.1952, H. DE SAEGER, 3642, vallon à Herbacées paludicoles; 2 ♂♂, II/gc/17, 14.VIII.1952, H. DE SAEGER, 3940, savane herbeuse paludicole; 2 ♂♂, Ndelele/R, 22.IX.1952, H. DE SAEGER, 4067, éboulis rocheux; 1 ♂, Akam, 23.VI.1950, G. DEMOULIN, 634, savane arbustive; 1 ♂ (no label).

Orthetrum falsum falsum LONGFIELD.

Adults :

1 ♂, Nagero, 4, 30.VII.1954, C. NEBAY, 72; 1 ♂, I/a/3, 8.V.1950, H. DE SAEGER, 497, bord de galerie sèche, taillis et strate herbeuse; 1 ♀, I/o/1, 5.X.1950, G. DEMOULIN, 869, savane arbustive de pente; 1 ♂, II/gd/10, 1.IX.1951, H. DE SAEGER, 2345, rivière à cours dénudé; 1 ♀, Tori/10-Soudan, 20.III.1952, 3202, H. DE SAEGER, vallon marécageux sans couvert; 1 ♀, II/fd/17, 7.V.1952, H. DE SAEGER, 3431, galerie forestière (massif); 1 ♂, 1 ♀, Aka, 14.V.1952, H. DE SAEGER, 3450, lisière de galerie forestière dense; 1 ♀, Nagero/12, 27.VIII.1954, C. NEBAY, 76.

Orthetrum guineense Ris.

Adults :

1 ♀, Nagero/9, 31.III.1954, C. Nebay, 10; 1 ♀, Nagero/3, 29.V.1954, C. Nebay, 44; 2 ♂♂, Nagero/1, 30.VI.1954, C. Nebay, 54; 3 ♂♂, Nagero/4, 30.VII.1954, C. Nebay, 66; 1 ♂, Nagero/4, 30.VII.1954, C. Nebay, 73; 1 ♂, Nagero/4, 30.VII.1954, C. Nebay, 75; 1 ♂, Nagero/2, 29.IX.1954, C. Nebay, 83; 7 ♂♂, Nagero/2, 29.IX.1954, C. Nebay, 84; 1 ♂, Nagero/12, 27.X.1954, C. Nebay, 86; 3 ♂♂, Nagero/12, 27.X.1954, C. Nebay, 88; 1 ♂, I/o/1, 5.X.1950, G. Demoulin, 869, savane arbustive de pente; 1 ♂, Napokomweli, 13.X.1950, G. Demoulin, 888, « Ndiwili », strate herbacée, 4 ♂♂, I/o/1, 16.X.1950, G. Demoulin, 891, savane de pente; 1 ♀, Napokomweli, 18 X.1950, G. Demoulin, 895, « Ndiwili », bas-fond marécageux; 5 ♂♂, I/o/2, 29.X.1950, H. De Saeger, 913, galerie humide; 15 ♂♂, 1 ♀, I/o/2, 30.X.1950, H. De Saeger, 915, lisière de galerie forestière; 2 ♂♂, 2 ♀♀, Km 17, 10.V.1950, H. De Saeger, 509, affleurement rocheux sous arbustes; 4 ♀♀, II fd/15, 24.V.1951, H. De Saeger, 1798, plaine marécageuse, 1 ♂, II/ge/13s, 12.VII.1951, H. De Saeger, 2059, mare aux abords marécageux; 1 ♂, II/je/8, 15 X.1951, H. De Saeger, 2600, tête de source à boisement dégradé; 1 ♀, II/gd/8, 12.VII.1951, H. De Saeger, 2061, tête de source faiblement arborée; 1 ♀, II/fc/3, 16.VII.1951, H. De Saeger, 2102, savane herbeuse à ligneux rares; 1 ♀, II/fd/5, 23.VII.1951, H. De Saeger, 2128, massif isolé; 1 ♀, II/gc/8, 27.VII.1951, H. De Saeger, 2158, fond marécageux dénudé; 1 ♀, II/gd/10, 25.VIII.1951, J. Verschuren, 2316, cours marécageux de la Nambirima; 1 ♀, II/gd/4, 30.VIII.1951, H. De Saeger, 2332, savane herbeuse brûlée; 4 ♂♂, 1 ♀, II/gd/10, 1.IX.1951, H. De Saeger, 2345, rivière à cours dénudé; 1 ♀, II/fd/17, 8.IX.1951, H. De Saeger, 2392, galerie forestière dégradée; 1 ♂, II/fd/11, 18.IX.1951, H. De Saeger, 2447, expansion marécageuse; 1 ♀, II/gc/9, 28.IX.1951, H. De Saeger, 2481, rivière marécageuse; 3 ♀♀, II/gd/10, 24.IX.1951, H. De Saeger, 2483, vallon marécageux; 1 ♀, II/fc/6, 30.X.1951, H. De Saeger, 2699, savane de bas-fond marécageux; 1 ♀, II id/8, 31.X.1951, H. De Saeger, 2708, tête de source à boisement dégradé; 1 ♂, PFSK/17/d/10, 26.III.1952, H. De Saeger, 3224, rivière à cours dénudé; 3 ♂♂, 2 ♀♀, II/gd/11, 10.IV.1952, H. De Saeger, 3314, petit vallon marécageux à découvert; 2 ♂♂, II/gc/8, 30.IV.1952, H. De Saeger, 3402, tête de source faiblement boisée; 1 ♂, 1 ♀, PFSK/22/8, 10.VI.1952, H. De Saeger, 3608, tête de source à boisement clair; 2 ♀♀, PpK/9/g/9, 10.IX.1952, H. De Saeger, 4044, galerie forestière très dégradée; 1 ♀, II/gd/4, 12.IX.1952, H. De Saeger, 4054, savane herbeuse à *Nephrolepis* et *Ophioglossum*; 1 ♂, Ndelele/R, 22 IX.1952, H. De Saeger, 4067, éboulis rocheux; 1 ♀, without label.

Orthetrum hintzii Schmidt.

Adults :

1 ♂, Nagero/2, 29.IX.1954, C. Nebay, 87; 1 ♀, Napokomweli, 19.IX.1950, G. Demoulin, 831, sur les herbes d'un « Ndiwili »; 1 ♂, 1 ♀, I/o/1, 5 X.1950, G. Demoulin, 869, savane arbustive de pente; 2 ♂♂, I/o/1, 16.X.1950, G. Demoulin, 891, savane de pente; 1 ♂, 1 ♀, Napokomweli, 18.X.1950, G. Demoulin, 895, « Ndiwili », bas-fond marécageux; 1 ♂, I/o/2, 30.X.1950, H. De Saeger, 915, lisière de galerie forestière; 1 ♂, II/gd/11, 12.III.1951, H. De Saeger, 1361, prairie à Cypéracées; 1 ♂, II/gd/4, 17.III.1951, H. De Saeger, 1412, savane arborescente; 1 ♂, II/bc/9, 19.III.1951, J. Verschuren, 1425, herbes courtes; 4 ♂♂, II/gc/11, 31.III.1951, H. De Saeger, 1474, marécage; 15 ♂♂, 10 ♀♀, II/gc/10, 6.IV.1951, H. De Saeger, 1506, Cyperaie; 4 ♂♂, II/gg/8, 10.IV.1951, H. De Saeger, 1514, galerie forestière; 1 ♂, 1 ♀, II/gd/4, 13.IV.1951, H. De Saeger, 1527, savane herbeuse; 4 ♂♂, 1 ♀, II/gc/7, 14.IV.1951, H. De Saeger, 1537, prairie; 1 ♀, II/hc/9, 10, 20.IV.1951, J. Verschuren, 1593, volant au-dessus de la galerie, très dégradée; 2 ♂♂, II/gc/11, 4.V.1951, H. De Saeger, 1645, végétation paludicole; 2 ♂♂, II/gd/11, 26.V.1951, H. De

SAEGER, 1806, fond marécageux (Nambirima); 4 ♂♂, II/gc/4, 1.VI.1951, H. DE SAEGER, 1855, savane herbeuse à ligneux rares; 1 ♂, 1 ♀, II/gd/11, 12.VI.1951, H. DE SAEGER, 1903, végétation herbacée; 3 ♂♂, II/gc/6, 21.VI.1951, H. DE SAEGER, 1952, savane herbeuse, fond marécageux; 1 ♂, 2 ♀♀, II/gd/4, 6.VII.1951, H. DE SAEGER, 2055, savane herbeuse à ligneux rares; 3 ♂♂, 1 ♀, II/ge/13s, 12.VII.1951, H. DE SAEGER, 2059, mare aux abords marécageux; 1 ♂, II/gd/8, 12.VII.1951, H. DE SAEGER, 2061, tête de source faiblement arborée; 5 ♂♂, II/gc/8, 27.VII.1951, H. DE SAEGER, 2158, fond marécageux dénudé; 1 ♂, 2 ♀♀, II/gd/4, 30.VIII.1951, H. DE SAEGER, 2332, savane herbeuse brûlée; 1 ♂, II/lf/9, 21.VIII.1951, H. DE SAEGER, 2299, galerie à boisement très dégradé; 29 ♂♂, 1 ♀, II/gd/10, 1.IX.1951, H. DE SAEGER, 2345, rivière à cours denudé; 3 ♂♂, II/fd/17, 8.IX.1951, H. DE SAEGER, 2392, galerie forestière dégradée; 6 ♂♂, 2 ♀♀, II/gd/10, 10.IX.1951, H. DE SAEGER, 2397, végétation paludicole; 5 ♂♂, 1 ♀, II/fd/11, 18.IX.1951, H. DE SAEGER, 2447, expansion marécageuse; 1 ♂, II/fc/17, 25.IX.1951, H. DE SAEGER, 2471, galerie forestière; 19 ♂♂, II/gc/9, 28.IX.1951, H. DE SAEGER, 2481, rivière marécageuse; 5 ♂♂, 2 ♀♀, II/gd/4, 24.IX.1951, H. DE SAEGER, 2482, savane herbeuse; 5 ♂♂, 1 ♀, II/gd/10, 24.IX.1951, H. DE SAEGER, 2483, vallon marécageux; 11 ♂♂, II/je/8, 15.X.1951, H. DE SAEGER, 2600, tête de source à boisement dégradé; 9 ♂♂, PpK/52/g, 16.X.1951, H. DE SAEGER, 2614, galerie forestière très dégradée; 1 ♂, II/PpK/55/d/9, 28.X.1951, H. DE SAEGER, 2679, galerie forestière; 3 ♂♂, II/fd/6, 29.X.1951, H. DE SAEGER, 2697, savane herbeuse de bas-fond marécageux; 2 ♂♂, 1 ♀, II/fc/6, 10.X.1951, H. DE SAEGER, 2575, savane herbeuse; 5 ♂♂, II/id/8, 31.X.1951, H. DE SAEGER, 2708, tête de source à boisement dégradé; 1 ♂, PFSK/17/d/10, 26 III.1952, H. DE SAEGER, 3224, rivière à cours dénudé; 12 ♂♂, 1 ♀, II/gd/11, 10.IV.1952, H. DE SAEGER, 3314, petit vallon marécageux à découvert; 3 ♂♂, 1 ♀, II/gc/11, 29.IV.1952, H. DE SAEGER, 3399, ruisseau dans un vallon dénudé; 1 ♂, II/fd/7", 5.V.1952, H. DE SAEGER, 3424, abords marécageux; 7 ♂♂, 1 ♀, PFSK/22/8, 10.VI.1952, H. DE SAEGER, 3608, tête de source à boisement clair; 5 ♂♂, II/gd/11, 24.VI.1952, H. DE SAEGER, 3701, vallon marécageux; 4 ♂♂, II/le/8, 9.IX.1952, H. DE SAEGER, 4040, tête de source boisée; 5 ♂♂, 1 ♀, PpK/9/g/9, 10.IX.1952, H. DE SAEGER, 4044, galerie forestière très dégradée; 1 ♂, 2 ♀♀ (no label); 1 ♂, II/ke/9, 12.X.1951, H. DE SAEGER, 2602, galerie forestière dégradée; 1 ♂, Gangala-na-Bodio, 14.XI.1949, H. DE SAEGER, 1; ?1 ♀ (endommagée), I/o/2, 13.VII.1950, G. DEMOULIN, 696, sur les feuilles des arbres de galerie humide; 3 ♂♂, I/o/3, 31.III.1950, H. DE SAEGER, 352, partie herbeuse en bordure de galerie forestière humide.

Orthetrum icteromelas RIS.

Adults :

1 ♀, I/a/1, 26.XII.1949, H. DE SAEGER, 71, savane herbeuse; 1 ♂, I/a/2, 26.XII.1949, G. DEMOULIN, 143, boue au fond d'une mare; 1 ♂, II/fd/15, 24.V.1951, H. DE SAEGER, 1798, plaine marécageuse; 1 ♀, II/gd/11, 24.VI.1952, H. DE SAEGER, 3701, vallon marécageux.

Orthetrum julia KIRBY.

Adults :

1 ♂, Nagero/12, 27.VIII.1954, C. NEBAY, 80; 1 ♂, Nagero/12, 27.X.1954, C. NEBAY, 86; 1 ♂, I/o/2, 29.X.1950, H. DE SAEGER, 913, galerie humide; 1 ♂, I/o/2, 30.X.1950, H. DE SAEGER, 915, lisière de galerie forestière; 1 ♂, I/o/1, 9.XI.1950, H. DE SAEGER, 944, savane arborescente; 1 ♂, II/gd/10, 1.IX.1951, H. DE SAEGER, 2345, rivière à cours dénudé; 1 ♂ (endommagé), II/fc/17, 25.IX.1951, H. DE SAEGER, 2471, galerie forestière claire; 1 ♂, Aka, 14.V.1952, H. DE SAEGER, 3454, galerie forestière dense (type guinéen); 2 ♂♂, PFSK/22/8, 10.VI.1952, H. DE SAEGER, 3608, tête de source à boisement clair; 1 ♂, I/o/3, 31.III.1950, H. DE SAEGER, 352, partie herbeuse en bordure de galerie forestière humide.

Orthetrum microstigma microstigma Ris.

Adults :

6 ♂♂, I/o/2, 30.X.1950, H. De Saeger, 915, lisière de galerie forestière; 1 ♀, I/o/1, 9.XI.1950, H. De Saeger, 944, savane arborescente.

