Mission A. Villiers au Togo et au Dahomey

V. *Odonata* and *Neuroptera*

by F. C. FRASER.

Some 300 specimens of Odonata and Neuroptera were collected by Dr A. Villiers during his mission to Togo and Dahomey, West Africa. Collections were made at the localities mentioned below and, as indicated, in many different kinds of habitat including in or on the borders of forest, along the course and borders of rivers, by waterfalls or over marshland : both day and night collecting was carried out and during the latter, a lamp was employed at times. Although *Odonata* are rarely attracted by this latter, *Neuroptera* frequently come to light in the tropics.

I. DAHOMEY

List of localities.

A. Porto-Novo. — 4th and 6th to 12th May, 1950. Quelques petites récoltes de hasard le soir à la lumière.

B. Abomey. — 6th and 7th and 13th to 19th May, 1950. Récoltes dans la savane guinéenne. Chasses à la lampe.

C. Zagnanado. — 8th to 13th May, 1950. Récoltes dans la savane guinéenne, dans la forêt galerie des bords de l'Ouémé, sur les bancs de sable bordant le fleuve et dans le cours même du fleuve.

D. Kétou. — 10th May, 1950. Chasse dans la forêt à mi-chemin entre l'Ouémé et Kétou.

E. Natitingou. — 10th and 11th June, 1950. Chasse dans la savane soudanienne et pêche dans un marigot.

F. Perma. — 11th June, 1950. Pêche dans la rivière.

G. Koussokoingou (Atakora, 600-700 m. d'alt.) 12th to 21st June, 1950. Chasse dans la savane soudanienne, dans les étroites forêts galeries bordant les ruisseaux et dans les ruisseaux eux-mêmes. Chasse à la lampe.

H. Boukombé (Atakora, 400 m. d'alt.) 14th to 16th June, 1950. Chasse dans la savane soudanienne. Chasse à la lampe.

I. Tanguieta (Atakora, 500 m. d'alt.) 22nd to 25th June, 1950. Chasse dans un petit îlot forestier, à la proximité de la cascade.

J. Koutiacou (Atakora, 600 m. d'alt.) 22nd to 25th June, 1950. Chasse dans la savane soudanienne et dans les forêts bordant les ruisseaux. Chasse à la lampe.

K. Tanougou (Atakora, 500 m. d'alt.) 25th June, 1950. Pêche dans les vasques des cascades.

L. Bassila. — 26th June to 3rd July, 1950. Chasses dans les savanes et îlots forestiers guinéens. Pêche dans les marigots. Chasse à la lampe.

(To avoid constant repetition, the capital letter preceding the localities and dates is quoted for each species in place of the full data).

Order ODONATA.

Suborder *ZYGOPTERA*.

Agriocnemis maclachlani SELYS.

(C) A single female of this local, rather than rare, species which is wide spread through tropical Africa. Species of the genus occur in colonies but on account of their small size, inconspicuous appearance and their low flight amongst grass and reeds, they are apt to be overlooked. I have specimens from Uganda.

Ceriagrion glabrum (BURMEISTER).

(L) 14 males and a female : (C) I male. One of the most common and most widely spread species of Odonata in Africa : extends to Madagascar and Mauritius. Females usually hide up in adjacent scrub which accounts for the great preponderance of the male sex : the brighter and more conspicuous colouring of the latter also calls attention to themselves.

Ceriagrion rubellocerinum FRASER.

(L) 13 males of this fine species which was first discovered in 1945 on the Ivory Coast, by Dr R. Paulian : since then Dr Villiers has taken it at Diala, Liberia, so that its distribution is extended not only widely along the coast but also far inland, where, judging from the numbers taken, its zoo-centre seems to lie.

Pseudagrion melanicterum SELYS.

(G) 1 male : (L) 4 males. A common species widely distributed throughout tropical Africa.

Pseudagrion furcigerum (RAMBUR).

(G) I male : (K) 1 male. The *terra typica* is unknown but was probably from Senegal. The present determinations have been made from figures given by Ris of the type in the Selysian collection.

Pseudagrion basicornu NIELSEN *in* RIS.

(D) 1 male with the colours fairly well preserved. (C) 1 female which, from its markings, I feel sure belongs to this species. Very few specimens of this rare species are known and the female has not been fixed for certain. The present female agrees with the description of one described by Dr Schmidt in the Museum Tervueren but which he was somewhat doubtful about. The species is distributed from the Ivory Coast to French Guinea and the Belgian Congo.

