

Occurrence of *Rhithrocleon* (Baetidae : Ephemeroptera) in West Africa

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SUMMARY

The discovery in the Ivory Coast is reported of the mayfly genus, *Rhithrocleon*, previously only known from East African torrents. A description is given of the new species, *Rhithrocleon elouardi*, known from the male imago only.

KEY WORDS : Insects — New species — West Africa — Ivory Coast — Fresh water.

RÉSUMÉ

PRÉSENCE DE *RHITHROCLOEON* (BAETIDAE : EPHEMEROPTERA) EN AFRIQUE DE L'OUEST

Rhithrocleon n'était connu auparavant que des torrents de l'Afrique de l'Est. L'imago mâle d'une nouvelle espèce, *Rhithrocleon elouardi*, est décrite de Côte d'Ivoire.

MOTS-CLÉS : Insectes — