

BY M. T. GILLIES

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Through the kindness of Dr. Elliott Pinhey of the National Museum, Bulawayo, Southern Rhodesia, I have been able to examine the small but interesting collection of mayflies in the possession of the Museum. The material is mostly dried and pinned, but a number of the specimens are sufficiently well preserved for specific determinations to be made. The Rhodesian fauna has been very little studied up to now, and the main interest of this collection lies in the new geographical records obtained. Descriptions of new species are not given here, but the opportunity is taken of drawing attention to the synonymy of *Notonurus* Crass, 1947, with *Compsonouriella* Ulmer, 1939.

OLIGONEURIIDAE

*Elassoneuria* sp.—1 ♀ imago, 96 miles S.E. of Nuanetsi, S. Rhodesia, iii.61.

The lateral processes of the ninth sternite are intermediate in length (*vide* Kimmins, 1960, *Bull. Brit. Mus. (Nat. Hist.) Ent.* 9:274), but the ventral plate is obscured. The wings lack the reticulum of fine veins depicted by Barnard, 1932, *Trans. R. Soc. S. Afr.* 20:212, in *E. trimeniana* (McLachlan).

*Elassoneuria* sp.—1 ♂ imago, Victoria Falls, iii.62.

A large species, body 17 mm. The genital forceps have four segments, the distal three segments being much more elongate than is figured by Kimmins, 1960, *Bull. Brit. Mus. (Nat. Hist.) Ent.* 9:339, for *E. candida* Eaton. The second segment is three times as long as broad, the third about twice as long as broad, and the fourth segment narrow and about two-thirds the length of the third. Whether this is the true *E. trimeniana* McLachlan, remains to be seen. If so, it may be noted that in well preserved specimens of *Elassoneuria* from the Congo at Leopoldville in my possession, the forceps are clearly seen to be composed of only three segments, as defined for the genus by Ulmer, 1920, *Stett. ent. Ztg.*, 81:128, thus indicating the specific distinctness of *E. congolana* Navás.

HEPTAGENIIDAE

*Afronurus* sp.—1 ♂ imago, Kabompo river, Mwinilunga, N. Rhodesia, iii.60; 1 ♂ imago, 30 miles from Ndola, N. Rhodesia, i.58; 1 ♂ imago, Chirunda, S. Rhodesia, ix.55; 3 ♂♂, 2 ♀♀, Victoria Falls, ii.53, iv.62.

*Compsonouriella* Ulmer (= *Notonurus* Crass, **syn. nov.**) sp.—1 ♀ imago, Victoria Falls, i.60; 1 ♀ imago, Lubudi, Congo, ii.60; 1 ♀ imago, Marandellas, S. Rhodesia, ix.60.

The specimens from the three localities all belong to the same apparently undescribed species. It is characterised by purplish brown stippling of the femora, and by deep brown pigmentation of all cross-veins and of the adjacent wing membrane in the fore wing as far posterior as MA<sub>2</sub>, as well as of a few cross-veins in the basal part of the wing field between MA<sub>2</sub> and CuA. It is thus distinct from *C. bequaerti* (Navás), *C. tortimeris* (Navás) and *C. njalensis* (Kimmins). It lies nearest to *C. cooperi* (Crass), the female of which has not been described.

*Compsonouriella* was named by Ulmer, 1939, *Arch. f. Hydrobiol. Suppl.* 16:563, for the Indonesian species *C. thienemanni* Ulmer. Comparison of this form with the descriptions of the African species, as well as with unnamed material from Tanganyika, shows close agreement with the characters given by Crass, 1947, *Proc. R. ent. Soc. Lond. (B)* 16:126; for his *Notonurus*. Of particular importance is the form of the penes in the male, the proportions and conspicuous stippling of the legs—fore tarsus 1 slightly less than tarsus 2; hind tarsus 1 equal to or slightly larger than tarsus 2—and the sinuous course of Sc and R<sub>1</sub> in the outer half of the fore wing. The nymph, in Tanganyika specimens, generally resembles that of *Afronurus*, although the conspicuous stippling of the femora distinguishes them from all described species of the latter genus.