Orthetrum stemmale kalai Longfield.

Adults :

1 ♀, source de la Duru, 12.IV.1950, H. De Saeger, 409, lisière de galerie forestière; 2 ♂♂, II/gc/8, 30.IV.1952, H. De Saeger, 3402, tête de source faiblement boisée; 1 ♂, II/fd/17, 7.V.1952, H. De Saeger, 3431, galerie forestière (massif).

Orthetrum latihami spec. nov.

Adults :

1 ♀, I/a/3, 8.V.1950, H. De Saeger, 497, bord de galerie sèche, taillis et strate herbeuse; 1 ♂, II/gd/4, 17.III.1951, H. De Saeger, 1412, savane arborescente; 1 ♂, II/gc/11, 31.III.1951, H. De Saeger, 1474, marécage; 1 ♂, II/gc/4, 1.VI.1951, H. De Saeger, 1855, savane herbeuse à ligneux rares; 1 ♂, II/gc/6, 8.VI.1951, H. De Saeger, 1877, savane à Graminées paludicoles; 1 ♂, II/gc/6, 21.VI.1951, H. De Saeger, 1952, savane herbeuse, fond marécageux; 2 ♂♂ (holotype, paratype), II/gd/4, 30.VIII.1951, H. De Saeger, 2332, savane herbeuse brûlée; 1 ♂, II/gd/10, 24.IX.1951, H. De Saeger, 2483, vallon marécageux; 1 ♂, II/ge/13ª, 12.VII.1951, H. De Saeger, 2059, mare aux abords marécageux; 1 ♀ (allotype), PpK/9/g/9, 10.IX.1952, H. De Saeger, 4044, galerie forestière très dégradée; 1 ♂, I/b/2″, 29.III.1950, G. Demoulin, 364, mare permanente ensoleillée.

Orthetrum monardi Schmidt.

Adults :

2 ♂♂, Km 17, 10.V.1950, H. De Saeger, 509, affleurement rocheux sous arbustes; 1 ♂, I/o/1, 11.X.1950, G. Demoulin, 884, savane herbeuse le long de I/o/2; 2 ♂♂, I/o/2, 26.X.1950, H. De Saeger, 904, rivière marécageuse; 1 ♂, I/o/1, 16 X.1950, G. Demoulin, 891, savane de pente; 1 ♂, II/gg/8, 10 IV.1951, H. De Saeger, 1514, galerie forestière; 1 ♂, PFSK/17/d/10, 26.III.1952, H. De Saeger, 3224, rivière à cours dénudé; 1 ♂, I/o, XI.1949, G. Demoulin, 85; 1 ♂, I/a/2, 2.I.1950, G. Demoulin, 146, mare; 2 ♂♂, I/o/2, 23.III.1950, H. De Saeger, 324, rivière, eau courante; 1 ♀ (allotype), I/o, XI.1949, G. Demoulin, 85.

Orthetrum saegeri spec. nov.

Adult :

1 ♂ holotype, PFSK/22/8, 10.VI.1952, H. De Saeger, 3608, tête de source à boisement clair.

Orthetrum spec indet.

Adults :

1 ♂ (teneral, damaged), II/gc/11, 31.III.1951, H. De Saeger, 1474, marécage; 1 ♀ (abnormal in having last *Ax* in forewing incomplete), no label.

ORTHETRUM GROUP.

Larvae :

4, Gangala-na-Bodio, n° 27, H. De Saeger; 1, I/b/2, 13.XII.1949, n° 129, G. Demoulin, ruisseau; 1, I/a/2, 16.XII.1949, n° 131, G. Demoulin, mare; 3, I/b/2, 21.XII.1949, n° 140, G. Demoulin, ruisseau, surface et boue du fond, feuilles mortes, immergées; 10, I/c/2, 23.XII.1949, n° 142, G. Demoulin, ruisseau; 10, I/c/2‴, 30.XII.1949, n° 145, G. Demoulin, ruisseau; 7, I/a/2, 2.I.1950, n° 146, G. Demoulin, mare; 4, I/b/2′, 4.I.1950, n° 149, G. Demoulin, ruisseau et abords; 1, I/a/2, 9.I.1950, n° 153, G. Demoulin, mare; 1, I/b/2-3, 11.I.1950, n° 154, G. Demoulin, ruisseau et ses abords détrempés; 15, I/c/2‴, 6.I.1950, n° 150, G. Demoulin, mare et marécage; 1, I/a/2, 16.I.1950, n° 159, G. Demoulin, mare; 12, I/b/2‴, 18.I.1950, n° 161, G. Demoulin, ruisseau marécageux; 16, I/c/2′, 20.I.1950, n° 164, G. Demoulin, ruisseau et abords; 9, I/b/2″, 25.I.1950, n° 232, G. Demoulin, mare permanente et ses abords marécageux; 2, I/a/2, 30.I.1950, n° 240, G. Demoulin, crique temporaire et plantes riveraines; 8, I/c/2‴, 3.II.1950, n° 245, G. Demoulin, marécage sur affleurement granitique; 1, I/a/2, 6.II.1950, n° 247, G. Demoulin,- empreintes d'éléphants remplies d'eau; 1, I/b/3′, 8.II.1950, n° 249, G. Demoulin, rivière Mogbwamu; 1, I/c/4, 10.II.1950, n° 250, G. Demoulin, petit ruisseau sous galerie; 3, I/b/3′, 15.II.1950, n° 253, G. Demoulin, rivière; 12, I/b/2″, 22.II.1950, n° 258, G. Demoulin, mare permanente; 11, I/c/2‴, 24.II.1950, n° 259, G. Demoulin, marécage sur affleurement rocheux: 19, I/b/2″, 1.III.1950, n° 294, G. Demoulin, mare permanente; 17, I/c/2″, 3.III.1950, n° 295, G. Demoulin, ruisseau sous galerie forestière; 8, I/a/M, 13.III.1950, n° 319, H. De Saeger, mare stagnante; 6, I/c/4, 15.III.1950, n° 354, G. Demoulin, ruisseau à eau courante, en aval d'une galerie forestière; 4, I/c/2‴, 17.III.1950, n° 355, G. Demoulin, empreintes d'éléphants pleines d'eau; 14, I/o/2, 22.III.1950, n° 359, G. Demoulin, rapides et anses calmes de la rivière; 4, I/a/3, 24.III.1950, n° 360, G. Demoulin, rapides et anses calmes de la rivière Aka; 1, I/a/4, 31.III.1950, n° 367, G. Demoulin, galerie forestière; 10, Akam, 21.IV.1950, n° 461, G. Demoulin, rapides et anses calmes des rivières Aka et Mogbwamu; 1, I/a/4″, 5.V.1950, n° 482, G. Demoulin, bras mort sous galerie dans les feuilles immergées; 2, I/a/3, 8.V.1950, n° 494, G. Demoulin, crique temporaire sur les plantes immergées; 3, I/o/2, 12.V.1950, n° 512, G. Demoulin, rivières à rapides sur roches; 5, Napokomweli, 12.V.1950, n° 513, G. Demoulin, marais à Cypéracées; 25, I/a/4′, 15.V.1950, n° 522, G. Demoulin, bras mort sous galerie, dans les feuilles mortes; 3, I/b/3′, 17.V.1950, n° 523, G. Demoulin, crique permanente à Cypéracées; 6, I/a/2, 22.V.1950, n° 539, G. Demoulin, mare temporaire; 3, I/b/2″, 24.V.1950, n° 550, G. Demoulin, mares permanentes; 2, I/c/2′, 26.V.1950, n° 561, G. Demoulin, tête de source, sous galerie; 2, I/o/2, 29.V.1950, n° 565, G. Demoulin, ruisseau sous galerie; 3, Km 31, 31.V.1950, n° 567, G. Demoulin, marais à *Cyperus*; 3, Nalugwambala, 2.VI.1950, n° 574, G. Demoulin, ruisseau sous galerie; 3, I/b/3″, 9.VI.1950, n° 587, G. Demoulin, mare permanente; 3, I/o/2, 13.VI.1950, n° 598, G. Demoulin, ruisseau sous galerie; 1, I/b/3″, 16.VI.1950, n° 608, G. Demoulin, mare permanente; 3, I/b/3″, 16.VI.1950, n° 614, G. Demoulin, mare sous *Irvingia*; 3, I/o/2, 19.VI.1950, n° 616, G. Demoulin, ruisseau sous galerie; 15, Akam, 23.VI.1950, n° 631, G. Demoulin, rivière; 2, I/b/2″, 28.VI.1950, n° 646, G. Demoulin, mares permanentes; 6, I/o/2, 30.VI.1950, n° 654, G. Demoulin, rivière, anses calmes; 12, I/o/2, 1.VII.1950, n° 661, G. Demoulin, anses calmes; 8, Km 17, 6.VII.1950, n° 671, G. Demoulin, tête de source; 3, I/a/2-I/a/3, 10.VII.1950, n° 682, G. Demoulin, crique temporaire en crue; 1, I/o/2, 12.VII.1950, n° 689, G. Demoulin, ruisseau sous galerie; 2, I/o/2, 13.VII.1950, n° 695, G. Demoulin, ruisseau sous galerie: 6, I/o/2, 14.VII.1950, n° 699, G. Demoulin, ruisseau sous galerie; 2, I/a/2, 17.VII.1950, n° 702, G. Demoulin, mare temporaire; 9, Km 17, 20.VII.1950, n° 711, G. Demoulin, tête de source sous galerie; 1, I/o/2, 21.VII.1950, n° 714, G. Demoulin, rivière sur barres granitiques; 9, I/a/3 amont, 24.VII.1950, n° 716, G. Demoulin, bras mort en communication avec Aka; 2, I/o/2,

26.VII.1950, n° 723, G. DEMOULIN, rivière sur barres granitiques; 1, Akam, 28.VII.1950, n° 728, G. DEMOULIN, Mogbwamu; 2, Km 17, 2.VIII.1950, n° 740, G. DEMOULIN, eau stagnante sous galerie de tête de source, 1, I/b/3′, 9.VIII.1950, n° 748, G. DEMOULIN, rivière Mogbwamu; 25, I/o/2, 11.VIII.1950, n° 754, G. DEMOULIN, rivière en crue, sur barres granitiques; 12, I/a/1, 14.VIII.1950, n° 755, G. DEMOULIN, « Ndiwili » inondé; 2, I/b/3″, 18.VIII.1950, n° 759, G. DEMOULIN, rivière à courant rapide; 17, I/c/2‴, 23.VIII.1950, n° 767, G. DEMOULIN, marais sur affleurement rocheux; 5, I/b/1, 1.IX.1950, n° 798, G. DEMOULIN, « Ndiwili »; 3, I/b/1, 6.IX.1950, n° 803, G. DEMOULIN, « Ndiwili »; 13, I/o/2, 13.IX.1950, n° 816, G. DEMOULIN, rivière sous galerie; 2, Napokomweli, 14.IX.1950, n° 820, G. DEMOULIN, « Ndiwili »; 3, Napokomweli, 15.IX.1950, n° 821, G. DEMOULIN, « Ndiwili »; 4, I/a/1, 18.IX.1950, n° 828. G. DEMOULIN, « Ndiwili »; I, I/o/2, 20.IX.1950, n° 833, G. DEMOULIN, rivière sur barres granitiques; 1, Napokomweli, 22.IX.1950, n° 834, G. DEMOULIN, « Ndiwili »; 1, Km 17, 25.IX.1950, n° 842, G. DEMOULIN, tête de source; 13, I/o/2, 29.IX.1950, n° 854, G. DEMOULIN, rivière sous galerie; 1, I/o/1, IX.1950, n° 857, G. DEMOULIN; 19, I/o/2, 5.X.1950, n° 867, G. DEMOULIN, rivière sous galerie; 4, Napokomweli, 4.X.1950, n° 870, G. DEMOULIN, « Ndiwili »; 1, I/o/2, 6.X.1950, n° 872, G. DEMOULIN, rivière sur barres granitiques; 1, I/a/1, 9.X.1950, n° 876, G. DEMOULIN, « Ndiwili »; 100, I/o/2, 12.X.1950, n° 886, G. DEMOULIN, rivière affluent de I/o/2, cours inférieur; 4, Napokomweli, 13.X.1950, n° 889, G. DEMOULIN, « Ndiwili », bas-fond marécageux; 2, I/o/2, 16.X.1950, n° 890, G. DEMOULIN, rivière sous galerie; 1, I/o/2, 30.X.1950, n° 922, H. DE SAEGER, rivière à eau courante; 1, II/e/14, 18.I.1951, n° 1104, P. SCHOEMAKER, mare temporaire; 38, II/gd/11, 16.III.1951, n° 1411, H. DE SAEGER, expansion marécageuse de la Nambirima; 13, II/fc/13, 19.IV.1951, n° 1572, J. VERSCHUREN, mare, parcelle 3; 35, II/gc/13ᵃ, 4.V.1951, n° 1656, H. DE SAEGER, petite mare permanente; 2, II/fd/18, 4.V.1951, n° 1675, P. SCHOEMAKER; 1, II/fc/12, 28.IV.1951, n° 1677, P. SCHOEMAKER; 1, II/gc/11, 18.IV.1951, n° 1678, P. SCHOEMAKER; 3, II/id/8, 22.V.1951, n° 1795, J. VERSCHUREN, végétation dense; 6, II/fb/11, 25.V.1951, n° 1811, J. VERSCHUREN, sol marécageux; 14, II/ge/13ᵃ, 11.VII.1951, n° 2058, H. DE SAEGER, mare aux abords marécageux; 2, II/gd/11, 14.VII.1951, n° 2084, H. DE SAEGER, galerie forestière très claire; 72, II/gc/11, 11.VII.1951, n° 2114, H. DE SAEGER, expansion marécageuse; 3, II/hd/17, 13.X.1951, n° 2595, H. DE SAEGER, mare alimentée par les crues de la Garamba; 5, II/gd/11, 25.X.1951, n° 2696, H. DE SAEGER, expansion marécageuse découverte; 3, Aka, 14.V.1952, n° 3464, H. DE SAEGER, ruisseau d'eau claire; 1, II/gc/135, 4.V.1951, H. DE SAEGER, n° 763; 1, II/gc/10, 4.VIII.1952, H. DE SAEGER, n° 1975; 1, II/gd/9, 7.VIII.1952, H. DE SAEGER, n° 1980; 21, I/b/2″, 28.XII.1949, n° 144, G. DEMOULIN, petite mare sur le cours du ruisseau; 1, I/a/3, 20.II.1950, n° 213, H. DE SAEGER, savane arborescente; 1, I/c/2″, 27.I.1950, n° 237, G. DEMOULIN, ruisseau sous galerie forestière; 10, I/c/2′, 17.II.1950, n° 255, G. DEMOULIN, tête de source sous galerie forestière; 4, I/a/4, 6.III.1950, n° 297, G. DEMOULIN, bras mort sur l'Aka, sous galerie forestière; 8, I/o/2, 23.III.1950, n° 324, H. DE SAEGER, rivière, eau courante; 25, I/a/4, 20.III.1950, n° 358, G. DEMOULIN, bras mort de la rivière; 8, I/o/2, 22.III.1950, n° 359, G. DEMOULIN, rapides et anses calmes de la rivière; 51, I/a/4, 27.III.1950, n° 363, G. DEMOULIN, bras mort de l'Aka, sous galerie forestière; 49, I/b/2″, 29.III.1950, n° 364, G. DEMOULIN, mare permanente ensoleillée; 21, I/a/4″, 17.IV.1950, n° 460, G. DEMOULIN, bras mort sous galerie; 2, I/o/2, 12.V.1950, n° 512, G. DEMOULIN, rivières à rapides, sur roches; 3, I/a/4′, 15.V.1950, n° 522, G. DEMOULIN, bras mort sous galerie, dans les feuilles mortes; 5, I/a/4″, 5.VI.1950, n° 579, G. DEMOULIN, galerie forestière, bras mort; 4, I/b/2, 9.VI.1950, n° 589, G. DEMOULIN, ruisseau; 2, I/a/2, 12.VI.1950, n° 592, G. DEMOULIN, crique temporaire; 13, Nalugwambala, 6.VII.1950, n° 674, G. DEMOULIN, ruisseau sous galerie; 10, I/o/2, 19.VII.1950, n° 708, G. DEMOULIN, ruisseau sous galerie; 36, I/o/2, 7.VIII.1950, n° 746, G. DEMOULIN, rivière sur barres granitiques; 1, Napokomweli, 8.VIII.1950, n° 747, G. DEMOULIN, « Ndiwili » dans l'eau; 8, I/o/2, 9.VIII.1950, n° 750, G. DEMOULIN, ruisseau sous galerie; 37, I/o/2, 21.VIII.1950, n° 765, G. DEMOULIN, ruisseau