Pseudagrion acaciae FÖRSTER.

(J) 1 male which I had at first thought was a new species but which, from the shape of the anal appendages, I now feel sure is a melanotic variety of *acaciae* Forster. This species is almost entirely distributed in East and South Africa but I have seen a specimen from Sikasso. The present male differs from type by the normal brick-red face a dark mahoghany red, the postocular spots almost blotted out by black; the sides and underneath of prothorax and thorax chalky-white with pruinescence, the extensor surface of the tibiae and tarsi bright reddish ochreous instead of pale brown, the pterostigma blood-red instead of light reddish brown

and finally segments 8 to 10 chalky-white on dorsum, as seen in many species of *Lestes*. The size and venation and the shape of the anal appendages do not differ in any way from type. The usual U-shaped black mark on the dorsum of segment 2 is replaced by a broad black band, the sides only being bluish.

Pseudagrion sjöstedti FÖRSTER.

(K) One pair of this handsome species, the male easily distinguished by its short, simple anal appendages. The species has been reported from the Cameroons, Soudan, Sikasso, Mashonoland, Belgian Congo and the Gold Coast, but in spite of its wide distribution must be considered a rare insect. The inferior anal appendages, shaped like a monk's-hood, will suffice to distinguish it from all other african species.

Pseudagrion kersteni GERSTAECKER.

(K) 2 males determined by the shape of the anal appendages : a not uncommon species in some tropical african areas.

Mesocnemis singularis KARSCH.

(K) 5 males of this singular species in which the arculus lies at a level between the two antenodals, a basal position which appears to place it far ahead of all other species in the Coenagriidae. It has a wide distribution. It is probably most nearly related to the american Argias.

Chlorocypha curta (SELYS).

(K) A single male of this very local species : not differing in any way from type.

Chlorocypha cyanifrons (SELYS).

(G. I place here with some doubt, a single female which has the head markings of *cyanifrons* SELYS with the yellow somewhat more extensive than in the male, which is to be expected in the more primitive female sex.

Phaon iridipennis (BURMEISTER).

(G) 1 male. (L) 17 males and 1 female. (D) 5 males. Of all these 24 specimens only 5 males have a pterostigma present in all wings, whilst the rest show no signs whatever. These forms, which possess a pterostigma, must be considered as more primitive than those without since only a few species of Zygoptera are known which have lost this organ. The distribution is wide throughout tropical africa and it is significant that in Madagascar, which is the extreme limit of distribution, only one example has been found so far which possesses a pterostigma. *P. rasoherinae* FRASER, a purely Madagascarian species and an obvious offshoot of *iridipennis*, has no pterostigma, which is just what we would expect.

Umma mesostigma (SELYS).

(L) A single female only : not differing in any way from type.

Suborder *ANISOPTERA.*

Allorhizucha klingi KARSCH.

(L) 3 males and 3 females. This archaic species is distributed along the West coast from Nigeria to the Gaboon and inland to Togo (the *terra-typica*) and the Belgian Congo. It apparently occurs in small colonies like the rest of the group.

Hadrothemis infesta (KARSCH).

(L) 1 male. This is a westerly extension of the hitherto known distribution in Nigeria and the Cameroons. The species is not a common one.

Orthetrum brachiale (PALISOT DE BEAUVOIS).

(C) 3 males, (D) 2 females, (E) 1 female, (G) 3 males and (L) 3 males and 2 females. A common and wide-spread species, extending to Mauritius from whence came the type. Specimens which I possess from the latter island, do not differ from the present examples.

Orthetrum stemmale capense CALVERT.

(G) One pair : a widely distributed species in tropical and subtropical Africa.

Orthetrum microstigma RIS.

(G) I place here with some doubt an atypical male in which there is only I row of cells between Rs and Rspl and in which the genitalia does not quite agree with Ris' figure. All other characters are correct as is also the very small pterostigma.

Orthetrum chrysostigma chrysostigma (BURMEISTER).

(G) One pair, true to type. A species with a wide distribution throughout tropical Africa and with a subspecies (*luzonicum*) which extends to as far as the Philippines.

Orthetrum farinosum FÖRSTER.

(G) 3 males and 2 females. All specimens are remarkably small, so much so that I was at first doubtful as to the determination : a reference to RIS (*Cat. Coll. Selys, Libellulines,* X : 223) however shows that he found Nigerian examples 'abnormally small'.

Orthetrum guineense RIS.

(L) A single male. Distinguishable with some difficulty from *chrysostigma* and at first described as a subspecies of that insect. It is restricted to the west central area of Africa.