BAETIDAE

*Centropiloides bifasciatum* (Esbén-Petersen).—1 ♀ subimago, Lubudi, Congo, ii.60.

*Centropiloides* sp.—1 ♂ imago, Mazabuka, N. Rhodesia, iii.61; 1 ♀ imago, Marandellas, S. Rhodesia, xii.60.

These specimens both belong to an undescribed species, smaller than *bifasciatum*, the costal and subcostal areas of the wing being very pale lemon yellow, and with two to three cross-veins between  $R_1$  and  $R_2$ , heavily pigmented dark brown, the pigment spreading out onto the adjacent wing membrane.

*Cloëon smaeleni* Lestage.—2 ♂ ♂, Zambezi river, Mwinilunga, N. Rhodesia, v.61.

This species appears to be widely distributed throughout tropical Africa. Described by Lestage, 1924, *Rev. Zool. Bot., Afr.*, 12:426, from Elisabethville, Katanga, it has been recorded by Kimmins, 1960, *Bull. Brit. Mus. (Nat. Hist.) Ent.* 9:339, as *Procloëon smaeleni*, from Uganda, Ghana and Sierra Leone. It is one of the commonest species of the genus in Tanganyika, and I have also collected it in Liberia and Gambia. *P. fraudulentum* Demoulin, also from Katanga, may well be a synonym.

The nymph of *C. smaeleni*, as collected in Tanganyika, is typical of *Cloëon*, i.e. with double gill lamellae on the first six abdominal segments and a single lamella on the seventh. Thus, despite the fact that the apparent first segment of the hind tarsus is three times as long as the second, it cannot be attributed to the Palaearctic genus *Procloëon* in which the gills are single on all segments.

#### LEPTOPHLEBIIDAE

*Adenophlebia peringueyella* Lestage.—1 ♂ imago, Clare Estate, Natal, iv.59.

*Adenophlebiodes (Adenophlebiodes) decorata* (Navás).—1 ♀ imago, 16 miles west of Mwinilunga, N. Rhodesia, ii.60.

*Adenophlebiodes (Hyalophlebia) sp.*—1 ♀ imago, Marendellas, S. Rhodesia, i.62.

#### EUTHYPLOCIIDAE

*Afroplocia? sampsoni* Barnard.—1 ♂ imago, Marendellas, S. Rhodesia, xii.60.

This species agrees well with Barnard's description. There are 8-9 sinuous intercalaries in the cubital field, wing 14 mm., body 15 mm. This species has previously only been recorded from Natal.

#### EPHEMERIDAE

*Eatonica schoutedeni* (Navás).—1 ♂ imago, Entebbe, iii.58; 2 ♂ ♂, Bukakata, Lake Victoria, v.52; 2 ♂ ♂, Grand Beach, Lake Nyasa, i.45; 2 ♂ ♂, Mount Selinda, Melsetter, S. Rhodesia, ii.61.

*Eatonica sp.*—1 ♀ subimago, Lubudi, Congo, ii.60.

An immense specimen, body 33 mm., wing 30 mm., wing span 55 mm., and thus almost double the size of some of the specimens listed above. Although only one species of *Eatonica* is currently recognised (cf. Barnard, 1932, *Trans. R. Soc. Afr.* 20:210), it seems inconceivable that a specimen of such dimensions should be conspecific with those, for instance, mentioned by Barnard from Wankie with a body length in the female of only 12 mm.

#### POLYMITARCIDAE

*Povilla adusta* Navás.—1 ♂ imago, Ingwezi, Syringa, S. Rhodesia, xi.55; 1 ♀ imago, Victoria Falls, xii.55; 1 ♂ imago, Ikelenge, Mwinilunga, N. Rhodesia, ii.60; 1 ♂ imago, Marandellas, S. Rhodesia, xii.61.

Malaria Institute, Amani, Tanganyika.

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