sous galerie; 8, I/o/2, 25.VIII.1950, n° 788, G. DEMOULIN, ruisseau sous galerie; 36, I/o/2, 4.IX.1950, n° 799, G. DEMOULIN, rivière sur barres granitiques; 1, Napokomweli, 6.IX.1950, n° 805, G. DEMOULIN, « Ndiwili »; 5, I/o/2, 5.X.1950, n° 867, G. DEMOULIN, rivière sous galerie; 1, I/o/2, 12.X.1950, n° 886, G. DEMOULIN, rivière affluent de I/o/2, cours inférieur; 18, I/o/2, 11.X.1950, n° 887, G. DEMOULIN, rivière sur barres granitiques; 150, II/ec/4, 16.III.1951, n° 1401, H. DE SAEGER, expansion marécageuse; 36, II/fd/11, 28.III.1951, n° 1466, H. DE SAEGER, marécage; 1, II/gd/8, 23.V.1951, n° 1857, P. SCHOEMAKER; 32, II/gc/13s, 21.VI.1951, n° 1953, H. DE SAEGER, mare permanente; 1, II/fd/10, 26.VI.1951, n° 2023, H. DE SAEGER, rivière à cours dénudé, eau courante; 14, II/gd/11, 18.VII.1951, n° 2106, H. DE SAEGER, fond marécageux; 3, II/lf/11, 21.VIII.1951, n° 2284, H. DE SAEGER, expansion marécageuse; 7, II/gd/11, 22.X.1951, n° 2655, H. DE SAEGER, fond marécageux.

Oxythemis phoenicosceles RIS.

Adult :

1 ♂, II/bc/9, 19.III.1951, J. VERSCHUREN, 1425, herbes courtes.

Aethiothemis solitaria (MARTIN MS) RIS.

Adults :

3 ♂♂, II/fc/6, 10.X.1951, H. DE SAEGER, 2575, savane herbeuse; 1 ♀, II/fd/6, 29.X.1951, H. DE SAEGER, 2697, savane herbeuse de bas-fond marécageux.

Aethiothemis mediofasciata RIS.

Adults :

1 ♀, Napokomweli, 13.X.1950, G. DEMOULIN, 888, « Ndiwili », strate herbacée; 1 ♂, II/hc/8, 5.IV.1951, H. DE SAEGER, 1501, tête de source; 3 ♂♂, II/fc/17, 25.IX.1951, H. DE SAEGER, 2471, galerie forestière claire; 5 ♂♂, 2 ♀♀, II/fc/6, 10.X.1951, H. DE SAEGER, 2575, savane herbeuse; 1 ♀, II/fc/18, 12.X.1951, H. DE SAEGER, 2653, berges-alluvions sablonneuses récentes; 1 ♂, II/gd/4, 27.X.1951, H. DE SAEGER, 2669; 1 ♀, II/fd/6, 29.X.1951, H. DE SAEGER, 2697, savane herbeuse de bas-fond marécageux; 1 ♀, II/fc/6, 30.X.1951, H. DE SAEGER, 2699, savane de bas-fond marécageux; 1 ♀, II/gc/17, 14.VIII.1952, H. DE SAEGER, 3940, savane herbeuse paludicole.

Nesciothemis farinosum (FÖRSTER).

Adults :

1 ♂, Nagero/1, 30.VI.1954, C. NEBAY, 62; 1 ♂, II/gd/11, 26.V.1951, H. DE SAEGER, 1806, fond marécageux (Nambirima).

Palpopleura deceptor (CALVERT).

Adults :

1 ♂, Nagero/12, 27.VIII.1954, C. NEBAY, 77; 2 ♂♂, Nagero/12, 27.VIII.1954, C. NEBAY, 81; 1 ♂, Napokomweli, 19.IX.1950, G. DEMOULIN, 831, sur les herbes d'un « Ndiwili »; 1 ♂, II/gd/4, 13.IV.1951, H. DE SAEGER, 1527, savane herbeuse; 1 ♂, II/gd/7", 20.IX.1951, H. DE SAEGER, 2448, frange de Graminées ripicoles; 1 ♂, II/gd/4, 24.IX.1951, H. DE SAEGER, 2482, savane herbeuse; 5 ♂♂, 1 ♀, PpK/14/g/14s, 4.IV.1952, H. DE SAEGER, 3284, mare temporaire.

Palpopleura jucunda Rambur.

Adult :

1 ♀, Napokomweli, 13.X.1950, G. Demoulin, 888, « Ndiwili », strate herbacée.

Palpopleura lucia f. lucia (Drury).

Adults :

1 ♂, Nagero/9, 31.III.1954, C. Nebay, 7; 2 ♂♂, 1 ♀, Nagero/9, 31.III.1954, C, Nebay, 10; 1 ♂, Nagero/9, 31.III.1954, C. Nebay, 13; 1 ♂. Nagero/3, 29.V.1954, C. Nebay, 44; 3 ♂♂, 1 ♀, Nagero/3, 29.V.1954, C. Nebay, 50; 3 ♂♂, 1 ♀, Nagero/1, 30.VI.1954, C. Nebay, 52; 1 ♀, Nagero/1, 30.VI.1954, C. Nebay, 53; 1 ♂, 1 ♀, Nagero/1, 30.VI.1954, C. Nebay, 54; 1 ♀, Nagero/1, 30.VI.1954, C. Nebay, 57; 3 ♂♂, Nagero/1, 30.VI.1954, C. Nebay, 59; 1 ♂, 2 ♀♀, Nagero/1, 30.VI.1954, C. Nebay, 60; 2 ♂♂, 2 ♀♀, Nagero/1, 30.VI.1954, C. Nebay, 61; 1 ♂, Nagero/4, 30.VII.1954, C. Nebay, 72; 2 ♂♂, 1 ♀, Nagero/4, 30.VII.1954, C. Nebay, 75; 3 ♂♂, 5 ♀♀, Nagero/12, 27.VIII.1954, C. Nebay, 76; 4 ♂♂, Nagero/12, 27.VIII.1954, C. Nebay, 77; 2 ♂♂, 1 ♀, Nagero/12, 27.VIII.1954, C. Nebay, 80; 5 ♂♂, Nagero/12, 27.VIII.1954, C. Nebay, 81; 4 ♂♂, 3 ♀♀, Nagero/2, 29.IX.1954, C. Nebay, 83; 1 ♂, Nagero/2, 29.IX.1954, C. Nebay, 84; 5 ♂♂, 1 ♀, Nagero/2, 29.IX.1954, C. Nebay, 85; 8 ♂♂, 2 ♀♀, Nagero/2, 29.IX.1954, C. Nebay, 87; 1 ♂, I/o/2, 14.IV.1950, H. De Saeger, 458, savane arborescente; 1 ♂, I/a/3, 8.V.1950, H. De Saeger, 497, bord de galerie sèche, taillis et strate herbeuse; 13 ♂♂, 4 ♀♀, Napokomweli, 15.IX.1950, G. Demoulin, 823, feuilles des arbres autour du « Ndiwili »; 7 ♂♂, 1 ♀, Napokomweli, 19.IX.1950, G. Demoulin, 831, sur les herbes d'un « Ndiwili »; 1 ♂, I/o/1, 5.X.1950, G. Demoulin, 869, savane arbustive de pente; 1 ♂, I/o/2, 26.X.1950, H. De Saeger, 904, rivière marécageuse; 1 ♂, I/o/2, 30.X.1950, H. De Saeger, 915, lisière de galerie forestière; 2 ♂♂, II/gd/4, 13.IV.1951, H. De Saeger, 1527, savane herbeuse; 1 ♂, II/gc/7, 14.IV.1951, H. De Saeger, 1537, prairie; 1 ♂, II/gc/6, 21.VI.1951, H. De Saeger, 1952, savane herbeuse, fond marécageux; 3 ♂♂, II gd/10, 27.VI.1951, J. Verschuren, 1987, volant au-dessus d'un cours d'eau marécageux; 1 ♂, II/ge/13s, 12.VII.1951, H. De Saeger, 2059, mare aux abords marécageux; 1 ♂, II/gd/11, 12.VII.1951, H. De Saeger, 2071, expansion marécageuse; 1 ♂, II gc/8, 27.VIII.1951, H. De Saeger, 2158, fond marécageux dénudé; 1 ♂, 1 ♀, II/fd/6, 23.VIII.1951, H. De Saeger, 2290, savane herbeuse de fond; 1 ♂, II/gd/7", 20.IX.1951, H. De Saeger, 2448, frange de Graminées ripicoles; 3 ♂♂, 2 ♀♀, II/fc/14, 25.IX.1951, H. De Saeger, 2474, mare temporaire; 3 ♂♂, II/gd/4, 24.IX.1951, H. De Saeger, 2482, savane herbeuse; 2 ♂♂, II gd/10, 24.IX.1951, H. De Saeger, 2483, vallon marécageux; 1 ♂. II/id/8, 17.XI.1951, H. De Saeger, 2765, tête de source; 12 ♂♂, PpK/14/g/14s, 4.IV.1952, H. De Saeger, 3284, mare temporaire; 2 ♂♂, 3 ♀♀, II/gd/11, 10.IV.1952, H. De Saeger, 3314, petit vallon marécageux à découvert; 31 ♂♂, 8 ♀♀, II/gc/11, 29.IV.1952, H. De Saeger, 3399, ruisseau dans un vallon dénudé; 26 ♂♂, 1 ♀, II/fd/7", 5.V.1952, H. De Saeger, 3424, abords marécageux; 30 ♂♂, 19 ♀♀, II/fd/17, 7.V.1952, H. De Saeger, 3431, galerie forestière (massif); 2 ♂♂, 2 ♀♀, Dedegwa, 17.V.1952, H. De Saeger, 3468, galerie forestière dense (type guinéen); 1 ♂, 1 ♀, Iso/II/11, 16.VI.1952, H. De Saeger, 3642, vallon à Herbacées paludicoles; 1 ♂, 2 ♀♀, PFSK/20/9, 4.VI.1952, H. De Saeger, 3653, prairie à Herbacées paludicoles; 2 ♂♂, II/gd/11, 24.VI.1952, H. De Saeger, 3701, vallon marécageux; 1 ♂, II/id/9, 16.VII.1952, H. De Saeger, 3805, galerie forestière; 2 ♂♂, II gc 17, 14.VIII.1952, H. De Saeger, 3940, savane herbeuse paludicole; 1 ♂, 1 ♀, PpK/9/g/9, 10.IX.1952, H. De Saeger, 4044, galerie forestière très dégradée; 1 ♀, Nagero/1, 30.VI.1954, C. Nebay, 63; 2 ♀♀, Nagero/4, 30.VII.1954, C. Nebay, 66; 1 ♀, Nagero/1, 30.VI.1954, C. Nebay, 69; 2 ♀♀, Nagero/12, 27.X.1954, C. Nebay, 88; 1 ♀, Nagero/12, 27.X.1954, C. Nebay, 97; 1 ♀, Km 17, 10.V.1950, H. De Saeger, 509, affleurement rocheux sous arbustes; 1 ♀, I/a/1, 12.VI.1950, G. Demoulin, 594, savane arborescente; 2 ♀♀, I/o/2, 21.IX.1950, G. Demoulin, 838, feuilles

des arbres en galerie humide; 1 ♀, Napokomweli, 18.X.1950, G. DEMOULIN, 895, « Ndiwili », bas-fond marécageux; 1 ♀, II/gd/4, 17.III.1951, H. DE SAEGER, 1412, savane arborescente; 1 ♀, II/gd/10, 25.VIII.1951, J. VERSCHUREN, 2316, cours marécageux de la Nambirima; 3 ♂♂, Gangala-na-Bodio, 14.XI.1949, H. DE SAEGER, 1; 1 ♂, 3 ♀♀, Gangala-na-Bodio, 14.XI.1949, H. DE SAEGER, 2; 1 ♂, I/o/2, 23.III.1950, H. DE SAEGER, 324, rivière, eau courante; 7 ♂♂, I/b/2", 29.III.1950, G. DEMOULIN, 364, mare permanente ensoleilleé; 5 ♂♂, I/a/4, 31.III.1950, G. DEMOULIN, 365, marais et eau d'infiltration sous galerie forestière; 1 ♂, I/o/3, 31.III.1950, H. DE SAEGER, 352, partie herbeuse en bordure de galerie forestière humide; 2 ♂♂, I/b/3, 14.IV.1950, H. DE SAEGER, 412, lisière galerie forestière sèche; 1 ♂, source de la Duru, 12.IV.1950, H. DE SAEGER, 409, lisière de galerie forestière; 3 ♂♂, I/a/1, 1.V.1950, G. DEMOULIN, 469, savane arborescente, sur les graminées.