Orthetrum angustiventre (RAMBUR).

(E) A single male of this rare species of which but few specimens are known. I possess a male which I found in a case among a collection of common african butterflies and which was said to have come from Sierra Leone. The type came from Senegal. The present specimen compares in all respects with my own example.

Trithemis arteriosa (BURMEISTER).

(E) 4 males, (G) 3 males. Most of these specimens are very small but with rather extensive coloured basal marking in hindwings :

moreover the genitalia is not quite typical. Apart from these characters, I can find nothing to separate them from *arteriosa*, which is one of the commonest and most widely spread of african dragonflies.

Trithemis dichroa KARSCH.

(G) 6 males and a female of this rare and local species. The type came from Togo but specimens have come from Sierra Leone, the Cameroons and Congo (the determination of the latter rather doubtful). The present specimens are true to type, and are easily identifiable from the genitalia.

Trithemis donaldsoni basitincta RIS.

(G) 1 male. The lobe of the genitalia does not appear to be quite so angulated as shown in the figure given by Ris, but the same applies to a specimen which I possess from the Congo, so that the figure is evidently not quite correct. The species with its long attenuated abdomen and fine span of acutely pointed wings is easilly recognised from all other species of the genus with the same dark violaceous black colouring. It appears to occur in singles and is one of the rarest Trithemines in collections. It is distinguished by its huge lamina and long tapered bill-like hamules.

Trithemis kirbyi ardens SELYS.

(E) 1 male. From enquiries which I have made from those who have collected this species, I find that it has the same habits as the oriental *kirbyi kirbyi* SELYS, which I have taken in many parts of the Deccan, India. It rests on bare ground or rocks where its brilliant vermilion colouring, further enhanced by the extensive rich amber coloured basal markings of the wings, makes it a most conspicuous object. It evidently obtains protection by its 'warning colours'.

Thermochoria equivocata KIRBY.

(L) 1 male. A rather localised species restricted to tropical West and Central Africa and mainly restricted to the Cameroons.

Hemistigma albipuncta (RAMBUR).

(C) 1 female, (B) 3 males and a female, (D) 1 male, (L) 1 female. Apparently widely distributed through the present area. Some

differentiation is seen among the specimens but this due to age states rather than to variation. The species occurs right across tropical Africa and to as far south as Natal.

Crocothemis erythraea (BRULLÉ).

(B) 1 male. The single specimen taken does not represent its ubiquity as it is one of the commonest african species with a distribution extending from the Mediterranean to Madagascar and throughout the continent of Africa. It was probably recognised and purposely passed over as too common to take ?

Crocothemis sanguinolenta (BURMEISTER).

(G) 3 males, (J) 2 males. I think that it would be impossible to distinguish this species from *erythraea* on the wing, so that it may be inferred that the two were not flying together, and also that *sanguinolenta* is more locally distributed. The specimens are all quite typical.

Crocothemis divisa KARSCH.

(G) 3 males. I regard this species as one of the rarest of the genus and it is rare to find more than one or two in even an extensive collection. Ris cites only 7 examples but I have seen as many as that myself from various parts of tropical Africa and Madagascar. Its less conspicuous colouring should be sufficient to distinguish it from the two former species even on the wing.

Brachythemis leucosticta (BURMEISTER).

(C) 3 males and 3 females. It is of interest to note that the latter are all andromorphs but whether this means that they were 100 % or the heteromorphs were overlooked on account of the lack of wing markings, it is impossible to say.

Chalcostephia flavifrons KIRBY.

(C) 1 female, (G) 1 female. Not differing from type. The species is thinly distributed from the West to the East Coast of Africa but is mainly a West african insect, centred on the Cameroons.

Diplacodes lefebvrei (RAMBUR).

(L) 1 teneral male, (A) 1 male. A common and widely-distributed species, extending up into Iraq and eastwards to the West coast of India. Southwards a larger form is found in Mauritius and Madagascar, the male often with dark markings on forewings.

Palpopleura lucia portia (DRURY).
Palpopleura lucia lucia (DRURY).

(L) 1 female *lucia lucia* and 2 males and a female of *lucia portia*. I regard these two as polymorphs of one form. Distributed over the whole of tropical Africa save desert areas, the two forms invariably cropping up in the same localities.

Palpopleura deceptor (CALVERT).

