

Cloeon pusillum Navas, A SPECIES OF *AFROBAETODES*
DEMOULIN (EPHEMEROPTERA: BAETIDAE)

BY M.T. GILLIES

Cloeon pusillum Navas, 1930 was described from a series of females from Kisangani, Zaire and redescribed by Demoulin, 1957, who figured the wing. It was characterised by its extremely small size, reduction of marginal intercalary veins and the brown abdomen. I have both sexes from Kinshasa and Brazzaville, the females closely agreeing with Demoulin's description and are clearly conspecific. They are also very similar to an *Afrobaetodes* Demoulin from Tanzania that I bred from nymphs. This genus was described from the nymphs only, and it now seems clear that '*Cloeon*' *pusillum* is the previously unknown adult of *Afrobaetodes*.

The Tanzanian species differs in that the male possesses a small hind wing, reduced to a strap-like vestige in the female. The specimens from Kinshasa while similar in most other respects lack the hind wing in both sexes. It is evident that *pusillum* is distinct from the type species *A. bernerii* Demoulin from Malawi, which, like the Tanzanian specimens, possessed a minute hind wing (Kimmins, 1955, *Ann. Mag. nat. Hist.* (12)8: 871). Description of the Tanzanian material awaits a comparative study of the nymphs. In the mean time, the opportunity is taken of defining the adult of *Afrobaetodes* and of describing the male of *A. pusillum*.

Reference should also be made to *Cloeon delicatissimum* Barnard from South Africa. The resemblance of this species to *pusillum* was noted by Demoulin (1957) and its transfer to *Afrobaetodes* is therefore indicated. This action is supported by the records of *Afrobaetodes* from South Africa given by Demoulin (1970, *South African Animal Life* 14: 52) who attributed these nymphs to the East African *A. bernerii*. Barnard's species lacks the hind wing, which points to its being distinct from *bernerii*. Thus one can recognise three species of *Afrobaetodes*: *A. bernerii* Demoulin, *A. delicatissimus* (Barnard) comb. nov. and *A. pusillum* (Navas).

Afrobaetodes Demoulin, 1970

Cloeon (in partim), Navas, 1930.

Cloeon (in partim), Barnard, 1932.

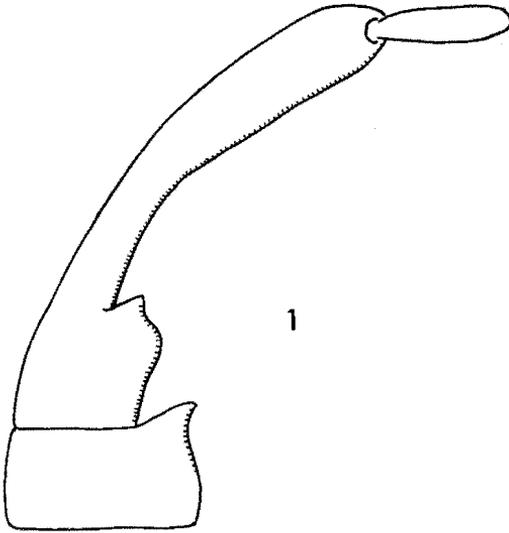
Baetidae nymph A., ? near *Centropitulum*, Kimmins, 1955.

Very small, rather squat mayflies. Thorax relatively large and broad, head and thorax in preserved specimens about equal to length of abdomen. Cross veins much reduced, marginal intercalaries single, scarce; hind wing very small or absent. Terminal segment of male forceps well developed. Male fore leg, femur: tibia tarsus 4:7:5; hind leg 2.6:3:1, hind tarsus 1 not demarcated from tibia, tarsus 2 about twice as long as tarsus 3.

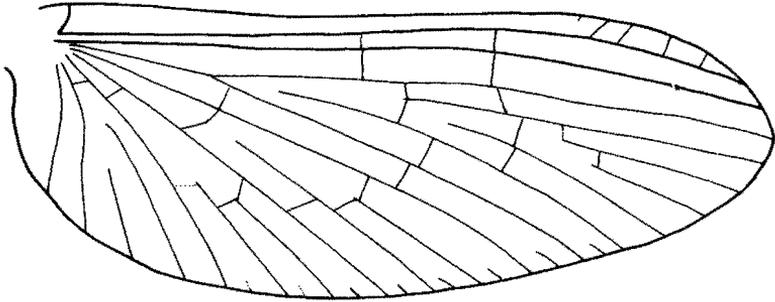
Afrobaetodes pusillum (Navas) comb. nov.

Cloeon pusillum Navas, 1930, *Rev. Zool. Bot. afr.* 19: 321.

Cloeon pusillum, Demoulin, 1957, *Bull. Ann. Soc. r. Ent. Belge* 93: 271.



1



2

Figs. 1-2. — *Afrobaetodes pusillus* male: 1, forceps; 2, wing.

Male imago. Eyes dark red; thorax and abdomen chocolate brown; tails greyish brown; venter and forceps (fig. 1) cream; fore femur dark brown, rest of legs colourless; marginal intercalaries in fore wing (fig. 2) much reduced, present from interspace anterior to R_{4.5} to MP₂ interspace; hind wing absent.

Wings: 2.9 - 3.1 mm.

Nymph. Not known.

Material examined:— ZAIRE: Kinshasa, 7 males, 3 females, vi.56, xi.59.
CONGO: Brazzaville, 3 males, vi.56.

Whitfield, Hamsey, Lewes, Sussex.
December 29th, 1977.