Palpopleura lucia f. **portia** (DRURY).

Adults :

1 ♀, Nagero/9, 31.III.1954, C. NEBAY, 13, 1 ♀, Nagero/3, 29.V.1954, C. NEBAY, 50; 1 ♀, Nagero/2, 29.IX.1954,, C. NEBAY, 74; 1 ♂, Nagero/12, 27.VIII.1954, C. NEBAY, 80; 4 ♀♀, Nagero/2, 29.IX.1954, C. NEBAY, 85; 1 ♂, 1 ♀, Nagero/12, 27.X.1954, C. NEBAY, 97; 1 ♂, I/o/2, 24.IV.1950, H. DE SAEGER, 458, savane arborescente; 1 ♂, Akam, 3.V.1950, G. DEMOULIN, 473, galerie de la Mogbwamu, sur les feuilles; 7 ♂♂, Km 17, 10.V.1950, H. DE SAEGER, 509, affleurement rocheux sous arbustes; 3 ♂♂, Akam, 19.V.1950, H. DE SAEGER, 529, galerie forestière sèche; 1 ♀, I/b/1, 1.IX.1950, G. DEMOULIN, 797, « Ndiwili »; 1 ♂, Napokomweli, 15.IX.1950, G. DEMOULIN, 823, feuilles des arbres autour du « Ndiwili »; 1 ♂, I/b/2, 27.IX.1950, G. DEMOULIN, 848, « Ndiwili », strate herbacée; 2 ♂♂, I/o/1, 5.X.1950, G. DEMOULIN, 869, savane arbustive de pente; 1 ♂, 1 ♀, Napokomweli, 13.X.1950, G. DEMOULIN, 888, « Ndiwili », strate herbacée; 1 ♂, 1 ♀, I/o/1, 16.X.1950, G. DEMOULIN, 891, savane de pente; 1 ♂, 1 ♀, Napokomweli, 18.X.1950, G. DEMOULIN, 895, « Ndiwili », bas-fond marécageux; 21 ♂♂, 8 ♀♀, I/o/2, 30.X.1950, H. DE SAEGER, 915, lisière de la galerie forestière; 1 ♂, source Wilibadi, 28.II.1951, J. VERSCHUREN, 1209, nid de Macroscélide; 1 ♂, II/gc/11, 31.III.1951, H. DE SAEGER, 1474. marécage; 1 ♂, II/gg/8, 10.IV.1951, H. DE SAEGER, 1514, galerie forestière; 1 ♀, II/hc/9, 10, 20.IV.1951, J. VERSCHUREN, 1593, volant au-dessus de la galerie, très dégradée; 1 ♀, II/gd/4, 6.VII.1951, 2055, H. DE SAEGER, savane herbeuse à ligneux rares; 1 ♂, II/ge/13s, 12.VII.1951, H. DE SAEGER, 2059, mare aux abords marécageux; 6 ♂♂, 3 ♀♀, II/gc/8, 27.VII.1951, H. DE SAEGER, 2158, fond marécageux dénudé; 2 ♂♂, II/ec/4, 30.VII.1951, H. DE SAEGER, 2172, savane herbeuse brûlée; 1 ♀, II/lf/9, 21.VIII.1951, H. DE SAEGER. 2299, galerie à boisement très dégradé; 1 ♀, II/gd/4, 29.VIII.1951, H. DE SAEGER, 2333, savane herbeuse brûlée; 3 ♂♂, 12 ♀♀, PpK/72, 27.VIII.1951, H. DE SAEGER, 2338, galerie forestière dense; 1 ♂, II/gd/10, 25.VIII.1951, J. VERSCHUREN, 2316, cours marécageux de la Nambirima; 4 ♂♂, 1 ♀, II/gd/10, 1.IX 1951, H. DE SAEGER, 2345, rivière à cours dénudé; 2 ♂♂, 1 ♀, II/fd/17, 8.IX.1951, H. DE SAEGER, 2392, galerie forestière dégradée; 1 ♀, II/gd/10, 10.IX.1951, H. DE SAEGER, 2397, végétation paludicole; 7 ♂♂, 2 ♀♀, II/id/10, 11.IX.1951, H. DE SAEGER, 2419, rivière à cours dénudé; 2 ♂♂, II/fd/11, 18.IX.1951, H. DE SAEGER, 2447, expansion marécageuse; 1 ♂, II/fc/17, 25.IX.1951, H. DE SAEGER, 2471, galerie forestière claire; 5 ♂♂, 2 ♀♀, II/gc/9, 28.IX.1951, H. DE SAEGER, 2481, rivière marécageuse; 1 ♂, II/gd/4, 24.IX.1951, H. DE SAEGER, 2482, savane herbeuse; 8 ♂♂, 2 ♀♀, II/gd/10, 24.IX.1951, H. DE SAEGER, 2483, vallon marécageux; 1 ♂, II/je/8, 15.X.1951, H. DE SAEGER, 2600, tête de source à boisement dégradé; 11 ♂♂, 5 ♀♀, PpK/52/g, 16.X.1951, H. DE SAEGER, 2614, galerie forestière très dégradée; 1 ♂, II/gc/9, 20.X.1951, H. DE SAEGER, 2651, petite galerie forestière à boisement dégradé; 11 ♂♂, 1 ♀, II/PpK/55/d/9, 28.X.1951, H. DE SAEGER, 2679, galerie forestière; 1 ♂, II/fd/6, 29.X.1951, H. DE SAEGER, 2697, savane herbeuse de bas-fond marécageux; 3 ♂♂, 1 ♀, II/id/8, 31.X.1951, H. DE SAEGER, 2708, tête de source à boisement dégradé; 2 ♂♂,

II/gd/9, 8.XI.1951, H. De Saeger, 2740, fond marécageux; 2 ♂♂, II/me/10, 12.XI.1951, H. De Saeger, 2744, cours d'eau à découvert; 11 ♂♂, 6 ♀♀, II id/8, 17.XI.1951, H. De Saeger, 2765, tête de source; 2 ♂♂, II/hc/8, 12.XII.1951, H. De Saeger, 2902, tête de source à boisement dégradé; 1 ♂, 1 ♀, Mabanga/9″′, 19.II.1952, H. De Saeger, 3134, rivière marécageuse à cours dénudé; 3 ♂♂, 1 ♀, PFSK/17/d/10, 26.III.1952, H. De Saeger, 3224, rivière à cours dénudé; 3 ♂♂, 7 ♀♀, II/gd/11, 10.IV.1952, H. De Saeger, 3314, petit vallon marécageux à découvert; 5 ♂♂, 1 ♀, II/gc/11, 29.IV.1952, H. De Saeger, 3399, ruisseau dans un vallon dénudé; 1 ♂, 5 ♀♀, II/fd/17, 7.V.1952, H. De Saeger, 3431, galerie forestière (massif); 1 ♂, 2 ♀♀, Iso, II/11, 16.VI.1952, H. De Saeger, 3642, vallon à Herbacées paludicoles; 15 ♂♂, 10 ♀♀, PpK/9/g 9, 10.IX.1952. H. De Saeger, 4044, galerie forestière très dégradée; 2 ♂♂, 2 ♀♀, Gangala-na-Bodio, 14.XI.1949, H. De Saeger, 1; 5 ♂♂, 1 ♀, Gangala-na-Bodio, 14.XI.1949, H. De Saeger, 2; 1 ♂, I/a/2, 16.XII.1949, G. Demoulin, 131, mare; 1 ♂, I/a/2, 26.XII 1949, G. Demoulin, 143, boue au fond d'une mare; 1 ♂, I/a/2, 2.I.1950, G. Demoulin, 146, mare: 2 ♂♂, 1 ♀, I b/3, 8.II.1950, H. De Saeger, 204, galerie forestière; 5 ♂♂, I/a/4, 31.III.1950, G. Demoulin, 365, marais et eau d'infiltration sous galerie forestière; 1 ♂, I/a/1, 26.XII.1949, H. De Saeger, 71, savane herbeuse; 1 ♂, source de la Duru, 12.IV.1950, H. De Saeger, 409, lisière de galerie forestière; 1 ♀, I/a/1, 17.VII.1950, G. Demoulin, 703, savane de pente.

Palpopleura spp.

Larvae :

19, I/a/2, 26.XII.1949, n° 143, G. Demoulin, boue au fond d'une mare; 11, I/a/2, 2.I.1950, n° 146, G. Demoulin, mare; 1, I/b/2′, 4.I.1950, n° 149, G. Demoulin, ruisseau et abords; 4, I/a/2, 16.I.1950, n° 159, G. Demoulin, mare; 5, I a/2, 30.I.1950, n° 240, G. Demoulin, crique temporaire et plantes riveraines; 1, I/c/4, 15.III.1950, n° 354, G. Demoulin, ruisseau à eau courante, en aval d'une galerie forestière; 9, I c/2‴, 17.III.1950, n° 355, G. Demoulin, empreintes d'éléphants pleines d'eau; 5, I a/2, 8.V.1950, n° 494, G. Demoulin, crique temporaire, sur les plantes immergées; 8, I/b/3′, 17.V.1950, n° 523, G. Demoulin, crique permanente à Cypéracées; 198, I a/2, 22.V.1950, n° 539, G. Demoulin, mare temporaire; 12, I/b 2″, 24.V.1950, n° 550, G. Demoulin, mares permanentes; 4, Nalugwambala, 2.VI.1950, n° 574, G. Demoulin, ruisseau sous galerie; 5, Km 31, 31.V.1950, n° 567, G. Demoulin, marais à *Cyperus*; 29, I/a/M, 7.VI.1950, n° 584, G. Demoulin, mare sub-permanente semi-ombragée; 12, I/b 3″, 9.VI.1950, n° 587, G. Demoulin, mare permanente; 71, I/a/2, 12.VI.1950, n° 592, G. Demoulin, crique temporaire; 10, I/b/3″, 16.VI.1950, n° 608, G. Demoulin, mare permanente; 15, Akam, 23.VI.1950, n° 631, G. Demoulin, rivière; 2, I o 2, 30.VI.1950, n° 654, G. Demoulin, rivière, anses calmes; 1, I/o 2, 1.VII.1950, n° 660, G. Demoulin, rivière sur barres granitiques; 8, I/a/2-I/a/3, 10.VII.1950, n° 682, G. Demoulin, crique temporaire en crue; 1, I o/2, 19.VII.1950, n° 708, G. Demoulin, ruisseau sous galerie; 7, I/a/3 amont, 24.VII.1950, n° 716, G. Demoulin, bras mort en communication avec Aka; 1, I b 1, 28.VII.1950, n° 735, J. Martin, bas-fond inondé « Ndiwili »; 9, I/o/2, 7.VIII.1950, n° 746, G. Demoulin, rivière sur barres granitiques; 3, I/b/3′, 9.VIII.1950, n° 748, G. Demoulin, rivière Mogbwamu; 10, I/o/1, 10.VIII.1950, n° 753, G. Demoulin, savane arbustive en deça de I/o/2; 50, I/o/2, 11.VIII.1950, n° 754, G. Demoulin, rivière en crue, sur barres granitiques; 5, I/a/1, 14.VIII.1950, n° 755, G. Demoulin, « Ndiwili » inondé; 6, I b/3′, 18.VIII.1950, n° 759, G. Demoulin, rivière à courant rapide; 2, I b/2″, 16.VIII.1950, n° 761, G. Demoulin, « Ndiwili » marécageux; 33, I/o/2, 21.VIII.1950, n° 765, G. Demoulin, ruisseau sous galerie; 11, I/c/2‴, 23.VIII.1950, n° 767, G. Demoulin, marais sur affleurement rocheux; 12, Napokomweli, 24.VIII.1950, n° 773, G. Demoulin, « Ndiwili »; 4, I/o/2, 25.VIII.1950, n° 788, G. Demoulin, ruisseau sous galerie; 11, Napokomweli, 31.VIII.1950, n° 796, G. Demoulin, « Ndiwili »; 1, I/b/1, 1.IX.1950, n° 798, G. Demoulin, « Ndiwili »; 12, I/o/2, 4.IX.1950, n° 793, G. Demoulin, rivière sur barres granitiques;

1, I/b/1, 6.IX.1950, n° 803, G. DEMOULIN, « Ndiwili »; 31?, Napokomweli, 6.IX.1950, n° 805, G. DEMOULIN, « Ndiwili »; 5, Napokomweli, 14.IX.1950, n° 820, G. DEMOULIN, « Ndiwili »; 34, Napokomweli, 15.IX.1950, n° 821, G. DEMOULIN, « Ndiwili »; 6, Napokomweli, 22.IX.1950, n° 834, G. DEMOULIN, « Ndiwili »; 2, Nalugwambala, 25.IX.1950, n° 839, G. DEMOULIN, rivière sous galerie; 2, I/b/2, 27.IX.1950, n° 847, G. DEMOULIN, « Ndiwili »; 14, Napokomweli, 4.X.1950, n° 870, G. DEMOULIN, « Ndiwili »; 38, I/o/2, 12.X.1950, n° 886, G. DEMOULIN, rivière affluent de I/o/2, cours inférieur; 3, I/o/2, 11.X.1950, n° 887, G. DEMOULIN, rivière sur barres granitiques; 14, Napokomweli, 17.X.1950, n° 892, G. DEMOULIN, « Ndiwili », bas-fond marécageux; 16, Napokomweli, 18.X.1950, n° 893, G. DEMOULIN, « Ndiwili », bas-fond marécageux; 2, II/gc/13^{s}, 4.V.1951, n° 1656, H. DE SAEGER, petite mare permanente; 1, II/gd/11, 14.VII.1951, n° 2084, H. DE SAEGER, galerie forestière très claire; 5, II/gc/13^{s}, 3.IX.1951, n° 2359, H. DE SAEGER, mare permanente; 4, II/hd/17, 13.X.1951, n° 2595, H. DE SAEGER, mare alimentée par les crues de la Garamba; 1, II/gd/5, 23.V.1951, P. SCHOEMAKER, 1857.