(B) 1 male. A much rarer species than *lucia* and probably overlooked on account of its hyaline wings. Species of the genus fly low in grass, with unsustained flight. The oriental species *sexmaculata*, which looks like a diminutive *deceptor*, has a flight which mimics hymenoptera of the Eumenid group and is hap to be mistaken for one from its yellow colouring before it attains the old, adult blue colouring.

Rhyothemis notata (FBR.)

(D) A single female. A West coast species extending from Sierra Leone to Old Calabar and inland to the Cameroons. An uncommon species : most species of the genus are gregarious but from the few specimens received in collections, it would seem that *notata* is an exception to the rule.

Pantala flavescens (FBR).

(B) 1 male, (C) 1 female. A circumtropical species, common everywhere especially during September and October when an annual flight occurs from east to west.

Tramea basilaris basilaris (BURMEISTER).

(K) 1 female. A common species distributed throughout tropical Africa from the West to East coast and to as far south as

Madagascar. The subspecies *burmeisteri* of the orient, often accompanies *P. flavescens* in its annual flight.

Gomphidia quarrei (SCHOUTEDEN).

(K) 2 males of this fine species. The specimens agree with the description of *G. quarrei* and with a female which I have in my collection from Uganda. The headquarters of the genus, in Africa, is the Belgian Congo, but the genus itself is essentially an oriental one.

NEUROPTERA

Family MYRMELEONTIDAE.

Formicaleon persephone BANKS.

(L) 1 female. I have not seen the type but the present specimens agrees closely with Banks' description. More material is necessary to fix this determination.

Macronemurus loranthe BANKS.

(C) 3 females, (E) 1 male, (K) 1 male, (J) 1 male and 5 females. A common species where found : it is usually gregarious like many other closely allied species.

Cymothales mirabilis GERSTAECKER.

(C) 1 male and 2 females, (G) 1 female. The species has a somewhat scattered distribution but its zoo-centre seems to be in Togo and the adjacent parts of West Africa. I am of opinion that supposed specimens from East Africa, viz Abyssinia, are really faulty determinations.

II. TOGO

LIST OF LOCALITIES.

M. Tohoun. — 20 to 24th May, 1950. Chasses dans les îlots forestiers et les galeries forestières bordant le Mono ainsi que dans le cours du fleuve. Chasses de nuit.

N. Lomé — 25th to 30th May, 1950. Chasses de nuit.

O. Tsevié. — 31st May, 1950. Quelques récoltes de hasard au bord de la route.

P. Klouto (Monts Togo, 500-800 m. d'alt.). — Chasse dans la forêt de type équatorial et dans les savanes récentes du sommet. Pêche dans les ruisseaux. Chasses de nuit.

R. Sokodé. — 7.VI.50. Quelque récoltes à la lampe.

S. Aledjo (900 m. d'alt.). — Chasses dans les éboulis rocheux boisés. Pêche dans un marigot. Chasses de nuit.

Order ODONATA.

Suborder *ZYGOPTERA*.

Ceriagrion glabrum (BURMEISTER).

(M) 3 males and a female. Common throughout tropical Africa.

Ceriagrion villiersi n. sp.

(M) One pair, Tohoun, Togo, 22.V.50, coll. A. Villiers.
Male. Abdomen, 35 mm. ; Hindwing, 22 mm.

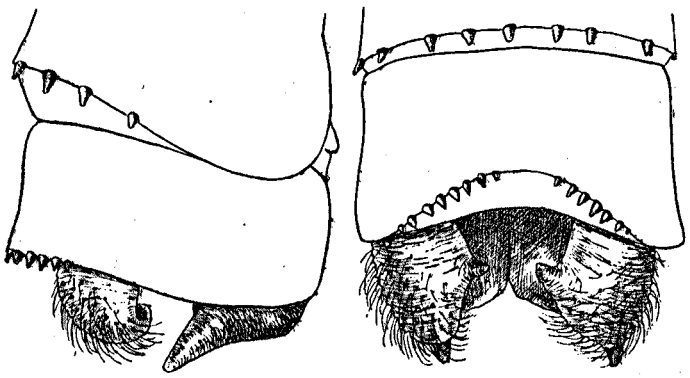

FIG. 1.— Male anal appendages of *Ceriagrion Villiersi* n. sp., dorsal and right lateral aspects.

