

A NEW GENUS FOR THE AFROTROPICAL MAYFLY,
CLOEON DENTATUM KIMMINS (EPHEM., BAETIDAE)

BY M.T. GILLIES

Originally described from Uganda by Kimmins (1956), *Cloeon dentatum* is now known to be widespread but uncommon in West African rivers. Despite the unusual form of the male forceps, Kimmins preferred to treat it as a species of *Cloeon*. The nymph was described by Gillies (1988) from material collected in the river Niandam in Guinea. These specimens departed from the typical *Cloeon* form by the highly derived mouthparts and the unusual length of the tarsal claws. At that time, since the association of the nymphs with the adults had not been established by rearing, I also preferred to leave its generic status unchanged. Recently, the acquisition of further material has made it possible to reconsider the matter. Accordingly, the new genus *Potamocloeon* is erected to accommodate the single aberrant species *C. dentatum*.

Potamocloeon gen. n.

Adult. Fore wing with single marginal intercalaries, hind wing absent. Male forceps with a stout, truncated terminal segment, about as broad as the long second segment.

Nymph. Labrum more or less rectangular; maxillary palp 2-segmented, the basal segment elongated and projecting a considerable distance anterior to the body of the maxilla; canines of mandibles divided, a tuft of fine setae at base of both prosthecae; labium greatly enlarged, glossae vestigial, the paraglossae broad and with short marginal hairs only; labial palp with two segments, apical segment more or less triangular, the base of the triangle distal. Legs slender, femora with a few stout setae along both margins; tibiae shorter than tarsi, tibio-tarsal joint apparently fused; tarsal claws about equal in length to tibiae, extremely fine and without teeth. Gills strongly asymmetrical, with small second lamellae on I-IV. Lateral margins of posterior abdominal segments with small spines. Tails 3, subequal, cerci with abundant hairs on inner surfaces.

Type species. *Cloeon dentatum* (Kimmins).

Potamocloeon is a member of the group of cloeonine mayflies, in which the posterior abdominal segments of the nymphs bear small, lateral spines (Jacob & Glazaczow, 1986; Gillies, 1989). This group includes *Centroptilum* Eaton, *Cloeon* Leach, *Pseudocentroptilum* Bogoescu, *Pseudocentroptiloides* Jacob & Glazaczow and *Procloeon* Bengtsson. In common with all members of the group except *Pseudocentroptiloides*, *Potamocloeon* has the ancestral type of single-lobed labrum. It shares with *Cloeon* and *Pseudocentroptilum* the derived character of tracheal gills with double lamellae. It differs from all other described Baetidae in the enormously enlarged labial palps and paraglossae.

At the same time, it shares with *Pseudocentroptiloides*, in the adult, the presence of a conspicuous tooth on the basal forceps segment and, in the nymph, the absence of unguis teeth and the attenuation of the

tarsal claws. However, long fine tarsal claws are also seen in the baetinae genus *Apobaetis* Day in North America. In my view, this character has evolved independently in several genera as an adaptation to life on sandy or silted substrates, and should not be taken as evidence of common ancestry. On the whole, therefore, the relationship with *Cloeon* seems closer, and it represents a sister group of this genus rather than of *Pseudocentropiloides*.

ACKNOWLEDGEMENTS

I am indebted to Dr J.-M. Elouard for material of *Potamocloeon dentatum* from the Ivory Coast.

REFERENCES

Gillies, M.T., 1988, Descriptions of the nymphs of some Afrotropical Baetidae (Ephemeroptera). 1. *Cloeon* Leach and *Rhithrocloeon* Gillies, *Aquat. Ins.* **10**: 49-59; 1989, A revision of the African species of *Centropilum* Eaton (Baetidae, Ephemeroptera), *ibid.* **11**: in press. Jacob, U. & Glazaczow, A., 1986, *Pseudocentropiloides* a new baetid genus of Palaearctic and Oriental distribution (Ephemeroptera), *ibid.*, **8**: 197-206. Kimmins, D.E., 1956, New species of Ephemeroptera from Uganda, *Bull. Br. Mus. Nat. Hist. (Ent.)* **4**(2): 69-87.

Whitfield, Hamsey, Lewes, Sussex, BN8 5TD.
January 27th, 1989.

New distribution records of Sepedophilus Gistel (Col., Staphylinidae) in Britain. — The following data are from collecting in Buckinghamshire, Durham, Northumberland and the Island of Mull, from 1978 to 1984. New vice-county records are asterisked. The British species were revised by Hammond (1973, *Entomologist's mon. Mag.* **108**(1972): 130-165).

Sepedophilus immaculatus (Stephens). *Bucks.: Ivinghoe Beacon (SP 9615), Saunderton Fen (SP 7901) and Weston Turville Reservoir LNR (SP 8609). Found in fens and on dry chalk turf, a curious habit paralleled by *Stenus subaeneus* Er. in Buckinghamshire.

S. litoreus (L.). Bucks.: 1, Newlands Park (TQ 0093), marshy pond with *Iris*, v.1984; S. Northumberland: 1, Broom Park (NY 9166), vi.1983 (coll. M. Eyre). A local species.

S. marshami (Stephens). Argyll: 2, Tobermory, Mull (NM 55), under low vegetation on basalt cliff, ix.1978; *N. Northumberland: Campfield Bog (NT 8638) railway bank, iv.1984; *S. Northumberland: 3, Seaton Sluice (NZ 37), shore refuse by brackish river, v.1982; *Durham: common, Castle Eden Dene (NZ 44), under low vegetation at Dene-mouth, vii.1981. Hammond (1973, *loc. cit.*) records *S. marshami* from as far north as Cumberland and Yorkshire, Crowson (1980, *ibid.* **116**: 43-4) from Ailsa Craig, Ayr, and Welch (1983, *Proc. R. Soc. Edinb.* **83B**: 505-529) from three Inner Hebridean islands. It appears to be coastal in its northern range.

S. nigripennis (Stephens). Argyll: 1, with *S. marshami* on Mull; N. Northumberland: Abberwick (NU 1213), Beltingham (NY 7864), Campfield Bog (NT 8638), Ford Moss (NT 9637). Very local in Scotland (Hammond, Welch, *loc. cit.*), where it is apparently coastal. Commoner and more widespread than *S. marshami* in Northumberland.

S. pedicularius (Gravenhorst). *Bucks.: 2, Medmenham (SU 8083), damp meadow/ditch by alder carr, v.1984. A very local southern fen species.

S. testaceus (F.). *Bucks.: 2, Blackend Spinney (SP 82), marshy wood, x.1978. A scarce but widespread south-eastern species.

I thank Peter Hammond for kindly confirming the determinations of *S. testaceus* and the Scottish *S. marshami*. — C.A.M. REID, Department of Zoology, Australian National University, GPO Box 4, Canberra, ACT 2601, Australia; July 10th, 1989.