Chalcostephia flavifrons KIRBY.

Adults :

1 ♀, Nagero/2, 29.IX.1954, C. NEBAY, 87; 1 ♀, Nagero/12, 27.X.1954, C. NEBAY, 89; 2 ♂♂, 1 ♀, I/a/3, 8.V.1950, H. DE SAEGER, 497, bord de galerie sèche, taillis et strate herbeuse; 1 ♀, Akam, 19.V.1950, H. DE SAEGER, 529, galerie forestière sèche; 1 ♂, 2 ♀♀, I/o/1, 5.X.1950, 869, savane arbustive de pente; 1 ♂, PpK/52/g, 16.X.1951, H. DE SAEGER, 2614, galerie forestière très dégradée; 1 ♂, II/bc/9, 19.III.1951, J. VERSCHUREN, 1425, herbes courtes; 3 ♂♂, 2 ♀♀, II/fd/17, 5.IX.1951, H. DE SAEGER, 2379, galerie forestière dense; 2 ♂♂, II/fc/17, 25.IX.1951, H. DE SAEGER, 2471, galerie forestière claire; 1 ♀, II/gc/9, 28.IX.1951, H. DE SAEGER, 2481, rivière marécageuse; 1 ♀, II/PpK/55/d/9, 28.X.1951, H. DE SAEGER, 2679, galerie forestière; 1 ♂, 1 ♀, II/fd/6, 28.XI.1951, H. DE SAEGER, 2817, savane herbeuse; 1 ♀, II/hc/8, 12.XII.1951, H. DE SAEGER, 2902, savane herbeuse; 2 ♀♀, II/gc/8, 30.IV.1952, H. DE SAEGER, 3402, tête de source faiblement boisée; 1 ♂, II/fd/7″, 5.V.1952, H. DE SAEGER, 3424, abords marécageux; 7 ♀♀, II/fd/18, 6.V.1952, H. DE SAEGER, 3429, berges sablonneuses; 12 ♂♂, 37 ♀♀, II/fd/17, 7.V.1952, H. DE SAEGER, 3431, galerie forestière (massif); 1 ♀, II/id/9, 11.VII.1952, H. DE SAEGER, 3773, ruisseau à galerie très dégradée; 1 ♀, Iso/III, 26.IX.1952, H. DE SAEGER, 4100, forêt d'*Isoberlinia;* 1 ♂, II/fd/6, 23.VIII.1951, H. DE SAEGER, 2290, savane herbeuse de fond; 1 ♂, II/lf/9, 21.VIII.1951, H. DE SAEGER, 2299, galerie à boisement très dégradé; 1 ♂, I/b/2″, 29.III.1950, G. DEMOULIN, 364, mare permanente ensoleillée; 1 ♂, I/a/4, 31.III.1950, G. DEMOULIN, 365, marais et eau d'infiltration sous galerie forestière.

[**Porpax bipunctus** spec. nov.].

Adults :

Holotype (Mamfe), 3 paratypes ♂♂ (Mamfe, Ikom and Ntaali Mountain, Mamfe); allotype (Ikom) and paratype ♀ (Ikom), all collected February, 1958, leg. PINHEY, in National Museum, Bulawayo.

[**Porpax asperipes** KARSCH].

Adults :

Series from Ketta, Etoumbi, Mambili and Fort Rousset Forests, Moyen Congo; ♂ from Bemboma, Congo; ♀ from Carnot; series of ♂♂ Ikelenge, N. Rhodesia.

[**Porpax risi** PINHEY].

Adults :

Series from Ikelenge (N. Rhodesia) and Vumba (S. Rhodesia), in open swamps.

Porpax garambensis spec. nov.

Adult :

Holotype ♂, nommé d'après la localité Garamba, II/fd/17, 7.V.1952, H. DE SAEGER, 3431, galerie forestière.

Hemistigma albipuncta (RAMBUR).

Adults :

1 ♀, II/gc/7, 14 IV.1951, H. DE SAEGER, 1537, prairie; 4 ♂♂, II/fc/14, 14.IX.1951, H. DE SAEGER, 2408, végétation paludicole; 7 ♂♂, 8 ♀♀, II/fc/17, 25.IX.1951, H. DE SAEGER, 2471, galerie forestière claire; 1 ♂, 1 ♀, II/fc/6, 10.X.1951, H. DE SAEGER, 2575, savane herbeuse; 1 ♂, 4 ♀♀, II/fc/8, 12.X.1951, H. DE SAEGER, 2653, berges-alluvions sablonneuses récentes; 1 ♀, II/fc/6, 30.X.1951, H. DE SAEGER, 2699, savane de bas-fond marécageux; 3 ♂♂, II/fd/7", 5.V.1952, H. DE SAEGER, 3424, abords marécageux; 2 ♀♀, II/gc/17, 14.VIII.1952, H. DE SAEGER, 3940, savane herbeuse paludicole; 2 ♀♀, II/fc/17, 25.IX.1951, H. DE SAEGER, 2471, galerie forestière claire.

Acisoma trifidum KIRBY.

Adult :

1 ♂, Km 17, 10.V.1950, H. DE SAEGER, 509, affleurement rocheux sous arbustes.

Acisoma panorpoides ascalaphoides (RAMBUR).

Adults :

1 ♂, II/gc/11, 31.III.1951, H. DE SAEGER, 1474, marécage; 1 ♀, II/gg/8, 10.IV.1951, H. DE SAEGER, 1514, galerie forestière; 2 ♂♂, II/gc/7, 14.IV.1951, H. DE SAEGER, 1537, prairie; 1 ♀, II/gc/11, 4.V.1951, H. DE SAEGER, 1645, végétation paludicole; 1 ♂, II/gd/10, 27.VI.1951, J. VERSCHUREN, 1987, volant au-dessus d'un cours d'eau marécageux; 1 ♂, 3 ♀♀, II/ge/13s, 12.VII.1951, H. DE SAEGER, 2059, mare aux abords marécageux; 2 ♂♂, 1 ♀, II/gd/8, 12.VII.1951, H. DE SAEGER, 2061, tête de source faiblement arborée; 1 ♂, II/gc/8, 27.VII.1951, H. DE SAEGER, 2158, fond marécageux dénudé; 3 ♂♂, 1 ♀, II/gd/8, 14.VIII.1951, H. DE SAEGER, 2250, tête de source peu arborée; 1 ♀, II/gd/11, 23.VIII.1951, H. DE SAEGER, 2314, expansion marécageuse; 5 ♂♂, 2 ♀♀, II/gd/10, 25.VIII.1951, J. VERSCHUREN, 2316, cours marécageux de la Nambirima; 1 ♂, 2 ♀♀, II/fd/6, 23.VIII.1951, H. DE SAEGER, 2290, savane herbeuse de fond; 1 ♂, II/gd/10, 1.IX.1951, H. DE SAEGER, 2345, rivière à cours dénudé; 1 ♂, 2 ♀♀, II/fd/11, 18.IX.1951, H. DE SAEGER, 2447, expansion marécageuse; 2 ♂♂, 1 ♀, II/fc/17, 25.IX.1951, H. DE SAEGER, 2471, galerie forestière claire; 2 ♂♂, 1 ♀, II/fd/15, 2.X.1951, H. DE SAEGER, 2485, plaine marécageuse; 1 ♀, II/fd/15, 22.IX.1951, H. DE SAEGER, 2464, marécage à végétation dense; 1 ♂, 1 ♀, PpK/52/g, 16.X.1951, H. DE SAEGER, 2614, galerie forestière très dégradée; 1 ♂, II/gc/9, 28.IX.1951, H. DE SAEGER, 2481, rivière marécageuse; 1 ♀, II/fc/18, 12.X.1951, H. DE SAEGER, 2653, berges-alluvions sablonneuses récentes; 1 ♂, II/PpK/55/d/9, 28.X.1951, H. DE SAEGER,

2679, galerie forestière; 2 ♂♂, 1 ♀, II/fd/6, 29.X.1951, H. De Saeger, 2697, savane herbeuse de bas-fond marécageux; 1 ♀, II/gc/13s, 21.XI.1951, H. De Saeger, 2774, mare permanente; 2 ♀♀, Ndelele/K/117/11, 19.III.1952, H. De Saeger, 3196, marais partiellement asséché; 1 ♂, II/gd/11, 10.IV.1952, H De Saeger, 3314, petit vallon marécageux à découvert; 1 ♂, II/gc/11, 29.IV.1952, H. De Saeger, 3399, ruisseau dans un vallon dénudé; 1 ♀, II/fd/7″, 5.V.1952, H. De Saeger, 3424, abords marécageux; 1 ♀, II/hd/6, 30.V.1952, H. De Saeger, 3567, savane herbeuse de fond de vallée; 4 ♂♂, II/gd/11, 24.VI.1952, H. De Saeger, 3701, vallon marécageux; 1 ♂, II/gc/17, 14.VIII.1952, H. De Saeger, 3940, savane herbeuse paludicole.

Acisoma spp.

Larvae :

1, I/b/3″, 16.VI.1950, n° 614, G. Demoulin, mare sous *Irvingia*; 1, I/b/2″, 28.VI.1950, n° 646, G. Demoulin, mares permanentes; 2, II/gd/11, 16.III.1951, n° 1411, H. De Saeger, expansion marécageuse de la Nambirima.

Diplacodes exilis Ris.

Adults :

1 ♂, I/b/1, 6.IX.1950, G. Demoulin, 804, savane herbeuse autour du « Ndiwili »; 1 ♂, PpK/14/g/7″, 4.IV.1952, H. De Saeger, 3289, périphérie d'une prairie; 3 ♂♂, 4 ♀♀, II/hd/6, 30.V.1952, H. De Saeger, 3567, savane herbeuse de fond de vallée; 1 ♂, I/a/2, 2.I.1950, G. Demoulin, 146, mare.

Diplacodes lefebvrei (Rambur).

Adults :

1 ♂, Nagero/2, 29.IX.1954, C. Nebay, 87; 1 ♀, II/fc/6, 10.X.1951, H. De Saeger, 2575, savane herbeuse; 1 ♀, II/fc/18, 12.X.1951, H. De Saeger, 2653, berges-alluvions sablonneuses récentes.

Crocothemis divisa Baumann.

Adults :

4 ♂♂, 3 ♀♀, Km 17, 10.V.1950, no. 509, H. De Saeger, at rocky outcrop below shrubs.

Crocothemis erythraea (Brullé).

Adults :

1 ♀, II/fd/17, 31.VIII.1951, H. De Saeger, 2341, galerie forestière claire; 1 ♂, II/fd/15, 22.IX.1951, H. De Saeger, 2464, marécage à végétation dense; 8 ♂♂, 7 ♀♀, II/fc/17, 25 IX.1951, H. De Saeger, 2471, galerie forestière claire; 1 ♀, II/fc/6, 10.X.1951, H. De Saeger, 2575, savane herbeuse; 1 ♂, II/fc/18, 22.X.1951, H. De Saeger, 2653, berges-alluvions sablonneuses récentes; 1 ♀, II/gd/4, 7.XI.1951, H. De Saeger, 2731, savane herbeuse; 1 ♂, II/fd/6, 28.XI.1951. H. De Saeger, 2817, savane herbeuse; 1 ♀, II/fc/14, 10.XII.1951, 2881, H. De Saeger, mare temporaire en cours de dessiccation; 5 ♂♂, Ndelele/K/117/11, 19.III.1952, H. De Saeger, 3196, marais partiellement asséché; 1 ♀, II/fd/7″, 5.V.1952, H. De Saeger, 3424, abords marécageux; 5 ♂♂, I/o/2, 23.III.1950, H. De Saeger, 324, rivière, eau courante; 1 ♂, 1 ♀, I/o/2, 22.III.1950, G. Demoulin, 359, rapides et anses calmes de la rivière; 1 ♂, I/b/2″, 29.III.1950, G. Demoulin, 364, mare permanente ensoleillée.

Crocothemis sanguinolenta (BURMEISTER).

Adults :

1 ♀, Km 17, 10.V.1950, H. DE SAEGER, 509, affleurement rocheux sous arbustes; 1 ♂, I/a/1, 26.VI.1950, G. DEMOULIN, 639, savane arborescente; 1 ♀, Napokomweli, 14.IX.1950, G. DEMOULIN, 823, feuilles des arbres autour du « Ndiwili »; 1 ♂, I/o/1, 5.X.1950, G. DEMOULIN, 869, savane arbustive de pente; 1 ♂, Napokomweli, 13.X.1950, G. DEMOULIN, 888, « Ndiwili », strate herbacée; 3 ♂♂, 1 ♀, I/o/1, 16.X.1950, G. DEMOULIN, 891, savane de pente; 1 ♂, I/o/2, 26.X.1950, H. DE SAEGER, 904, rivière marécageuse; 1 ♂, I/o/2, 30.X.1950, H. DE SAEGER, 915, lisière de galerie forestière; 1 ♀, II/gd/4, 17.III.1951, H. DE SAEGER, 1412, savane arborescente; 1 ♂, II/gd/11, 26.V.1951, H. DE SAEGER, 1806, fond marécageux (Nambirima); 1 ♀, II/fd/15, 2.X.1951, H. DE SAEGER, 2485, plaine marécageuse; 2 ♀♀, II/fd/6, 29.X.1951, H. DE SAEGER, 2697, savane herbeuse de bas-fond marécageux; 1 ♂, Mabanga/9'', 19 II.1952, H. DE SAEGER, 3134, rivière marécageuse à cours dénudé; 1 ♂, Dedegwa, 17.V.1952, H. DE SAEGER, 3468, galerie forestière dense (type guinéen); 1 ♀, PFSK/20/9, 14.VI.1952, H. DE SAEGER, 3653, prairie à Herbacées paludicoles; 1 ♂, 1 ♀, PpK/9/g/9, 10 IX.1952, H DE SAEGER, 4044, galerie forestière très dégradée; 1 ♂, I/c/1, 24.II.1950, G. DEMOULIN, 217, savane arborescente, jeunes pousses endroits brûlés; 4 ♂♂, I/o/2, 23.III.1950. H. DE SAEGER, 324, rivière, eau courante; 1 ♂, I/o/2, 22.III.1950, G. DEMOULIN, 359, rapides et anses calmes de la rivière.