Head : eyes blue, occiput and vertex as far anterior as the lateral ocelli dull brown, anterior to which, including the labrum and rest of face, a pale turquoise blue. Beneath head, including the labium, pale carneous to dirty white. Prothorax and thorax pale turquoise blue on dorsum and upper parts of sides, changing to white below : small linear dark points on the upper ends of the

humeral and both lateral sutures. Legs white, femora black on extensor surface, as also the spines and claws of tibiae and tarsus. Wings hyaline, scarcely tinted, 13 postnodals to forewings, 12 in the hind : pterostigma dark olivaceous framed in pale yellow and secondarily by black nervures : Anal vein leaving the hind border of wing at level of *Ac* or a shade distal to that level. Abdomen bright ochreous suffused with ferruginous on the dorsum : intersegmental joints darker. Segment 10 shallowly and broadly excavate apical border where it is fringed with about 6 small black spines : the preceding segments with a scanty row of apical black minute spines. Appendages short, superiors widely separated as seen from above, broadly conical, the inner border ending in a short obtuse spine, the apex and outer side clothed with long curling hairs. In profile, this appendage is rounded and curled inwards on itself. Inferior appendages rather longer, broad at base, the apical portion sloping upwards and posteriorly to end in an obtuse point, which is just visible from below the superiors as viewed from above.

Female. Abdomen, 31 mm. Hindwing, 20 mm.

Differs considerably in its colouring from the male : the head bright orange on the vertex and occiput, the labrum pale and the bases of mandibles and froms pale yellow. Prothorax and thorax a duller orange on the dorsum, paling to yellow on the sides and with the same small linear dark points on the upper ends of the sutures as in the male. Legs yellow, only a trace of the black lines on extensor surface of femora. Wings as in the male but the pterostigma a paler olivaceous. Abdomen yellow changing to bright ochreous on segments 7 to 10 : segments 2 to 6 with the dorsum dull brown to blackish : segment 1 and the apical ends of 2 to 6 pale yellow. Vulvar scales robust, yellow.

This new species is easily recognised from the striking contrast of colours in the male, the head and thorax blue, the abdomen bright ferruginous. The female differs from other species by the dark brownish of the dorsum of segments 2 to 6.

Type in the Museum National d'Histoire Naturelle, Paris : allotype female returned to the Institut Français d'Afrique Noire, Dakar.

Pseudagrion melanicterum Selys.

(M) 18 males. This large number contrasts strongly with the 5 specimens from Dahomey and appears to show that the species is a submontane one.

Isomecocnemis subnodalis SELYS.

(S) A single male which differs in some respects from the type and may possibly be a new species. I am unable to detect a spine on the ventral surface of the superior anal appendages but these are so closely apposed that it is difficult to examine them without risk of breaking them off : the antehumeral blue stripe is incomplete at its upper end instead of a break in its length : the basal rings on segments 3 to 6 are interrupted on the dorsum : segment 2 has no dorsal spot but this may have been obliterated by post-mortem decomposition : segment 9 is all black save a small apical linear blue spot : lastly the joint between this segment and 10, and the whole of 10 are sky blue. Apart from the apparently missing ventral spine, the appendages are as in the type. The superior appendage appears to have a basal spine tucked away beneath segment 10.

Mesocnemis singularis KARSCH.

(M) male 1. Note the remarks given for this species under the Dahomey list.

Lestes tridens MCLACHLAN.

(M) 26 males and 3 females. The type is from Delagoa Bay and I have examples from Zululand and Tanga territory. I can find no differences to separate the present specimens from those from east Africa, so that the distribution of the species is very much wider than was expected. Apparently very local but common where it occurs. The characteristic 3-spined superior anal appendages of the male serve to distinguish it from other african species.

Chlorocypha dispar (PAL. DE BEAUV.).

(P) 4 males and a female. A West coast species distinguished by its extreme melanism, the dorsum of the male thorax being entirely black, the abdomen blood red with some black markings on the three basal segments, which show some slight variations.

Sapho ciliata SELYS.

(P) 6 males and 2 females. A local but common species exhibiting age states and variations : thus the wings are greyish, tinted

with blackish or opaque steely blue black according to age in the males and more or less deeply enfumed in the female.

The relationships of the various species of *Sapho* found on the West coast are very obscure : whilst *ciliata* SELYS and *bicolor* SELYS appear to be constant and good species, there is good reason to suspect that all others are polymorths of a single species : notes and observations by the collectors are necessary to settle this problem.

Umma cincta (SELYS).

(P) 2 males and a female of this local but common species which is restricted to the West coast and its hinterland. Togo may be regarded as its zoo-centre.

Umma declivium (FÖRSTER).