Crocothemis spp.

Larvae :

1, I/o/2, 12.V.1950, n° 512, G. DEMOULIN, rivières rapides, sur roches; ?5, Napokomweli, 12.V.1950, n° 513, G, DEMOULIN, marais à Cypéracées; ?1, I/b/2, 14.VI.1950, n° 603, G. DEMOULIN, eau courante et mares permanentes; ?1, I/o/2, 1.VIII.1950, n° 742, G. DEMOULIN, cuvette sur barre granitique pleine d'eau; ?4, I/o/2, 7.VIII.1950, n° 746, G. DEMOULIN, rivière sur barres granitiques; ?1, II/fc/12, 28.IV.1951, n° 1677, P. SCHOEMAKER.

Bradinopyga strachani (KIRBY).

Adults :

1 ♂, I/b/3, 14.IV.1950, H. DE SAEGER, 412, lisière galerie forestière sèche; 1 ♀, I/o/1, 4.IX.1950, G. DEMOULIN, 800, savane herbeuse; 1 ♀, Ndelele/R, 24 IX.1952, H. DE SAEGER, 4075, éboulis rocheux.

Larvae :

1, I/o/2, 23.III.1950, n° 324, H. DE SAEGER, rivière, eau courante; 9, I/o/2, 26.VII.1950, n° 723, G. DEMOULIN, rivière sur barres granitiques; 8, I/o/2, 25.VII.1950, n° 721, G. DEMOULIN, ruisseau sous galerie; 73, I/o/2, 1.VIII.1950, n° 742, G. DEMOULIN, cuvette sur barre granitique pleine d'eau; 71, I/o/2, 7.VIII.1950, n° 746, G. DEMOULIN, rivière sur barres granitiques; 40, I/o/2, 10.VIII.1950, n° 752, G. DEMOULIN, ruisseau sous galerie; 6, I/o/2, 4.IX.1950, n° 799, G. DEMOULIN, rivière sur barres granitiques; 2, I/o/2, 11.IX.1950, n° 811, G. DEMOULIN, rivière sur barres granitiques; 25, I/o/2, 20.IX.1950, n° 833, G. DEMOULIN, rivière sur barres granitiques; 49, I/o/2, 3.X.1950, n° 865, G. DEMOULIN, rivière sur barres granitiques; 5, I/o/2, 11.X.1950, n° 887, G. DEMOULIN, rivière sur barres granitiques.

Brachythemis lacustris (KIRBY).

Adult :

1 ♀, II/fc/18, 28.III.1951, H. DE SAEGER, 1461, anse sablonneuse de la Garamba.

Brachythemis leucosticta (BURMEISTER).

Adult :

1 ♂, II/hd/4, 23.III.1951, H. DE SAEGER, 1444, savane herbeuse brûlée.

Larva :

1, Napokomweli, 19.IX.1950, n° 830, G. DEMOULIN, « Ndiwili ».

Brachythemis wilsoni PINHEY.

Adults :

1 ♂, II/gd/4, 17.III.1951, H. DE SAEGER, 1412, savane arborescente; 1 ♂, II/fd/15, 24.V.1951, H. DE SAEGER, 1798, plaine marécageuse; 3 ♂♂, 1 ♀, Ndelele/K/117/11, 19.III.1952, H. DE SAEGER, 3196, marais partiellement asséché; 1 ♂, Iso, II/11, 16.VI.1952, H. DE SAEGER, 3642, vallon à Herbacées paludicoles; 1 ♂, II/gd/4, 25.VIII.1952, H. DE SAEGER, 3978, végétation herbeuse basse; 1 ♂, 1 ♀, II/lf/9, 21.VIII.1951, H. DE SAEGER, 2299, galerie à boisement très dégradé; 1 ♀, II/gc/11, 30.III.1951, H. DE SAEGER, 1474, marécage; 1 ♂, II/gd/8, 12.VII.1951, H. DE SAEGER, 2061, tête de source faiblement arborée; 1 ♂, II/gd/7″, 20.IX.1951, H. DE SAEGER, 2448, frange de Graminées ripicoles; 1 ♀, no label; 1 ♂, I/b/2″, 29.III.1950, G. DEMOULIN, 364, mare permanente ensoleillée; 1 ♂, I/b/3, 8.II.1950, H. DE SAEGER, 204, galerie forestière.

Larva :

2, I/a/4″, 5.VI.1950, n° 579, G. DEMOULIN, galerie forestière bras mort.

Brachythemis spp.

Larvae :

1, I/b/2″, 29.III.1950, n° 364, G. DEMOULIN, mare permanente ensoleillée; 3, I/a/2, 17.VII.1950, n° 702, G. DEMOULIN, mare temporaire; 25, II/gd/11, 14.VII.1951, n° 2084, H. DE SAEGER, galerie forestière très claire; 1, II/gc/11, 11.VII.1951, n° 2114, H. DE SAEGER, expansion marécageuse.

Philonomon luminans (KARSCH).

Adults :

1 ♀, II/fc/17, 25.IX.1951, H. DE SAEGER, 2471, galerie forestière claire; 2 ♂♂, PpK/14/g/14s, 4.IV.1952, H. DE SAEGER, 3284, mare temporaire.

Larvae :

2, I/a/2, 19.XII.1949, n° 136, G. DEMOULIN, mare; faune de boue du fond; 2, I/b/3″, 16.VI.1950, n° 614, G. DEMOULIN, mare sous *Irvingia*; 8, I/a/2, 17.VII.1950, n° 702, G. DEMOULIN, mare temporaire; 2, I/b/1, 6.IX.1950, n° 803, G. DEMOULIN, « Ndiwili »; 5, Km 17, 25.IX.1950, n° 843, G. DEMOULIN, cuvettes rocheuses; 1, I/b/2, 27.IX.1950, n° 847, G. DEMOULIN, « Ndiwili ».

Limnetothemis erythra spec. nov.

Adult :

Holotype ♂ seul, II/fd/15, 24.V.1951, H. De Saeger, 1798, plaine marécageuse.

? Larva :

1, I/o/3 aval, 29.IX.1950, n° 852, G. Demoulin, « Ndiwili » isolé.

Trithemis annulata (Beauvois).

Adult :

1 ♂, Nagero/18, 11.IV.1952, H. De Saeger, 3320, berges de la Dungu.

Trithemis arteriosa (Burmeister).

Adults :

11 ♂♂, 1 ♀, I/o/2, 6.X.1950, G. Demoulin, 874, sur les fleurs et inflorescences au bord de l'eau; 25 ♂♂, 4 ♀♀, I/o/1, 11.X 1950, G. Demoulin, 884, savane herbeuse le long de I/o/2; 18 ♂♂, 3 ♀♀, Napokomweli, 13.X.1950, G. Demoulin, 888, « Ndiwili », strate herbacée; 15 ♂♂, I/o/1, 16.X.1950, G. Demoulin, 891, savane de pente; 22 ♂♂, I/o/2, 26.X.1950, H. De Saeger, 904, rivière marécageuse; 2 ♂♂, 1 ♀, II/hc/10, 28.II.1951, H. De Saeger, 1299, végétation ripicole; 8 ♂♂, II/gd/11, 26.V.1951, H. De Saeger, 1806, fond marécageux (Nambirima); 2 ♂♂, II/gd/11, 12 III.1951, H. De Saeger, 1361, prairie à Cypéracées; 3 ♂♂, II/fd/6, 23.VIII.1951, H. De Saeger, 2290, savane herbeuse de fond; 1 ♂, II/fd/17, 31.VIII,1951, H. De Saeger, 2341, galerie forestière claire; 1 ♂, II/id/10, 11.IX.1951, 2419, H. De Saeger, rivière à cours dénudé; 1 ♂, II/fc/6, 10.X.1951, H. De Saeger, 2575, savane herbeuse; 1 ♀, II/id/8, 17.XI.1951, H. De Saeger, 2765, tête de source; 1 ♂, II/gd/11, 19.IV.1952, H. De Saeger, 3314, petit vallon marécageux à découvert; 2 ♂♂, Nagero/18, 11.IV.1952, H. De Saeger, 3320, berges de la Dungu; 1 ♂, II/gc/11, 29.IV.1952, H. De Saeger, 3399, ruisseau dans un vallon dénudé; 1 ♀, II/gc/11, 31.III.1951, H. De Saeger, 1474, marécage; 11 ♂♂, 1 ♀, Nagero/12, 27.X.1954, C. Nebay, 86; 3 ♂♂, 1 ♀, Nagero/2, 29.IX.1954, C. Nebay, 85; 2 ♂♂, 1 ♀, Nagero/2, 29.IX.1954, C. Nebay, 87; 5 ♂♂, 1 ♀, I/o/1, 5.X.1950, G. Demoulin, 869, savane arbustive de pente; 1 ♂, Km 17, 10.V.1950, H. De Saeger, 509, affleurement rocheux sous arbustes; 1 ♂, II/gd/8, 12.VII.1951, H. De Saeger, 2061, tête de source faiblement arborée; 1 ♂, 1 ♀, II/ec/4, 30.VII.1951, H. De Saeger, 2172, savane herbeuse brûlée; 6 ♂♂, 1 ♀, Ndelele/R, 22.IX 1952, H. De Saeger, 4068, savane herbeuse à *Loudetia simplex*; 1 ♂, Ndelele/R, 24.IX.1952, H. De Saeger, 4075, éboulis rocheux; 7 ♂♂, I/o/2, 23.III.1950, H. De Saeger, 324, rivière, eau courante; 1 ♂, I/a/3-b/3, 24.III.1950, H. De Saeger, 327, petite galerie forestière sèche; 5 ♂♂, I/o/2, 22.III.1950, G. Demoulin, 359, rapides et anses calmes de la rivière; 1 ♂, I/b/2", 29.III.1950, G. Demoulin, 364, mare permanente ensoleillée; 2 ♂♂, I/b/3, 14.IV.1950, H. De Saeger, 412, lisière galerie forestière sèche.

Trithemis dichroa Karsch.

Adults :

10 ♂♂, 1 ♀, I/o/1, 5.X.1950, G. Demoulin, 869, savane arbustive de pente; 13 ♂♂, I/o/2, 6.X 1950, G. Demoulin, 874, sur les fleurs et inflorescences au bord de l'eau; 8 ♂♂, I/o/1, 11.X.1950, G. Demoulin, 884, savane herbeuse le long de I/o/2; 10 ♂♂, Napokomweli, 13.X.1950, G. Demoulin, 888, « Ndiwili », strate herbacée; 5 ♂♂, 1 ♀, I/o/1, 16.X.1950, G. Demoulin, 891, savane de pente; 13 ♂♂, 1 ♀, I/o/2, 26 X.1950, H. De

SAEGER, 904, rivière marécageuse; 1 ♂, II/gd/10, 1.IX.1951, H. DE SAEGER, 2345, rivière à cours dénudé; 1 ♂, I/o, XI.1949, G. DEMOULIN, 85; 2 ♀♀, I/o/2, 22.III.1950, G. DEMOULIN, 359, rapides et anses calmes de la rivière.

Trithemis kalula KIRBY.

Adult :

1 ♂, Km 17, 10.V.1950, H. DE SAEGER, 509, affleurement rocheux sous arbustes.

Trithemis monardi imitata PINHEY.

Adults :

3 ♂♂, I/o/2, 22.III.1950, G. DEMOULIN, 359, rapides et anses calmes de la rivière; 1 ♂, I/a/4, 31.III.1950, G. DEMOULIN, 365, marais et eau d'infiltration sous galerie forestière; 2 ♂♂, I/b/3, 14.IV.1950, H. DE SAEGER, 412, lisière galerie forestière sèche; 1 ♀, I/b/2, 28.XII.1949, H. DE SAEGER, 74, galerie forestière sur sol feuilles mortes; 18 ♂♂, I/o/2, 23.III.1950, H. DE SAEGER, 324, rivière, eau courante; 1 ♂, II/hc/10, 28.II.1951, H. DE SAEGER, 1299, végétation ripicole; 1 ♂, II/fc/17, 1.III.1951, H. DE SAEGER, 1305, galerie forestière; 1 ♂, II/gd/11, 10.IV.1952, H. DE SAEGER, 3314, petit vallon marécageux à découvert.

Trithemis stictica (BURMEISTER).

Adults :

8 ♂♂, I/o/2, 23.III.1950, H. DE SAEGER, 324, rivière, eau courante; 1 ♀, I/a/3-b/3, 24.III.1950, H. DE SAEGER, 327, petite galerie forestière sèche; 2 ♂♂, I/o/2, 22.III.1950, G. DEMOULIN, 359, rapides et anses calmes de la rivière; 1 ♂, I/b/3, 14.IV.1950, H. DE SAEGER, 412, lisière galerie forestière sèche.

Trithemis leptosoma spec. nov.

Adults :

1 ♀, I/o/1, 16.X.1950, G. DEMOULIN, 891, savane de pente; 3 ♂♂, I/o/2, 30.X.1950, H. DE SAEGER, 915, lisière de galerie forestière.

Trithemis spp.

Larvae :

12, Gangala-na-Bodio, n° 27, H. DE SAEGER: 1, I/c/2‴, 24.II.1950, n° 259, G. DEMOULIN, marécage sur affleurement rocheux; 8, I/o/2, 23.III.1950, n° 324, H. DE SAEGER, rivière, eau courante; 7, I/b/2″, 29.III.1950, n° 364, G. DEMOULIN, mare permanente ensoleillée; 105, I/a/4′, 15.V.1950, n° 522, G. DEMOULIN, bras mort sous galerie, dans les feuilles mortes; 1, I/o/2, 29.V.1950, n° 565, G. DEMOULIN, ruisseau sous galerie; 28, I/a/4″, 5.VI.1950, n° 579, G. DEMOULIN, galerie forestière bras mort; 9, Kpaika, 20.VI.1950, n° 618, G. DEMOULIN, mares dans lit secondaire sous galerie; 3, I/o/2, 14.VII.1950, n° 699, G. DEMOULIN, ruisseau sous galerie; 3, Km 17, 20.VII.1950, n° 711, G. DEMOULIN, tête de source sous galerie; 30, I/a/3, 24.VII.1950, n° 716, G. DEMOULIN, bras mort en communication avec Aka; 1, I/o/2, 26.VII.1950, n° 723, G. DEMOULIN, rivière sur barres granitiques; 3, I/b/3′, 18.VIII.1950, n° 759, G. DEMOULIN, rivière à courant rapide; 2, I/b/1, 1.IX.1950, n° 798, G. DEMOULIN, « Ndiwili »; 1, I/b/1, 6.IX.1950, n° 803, G. DEMOULIN, « Ndiwili »; 1, I/o/2, 11.IX.1950, n° 811, G. DEMOULIN, rivière sur barres granitiques; 3, I/a/1, 18.IX.1950, n° 828, G. DEMOULIN, « Ndiwili »; 3, Napokomweli,

4.X.1950, n° 870, G. DEMOULIN, « Ndiwili »; 4, I/o/2, 12.X.1950, n° 886, G. DEMOULIN, rivière affluent de I/o/2, cours inférieur; 2, I/o/2, 11.X.1950, n° 887, G. DEMOULIN, rivière sur barres granitiques; 5, Napokomweli, 13.X.1950, n° 889, G. DEMOULIN, « Ndiwili », bas-fond marécageux; 1, I/o/2, 30.X.1950, n° 922, H. DE SAEGER, rivière à eau courante; 2, II/fc/12, 28.IV.1951, n° 1677, P. SCHOEMAKER; 2, PpK/8/9, 15.VII.1952, n° 3795, H. DE SAEGER, petite mare.

? Tritheminae.

Larvae :

3, I/a/4', 15.V.1950, n° 522, G. DEMOULIN, bras mort sous galerie, dans les feuilles mortes; 8, I/a/M, 7.VI.1950, n° 584, G. DEMOULIN, mare sub-permanente semi-ombragée; 6, I/o/2, 7.VIII.1950, n° 746, G. DEMOULIN, rivière sur barres granitiques.

Zygonyx torrida (KIRBY).

Adult :

1 ♂, I/o/2, 23.III.1950, H. DE SAEGER, 324, rivière, eau courante.

Larvae :

2, I/o/2, 11.IX.1950, n° 811, G. DEMOULIN, rivière sur barres granitiques.

Zygonyx natalensis (MARTIN).

Larvae :

?1, I/o/2, 30.VIII.1950, n° 791, G. DEMOULIN, ruisseau sous galerie; 6, I/o/2, 11.IX.1950, n° 811, G. DEMOULIN, rivière sur barres granitiques.

Zygonyx spp.

Larvae :

1, Bagbele, n° 27, H. DE SAEGER (émergé); 1, I/b/2", 1.III.1950, n° 294, G. DEMOULIN, mare permanente; 1, I/o/2, 21.VII.1950, n° 714, G. DEMOULIN, rivière sur barres granitiques; 16, I/o/2, 26.VII.1950, n° 723, G. DEMOULIN, rivière sur barres granitiques; 19, I/o/2, 28.VII.1950, n° 732, G. DEMOULIN, rivière sur barres granitiques; 15, I/o 2, 7.VIII.1950, n° 746, G. DEMOULIN, rivière sur barres granitiques; 1, I o/2, 30.VIII.1950, n° 791, G. DEMOULIN, ruisseau sous galerie; 91, I/o/2, 4.IX.1950, n° 799, G. DEMOULIN, rivière sur barres granitiques; 19, I/o/2, 8.IX.1950, n° 810, G. DEMOULIN, ruisseau sous galerie; 42, I/o/2, 6.X.1950, n° 872, G. DEMOULIN, rivière sur barres granitiques; 17, I/o/2, 12.X.1950, n° 886, G. DEMOULIN, rivière affluent de I o/2, cours inférieur; 4, I/o 2, 11.X.1950, n° 887, G. DEMOULIN, rivière sur barres granitiques; 3, I'o/2, 30.X.1950, n° 922, H. DE SAEGER, rivière à eau courante.

Rhyothemis fenestrina (RAMBUR).

Adult :

1 ♀, I/o/3, 31.III.1950, H. DE SAEGER, 352, partie herbeuse en bordure de galerie forestière humide.

Rhyothemis semihyalina (DESJARDINS).

Adult :

1 ♀, II/id/10, 11.IX.1951, H. DE SAEGER, 2419. rivière à cours dénudé.

Tholymis tillarga (FABRICIUS).

Adults :

1 ♀, Nagero/2, 29.IX.1954, C. NEBAY, 87; 1 ♀, Nagero/12, 27.X.1954, C. NEBAY, 88; 1 ♀, Nagero/12, 27.X.1954, C. NEBAY, 97; 1 ♀, I/o/1, 9.XI.1950, H. DE SAEGER, 944, savane arborescente; 1 ♀, Napokomweli, 18 X.1950, G. DEMOULIN, 895, « Ndiwili », bas-fond marécageux; 3 ♂♂, II/fd/6, 23.VIII.1951, H. DE SAEGER, 2290, savane herbeuse de fond; 1 ♀, II/fd/17, 5.IX.1951, H. DE SAEGER, 2379, galerie forestière dense; 1 ♀, II/gd/10, 24.IX.1951, H. DE SAEGER, 2483, vallon marécageux; 1 ♀, II/fd/6, 29.X.1951, H. DE SAEGER. 2697, savane herbeuse de bas-fond marécageux.

Pantala flavescens (FABRICIUS).

Adults :

4 ♂♂, 6 ♀♀, Nagero/12, 27.X.1954, C. NEBAY, 86; 1 ♂, 2 ♀♀, Km 17, 10.V.1950, H. DE SAEGER, 509, affleurement rocheux sous arbustes; 4 ♂♂, 1 ♀, I/o, 12.IX.1950, G. DEMOULIN. 814, au-dessus d'une pelouse rase; 2 ♂♂, 2 ♀♀, I/o/2, 20.IX.1950, G. DEMOULIN, 832, savane herbeuse, de part et d'autre de la rivière; 1 ♂, I/o/1, 11.X.1950, G. DEMOULIN, 884, savane herbeuse le long de I/o/2; 5 ♂♂, 3 ♀♀, I/o, 16.IX.1950, G. DEMOULIN, 826, au-dessus d'une pelouse rase: 1 ♂, 1 ♀, Napokomweli, 13.X.1950, G. DEMOULIN, 888, « Ndiwili », strate herbacée; 1 ♂, 1 ♀, I/o/1, 16.X.1950, G. DEMOULIN, 891, savane de pente; 5 ♂♂, 2 ♀♀, I/o/1, 10 XI.1950, H. DE SAEGER, 946, savane; 1 ♀, II/gc/6, 8.VI.1951, H. DE SAEGER, 1877, savane à Graminées paludicoles; 6 ♂♂, 17 ♀♀, II/hd/4, 14.VI.1951, H. DE SAEGER, 1907, savane herbeuse brûlée; 2 ♂♂, II/gd/4, 20.VI.1951, H. DE SAEGER, 2008, savane herbeuse; 1 ♀, II/hd/4, 17.VII.1951, H. DE SAEGER, 2107, savane herbeuse non brûlée; 1 ♀, II/fd/17, 31.VIII 1951, H. DE SAEGER, 2341, galerie forestière claire; 1 ♂, II/fc/17, 25.IX.1951. H. DE SAEGER, 2471, galerie forestière claire; 5 ♂♂, 7 ♀♀, II/gd/4, 7.XI.1951, H. DE SAEGER, 2731, savane herbeuse; 1 ♂, PpK/14/g/14s, 4.IV.1952, H. DE SAEGER, 3284, mare temporaire; 1 ♂, II/gd/11, 10.IV.1952, H. DE SAEGER. 3314, petit vallon marécageux à découvert; 1 ♂, no label.

Larvae :

2, I/a/2, 16.I.1950, n° 159, G. DEMOULIN, mare; 33, I/a/2, 24.IV.1950, n° 462, G. DEMOULIN, crique temporairement inondée; 4, I/a/2, 8.V.1950, n° 494, G. DEMOULIN, crique temporaire, sur les plantes immergées; 37, I/a/2, 22.V.1950, n° 539, G. DEMOULIN, mare temporaire; 25, I/a/2, 12.VI.1950, n° 592, G. DEMOULIN, crique temporaire; 7, I/b/3″, 16.VI.1950, n° 608, G. DEMOULIN, mare permanente; 55, Akam, 23.VI.1950, n° 631, G. DEMOULIN, rivière; 38, I/a/2, 26.VI.1950, n° 637, G. DEMOULIN, crique temporaire; 5, I/a/2-I/a/3, 10.VII.1950, n° 682, G. DEMOULIN, crique temporaire en crue; 81, I/a/2, 17.VII.1950, n° 702, G. DEMOULIN, mare temporaire; 28, I/b/1, 28.VII.1950, n° 735, J. MARTIN, bas-fond inondé « Ndiwili »; 1, I/b/3′, 9.VIII.1950, n° 748, G. DEMOULIN, rivière Mogbwamu; 99, I/a/1, 14.VIII.1950, n° 755, G. DEMOULIN, « Ndiwili » inondé; 17, I/b/3′, 18.VIII.1950, n° 759, G. DEMOULIN, rivière à courant rapide; 38, I/b/2ˢ, 16.VIII.1950, n° 761, G. DEMOULIN, « Ndiwili » marécageux; 179, I/b/1, 1.IX.1950, n° 798, G. DEMOULIN, « Ndiwili »; 131, I/b/1, 6.IX.1950, n° 803, G. DEMOULIN, « Ndiwili »; 1, Napokomweli, 14.IX.1950, n° 820, G. DEMOULIN, « Ndiwili »; 1, Napokomweli,

15.IX.1950, n° 821, G. DEMOULIN, « Ndiwili »; 5, I/a/1, 18.IX.1950, n° 828, G. DEMOULIN, « Ndiwili »; 1, Napokomweli, 19.IX.1950, n° 830, G. DEMOULIN, « Ndiwili »; 1, Km 17, 25.IX.1950, n° 843, G. DEMOULIN, cuvettes rocheuses; 129, I/b/2, 27.IX.1950, n° 847, G. DEMOULIN, « Ndiwili »; 3, Napokomweli, 4.X.1950, n° 870, G. DEMOULIN, « Ndiwili »; 11, Napokomweli, 13.X.1950, n° 889, G. DEMOULIN, « Ndiwili », bas-fond marécageux; 4, Napokomweli, 17.X.1950, n° 892, G. DEMOULIN, « Ndiwili », bas-fond marécageux; 3, Napokomweli, 18.X.1950, n° 893, G. DEMOULIN, « Ndiwili », bas-fond marécageux; 2, II/gd/14[s], 29.V.1952, n° 1886, H. DE SAEGER, plancton.

Trapezostigma basilare (BEAUVOIS).

Adults :

1 ♂, Nagero/9, 31.III.1954, C. NEBAY, 7; 1 ♂, Nagero/12, 27.X.1954, C. NEBAY, 86; 1 ♂, I/a/3, 8.V.1950, H. DE SAEGER, 497, bord de galerie sèche, taillis et strate herbeuse; 1 ♂, 1 ♀, I/o/1, 10.XI.1950, H. DE SAEGER, 946, savane; 1 ♂, II/fd/17, 9.VII.1951, H. DE SAEGER, 2056, strate herbeuse; 1 ♂, II/gd/4, 7.XI.1951, H. DE SAEGER, 2731, savane herbeuse.

Larva :

1, Napokomweli, 22.IX.1950, n° 834, G. DEMOULIN, « Ndiwili ».

Urothemis assignata (SELYS).

Adults :

1 ♂, II/fc/6, 3.X.1951, H. DE SAEGER, 2512, savane herbeuse; 3 ♂♂, Ndelele/K/117/11, 19.III.1952, H. DE SAEGER, 3196, marais partiellement asséché.

Urothemis edwardsi (SELYS).

Adults :

1 ♂, I/o/2, 23.III.1950, H. DE SAEGER, 324, rivière, eau courante; 2 ♂♂, II/fd/15, 24.V.1951, H. DE SAEGER, 1798, plaine marécageuse; 1 ♂, II/gc/4, 1.VI.1951, H. DE SAEGER, 1855, savane herbeuse à ligneux rares; 2 ♀♀, II/fc/17, 25.IX.1951, H. DE SAEGER, 2471, galerie forestière claire.