(P) 1 male. The specimen resembles one which I have from Usambara, the *terra typica* and another from the West coast determined by Mr Kimmins of the British Museum. As this species becomes better known, its distribution is seen to be both extensive and scattered throughout tropical Africa. The specimen was evidently taken in company with its relation *cincta*.

Phaon iridipennis (BURMEISTER).

(M) 9 males of which only 2 possess a pterostigma. See my remarks on this species under Dahomey.

Suborder *ANISOPTERA*.

Paragomphus sp.

(P) A single female which I am unable to determine with any certainty. It may belong to *Hageni* (Selys), *elpidius* RIS, *serrulata* (KARSCH) or *moka* Longfield but the markings are too indefinite to determine which.

Anax goliath SELYS.

(M) 1 male, which has unfortunately been largely destroyed by the larvae of some dipteron which had laid its eggs in the decomposing carcase. The species is one of the largest known dragon-

flies and quite the largest of the african dragonflies. I have seen specimens from Nyassa and Madagascar which do not differ from the present one. The insect is either rare or offers great difficulty in catching.

Allorhizucha klingi KARSCH.

3 males and 3 females. A local species with *terra typica* in Togo (See under Dahomey).

Orthetrum brachiale (PAL. DE BEAUV.).

(M) 2 males (See note under Dahomey).

Orthetrum stemmale capense CALVERT.

(P) 1 female which I place with some doubt in this species. Has a wide distribution in Africa from south of the Soudan to the Cape.

Orthetrum guineense RIS.

(S) 1 pair. Confined almost exclusively to the tropical areas of the West coast of Africa (See note under Dahomey).

Orthetrum africanum (SELYS).

(P) 1 male. The specimen is not quite typical : the venation is closer, the thorax deep black with very sharply defined citron yellow dorsal and lateral stripes to the thorax. The abdomen is relatively shorter but in other respects, it passes well for *africanum* according to the key given by Ris. The species, which is restricted to tropical West Africa, does not appear to be at all common!

Orthetrum angustiventre (RAMBUR).

(M) 1 male only of this rather rare species (See the note under Dahomey).

Palpopleura lucia lucia (DRURY).

(P) 2 males (See remarks under Dahomey).

Palpopleura deceptor (CALVERT).

(M) 2 males (See note under Dahomey).

Philonomon luminans (KARSCH).

(M) 6 males. Has a very wide distribution in tropical Africa from the West to East coast and southwards to Madagascar but is nowhere common. No variation is found and the present specimens are entirely typical.

Brachythemis leucosticta (BURM.).

(P) A single male of this ubiquitous african species.

Bradinopyga strachani (KIRBY).

(P) 1 male of this rather rare species. Most specimens have come from the Cameroons but there are specimens in the British Museum from Sierra Leone and a female from Abyssinia, whilst I have recently received a male from Mr Pinhey of the Coryndon museum, Nairobi, taken in Nimule, Soudan, 1950.

Diplacodes lefebvrei (RAMBUR).

(M) 1 male of this dominant species which is distributed from the West coast of Africa to as far as the same coast in India, northwards to Iraq and southwards to Mauritius and Madagascar (See note under Dahomey).

Pantala flavescens (FBR).

(M) 2 males of this circumtropical species (See remarks under Dahomey).

Tramea basilaris basilaris (BURMEISTER).

(M) 1 male. Distributed throughout Africa save in desert zones.

Order NEUROPTERA.

Family ASCALAPHIDAE.

Helicomitus festivus (RAMBUR).

(M) 1 female. A widely distributed species but nowhere common. Rambur's type came from Senegal and he also cites Madagascar:

I have specimens from both areas which are identical with the present specimen.

Pseudohybris sp.

(M) I female which, in the absence of the male, I am unable to identify. This may be *P. heymonsi* WEELE known from a single male from Togoland, type in the Berlin Museum, and if so, it becomes the allotype. In the male, the abdomen is very long and narrow : the present specimen has this short and fusiform, as would be expected from the sex.

Campylophlebia magnifica McLACHLAN.

(P) 1 female of this superb species so well named by McLachlan. Recently I have received a male from the Coryndon Museum, Nairobi with data. — 'Mutwanga, Ruwenzori, Belgian Congo, 1950, coll. T. H. E. Jackson', so that the distribution, West Africa, is considerably widened.

Family MYRMELEONTIDAE.

Hagenomyia tristis (HAGEN).

(P) 1 female, (M) 5 males and 10 females. One of the most widely distributed and most common species of neuroptera found in Africa. It is evidently a gregarious species like some of its near relatives in the orient, which may be put up in great numbers from damp, shady spots.