Family LIBELLULIDAE

Larvae incogn. :

2, I/a/2, 16.XII.1949, n° 131, G. DEMOULIN, mare; 2, I/a/2, 19.XII.1949, n° 136, G. DEMOULIN, mare, faune de la boue de fond; 1, I/c/2, 23.XII.1949, n° 142, G. DEMOULIN, ruisseau; 4, I/a/2, 26.XII.1949, n° 143, G. DEMOULIN, boue au fond d'une mare; 1, I/c/2″, 30.XII.1949, n° 145, G. DEMOULIN, ruisseau; 1, I/c/4, 13.I.1950, n° 158, G. DEMOULIN, ruisseau sans galerie; 2, I/c/2‴, 6.I.1950, n° 150, G. DEMOULIN, mare et marécage; 1, I/b/2″, 25.I.1950, n° 232, G. DEMOULIN, mare permanente et ses abords marécageux; 2, I/a/2, 30.I.1950, n° 240, G. DEMOULIN, crique temporaire et plantes riveraines; 4, I/a/2, 6.II.1950, n° 247, G. DEMOULIN, empreintes d'éléphants remplies d'eau; 1, I/b/3′, 8.II.1950, n° 249, G. DEMOULIN, rivière Mogbwamu; 2, I/b/3′, 15.II.1950, n° 253, G. DEMOULIN, rivière; 1, I/c/2″, 3.III.1950, n° 295, G. DEMOULIN, ruisseau sous galerie

forestière; 4, I/a/4, 6.III.1950, n° 297, G. DEMOULIN, bras mort de l'Aka, sous galerie forestière; 1, I/b/3″, 8.III.1950, n° 298, G. DEMOULIN, crique à eaux permanentes; 3, I/a/M, 13.III.1950, n° 319, H. DE SAEGER, mare stagnante; 3, I/o/2, 23.III.1950, n° 324, H. DE SAEGER, rivière, eau courante; 6, I/a/4, 20.III.1950, n° 358, G. DEMOULIN, bras mort de la rivière; 4, I/o/2, 22.III.1950, n° 359, G. DEMOULIN, rapides et anses calmes de la rivière; 2, I/a/3, 24.III.1950, n° 360, G. DEMOULIN, rapides et anses calmes de la rivière Aka; 3, I/a/4, 27.III.1950, n° 363, G. DEMOULIN, bras mort de l'Aka, sous galerie forestière; 10, I/b/2″, 29.III.1950, n° 364, G. DEMOULIN, mare permanente ensoleillée; 4, I/a/4″, 17.IV.1950, n° 460, G. DEMOULIN, bras mort sous galerie; 1, Akam, 21.IV.1950, n° 461, G. DEMOULIN, rapides et anses calmes des rivières Aka et Mogbwamu; 20, I/b/2″, 26.IV.1950, n° 468, G. DEMOULIN, mare permanente ensoleillée; 3, I/a/4″, 5.V.1950, n° 482, G. DEMOULIN, bras mort sous galerie, dans les feuilles immergées; 1, I/a/2, 8.V.1950, n° 494, G. DEMOULIN, crique temporaire, sur les plantes immergées; 1, I/o/2, 12.V.1950, n° 512, G. DEMOULIN, rivière à rapides, sur roches; 6, Napokomweli, 12.V.1950, n° 513, G. DEMOULIN, marais à Cypéracées; 7, I/a/2, 22.V.1950, n° 539, G. DEMOULIN, mare temporaire; 4, Nalugwambala, 2.VI.1950, n° 574, G. DEMOULIN, ruisseau sous galerie; 1, I/b/2, 9.VI.1950, n° 589, G. DEMOULIN, ruisseau; 17, I/b/3″, 16.VI.1950, n° 608, G. DEMOULIN, mare permanente; 4, I/b/3″, 16.VI.1950, n° 614, G. DEMOULIN, mare sous *Irvingia*; 1, I/o/2, 19.VI.1950, n° 616, G. DEMOULIN, ruisseau sous galerie; 25, I/a/2, 26.VI.1950, n° 637, G. DEMOULIN, crique temporaire; 1, I/o/2, 30.VI.1950, n° 654, G. DEMOULIN, rivière, anses calmes; 2, I/o/2, 1.VII.1950, n° 660, G. DEMOULIN, rivière sur barres granitiques; 6, I/o/2, 1.VII.1950, n° 661, G. DEMOULIN, anses calmes; 1, Km 17, 6.VII.1950, n° 671, G. DEMOULIN, tête de source; 2, Nalugwambala, 6.VII.1950, n° 674, G. DEMOULIN, ruisseau sous galerie; 2, I/o/2, 12.VII.1950, n° 689, G. DEMOULIN, ruisseau sous galerie; 54, I/a/2, 17.VII.1950, n° 702, G. DEMOULIN, mare temporaire; 1, I/o/2, 19.VII.1950, n° 708, G. DEMOULIN, ruisseau sous galerie; 2, I/a/3 amont, 24.VII.1950, n° 716, G. DEMOULIN, bras mort en communication avec Aka; 4, Akam, 28.VII.1950, n° 728, G. DEMOULIN, Mogbwamu; 3, I/o/2, 28.VII.1950, n° 732, G. DEMOULIN, rivière sur barres granitiques; 1, I/b/1, 28.VII.1950, n° 735, J. MARTIN, bas-fond inondé « Ndiwili »; 1, Km 17, 2.VIII.1950, n° 740, G. DEMOULIN, eau stagnante sous galerie de tête de source; 3, I/o/2, 1.VIII.1950, n° 742, G. DEMOULIN, cuvette sur barre granitique pleine d'eau; 1, I/a/4″, 4.VIII.1950, n° 743, G. DEMOULIN, bras mort sous galerie; 3, I/o/2, 7.VIII.1950, n° 746, G. DEMOULIN, rivière sur barres granitiques; 1, Napokomweli, 8.VIII.1950, n° 747, G. DEMOULIN, « Ndiwili », dans l'eau; 1, I/o/2, 9.VIII.1950, n° 750, G. DEMOULIN, ruisseau sous galerie; 1, I/o/2, 10.VIII.1950, n° 752, G. DEMOULIN, ruisseau sous galerie; 16, I/o/2, 11.VIII.1950, n° 754, G. DEMOULIN, rivière en crue, sur barres granitiques; 1, I/a/1, 14.VIII.1950, n° 755, G. DEMOULIN, « Ndiwili » inondé; 21, Napokomweli, 18.VIII.1950, n° 762, G. DEMOULIN, « Ndiwili »; 3, I/o/2, 21.VIII.1950, n° 765, G. DEMOULIN, ruisseau sous galerie; 4, I/o/2, 25.VIII.1950, n° 788, G. DEMOULIN, ruisseau sous galerie; 14, I/o/2, 30.VIII.1950, n° 791, G. DEMOULIN, ruisseau sous galerie; 7, Napokomweli, 31.VIII.1950, n° 796, G. DEMOULIN, « Ndiwili »; 4, I/b/1, 1.IX.1950, n° 798, G. DEMOULIN, « Ndiwili »; 9, I/o/2, 4.IX.1950, n° 799, G. DEMOULIN, rivière sur barres granitiques; 1, I/o/2, 8.IX.1950, n° 810, G. DEMOULIN, ruisseau sous galerie; 106, I/o/2, 11.IX.1950, n° 811, G. DEMOULIN, rivière sur barres granitiques; 2, I/o/2, 13.IX.1950, n° 816, G. DEMOULIN, rivière sous galerie; 6, Napokomweli, 14.IX.1950, n° 820, G. DEMOULIN, « Ndiwili »; 2, I/a/1, 18.IX.1950, n° 828, G. DEMOULIN, « Ndiwili »; 10, Napokomweli, 19.IX.1950, n° 830, G. DEMOULIN, « Ndiwili »; 3, Napokomweli, 22.IX.1950, n° 834, G. DEMOULIN, « Ndiwili »; 2, Km 17, 25.IX.1950, n° 842, G. DEMOULIN, tête de source; 1, Km 17, 25.IX.1950, n° 843, G. DEMOULIN, cuvettes rocheuses; 17, I/b/2, 27.IX.1950, n° 847, G. DEMOULIN, « Ndiwili »; 12, I/o/3 aval, 29.IX.1950, n° 852, G. DEMOULIN, « Ndiwili » isolé; 19, Napokomweli, 4.X.1950, n° 870, G. DEMOULIN, « Ndiwili »; 3, I/o/2, 6.X.1950, n° 872, G. DEMOULIN, rivière sur barres granitiques; 29, I/a/1, 9.X.1950, n° 876, G. DEMOULIN, « Ndiwili » (incl. *Tritheminae*); 4, I/o/2, 12.X.1950, n° 886, G. DEMOULIN,

rivière affluent de I/o/2, cours inférieur; 2, I/o/2, 11.X.1950, n° 887, G. DEMOULIN, rivière sur barres granitiques; 40. Napokomweli, 13.X.1950, n° 889, G. DEMOULIN, « Ndiwili », bas-fond marécageux; 1, I/o/2, 16.X.1950, n° 890, G. DEMOULIN, rivière sous galerie; 4, Napokomweli, 18.X.1950, n° 893, G. DEMOULIN, « Ndiwili », bas-fond marécageux; 4, I/o/2, 30.X.1950, n° 922, H. DE SAEGER, rivière à eau courante; 1, II/e/14, 18.I.1951, n° 1104, P. SCHOEMAKER, mare temporaire; 7, II/ec 4, 16.III.1951, n° 1401, H. DE SAEGER, expansion marécageuse; 3, II/fd/11, 28.III.1951, n° 1466, H. DE SAEGER, marécage; 3, II/gc/13[s], 4.V.1951, n° 1656, H. DE SAEGER, petite mare permanente; 12, II/fc/12, 28.IV.1951, n° 1677, P. SCHOEMAKER; 2, II/gc/11, 18.IV.1951, n° 1678, P. SCHOEMAKER; 13, II/gc/13[s], 21.VI.1951, n° 1953, H. DE SAEGER, mare permanente; 3, II/fd/10, 26.VI.1951, n° 2023, H. DE SAEGER, rivière à cours dénudé, eau courante; 4, II/ge/13[s], 11.VII.1951, n° 2058, H. DE SAEGER, mare aux abords marécageux; 4, II/gd 11, 18.VII.1951, n° 2106, H. DE SAEGER, fond marécageux; 14, II/gc/11, 11.VII.1951, n° 2114, H. DE SAEGER, expansion marécageuse; 8, II/gd/11, 22.X.1951, n° 2655, H. DE SAEGER, fond marécageux; 3, II/id/11, 2.III.1951, H. DE SAEGER, n° 369; 1, II/fe/13, 15.VI.1951, H. DE SAEGER, n° 688, plancton; 1, II/id/8, 1.VI.1952, H. DE SAEGER, n° 694; 1, II gd 14[s], 1.VIII.1951, H. DE SAEGER, n° 955, plancton; 2, II/fd/12, 10.X.1951, inv. 1289; 1, II/fd/12, 10.X.1951, H. DE SAEGER, n° 1290; 3, Ndelele/K 17/135, 19.III.1952, n° 1685; 5, Iso/II/14[s], 16.VI.1952, H. DE SAEGER, n° 1867, plancton; 1, II/gd/11, 24.VI.1952, inv. 1874; 2, II/gc/14, 26.VI.1952, H. DE SAEGER, n° 1878; 1, II/gc/4, 26.VI.1952, inv. 1878/1; 5, II gd 14[s], 29.V.1952, H. DE SAEGER, n° 1886, plancton; 1, II/fd/11, 3.VI.1952, inv. 1882/2; 2, II gd 11, 4.VI.1952, H. DE SAEGER, 1891, plancton; 4, II/fd/14, 28.VI.1952, inv. 1899/1; 1, II gc 14[s], 8.VII.1952, n° 1924; 1, Utukuru/14[s], 22.VII.1952, H. DE SAEGER, 1934, plancton; 1, Pali/11, 23.VII.1952, inv. 1941; 3, Utukuru/10, 26.VII.1952, inv. 1945; 3, Ndelele R, 31.VII.1952, H. DE SAEGER, inv. 1952; 1, II/gd/9, 7.VIII.1952, inv. 1980; 3, II/gd/8, 28.VIII.1952, H. DE SAEGER, 2046; 1, riv. Dungu, 29.VII.1952, H. DE SAEGER, 2048; 3, II gd/14[s], 2.IX.1952, inv. 2055.

Suborder ANISOPTERA

Larvae indet.:

3, II/gd/19[s], 22.VIII.1952, n° 3036, H. DE SAEGER.

Order ODONATA

Larvae indet.:

1, I/z/3[s], 17.V.1950, n° 749, H. DE SAEGER; 2, II/fd 12, 10.X.1951, n° 1290, H. DE SAEGER.

⁂

N° 249 : air, temp. 28°5; eau, pH 6,4, temp. 20°7 — 10 h.

N° 250 : temp. 27°2, pH 7,3, eau couverte d'algues; temp. 29°7, pH 6,4, pas d'algues.

N° 298 : temp. 23°8, pH 6,4 — 9 h.

N° 300 : temp. 27°5, pH 8,4 — 10 h 30.

N° 356 : temp. 24°8, pH 5,6 — 10 h 30, sous ombrage.

N° 357 : temp. 25°6, pH 7,0 — 14 h, eau de pluie récente.

N° 359 : temp. 21°8, pH 7,2 — 9 h.

N° 364 : temp. 23°5, pH 6,2 — 9 h.

N° 367 : temp. air, 27°8 — 10 h, 27°9 — 12 h, 27°5 — 14 h; temp. eau, 26°8 — 10 h, 27°6 — 12 h, 27°4 — 14 h; pH 6.4 — petite dépression remplie d'eau, sous couvert.

N° 478 : temp. 22°8, pH 6,1 — eau courante — 9 h.

N° 494 : temp. 25°9, pH 6,7 — 9 h.

N° 523 : temp. 22°7, pH 6,0 — 9 h 30.

N° 550 : temp. 20°6, pH 6,1 — 9 h; temp. 28°, pH 6,2 — 14 h — pas d'ombrage.

N° 567 : temp. 23°, pH 5,7 — 11 h.

N° 574 : temp. 23°8, pH 6,1 — 8 h 45.

N° 584 : temp. ombre 23°8, soleil 26°8, pH 5,9 — 9 h

N° 592 : temp. 25°5, pH 5,9 — 8 h 30.

N° 603 : temp. 23°, pH 6,0 — 10 h.

N° 608 : temp. 30°, pH 6,1 — 11 h.

N° 619 : temp. 23°9, pH 6,1 — 13 h 30.

N° 631 : temp. 25°, pH 6,5 — 9 h — rivière sans ombrage.

N° 637 : temp. 28°, pH 5,8 — 10 h.

N° 654 : temp. 23°4, pH 6,1 — 10 h.

N° 702 : temp. 25°, pH 5,7 — 10 h 30.

N° 708 : temp. 22°, pH 6,1 — 9 h 30.

N° 723 : temp. 21°4, pH 6,1 — 9 h.

N° 728 : temp. 23°3, pH 6,2 — 9 h.

N° 743 : temp. 23°5, pH 6,1 — 9 h 30.

N° 816 : temp. 22°1, pH 6,2 — 9 h.

N° 839 : temp. 28°1, pH 6,3 — 14 h 30.

N° 843 : temp. 35°, pH 6,3 — 16 h — sans ombrage.

N° 2106 : pH 6,5.

N° 2114 : pH 5,8.

N° 2185 : pH 6,4.

N° 2284 : temp. 22°, pH 6,0 — 10 h.

N° 3464 : temp. air 25°, temp. eau 23°5, pH 6,0 — 10 h, sous ombrage très dense.

N° 3568 : temp. air 25°; temp. eau 23°, pH 6,6 — 14 h, pas d'ombrage.

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INDEX TO GENERA AND SPECIES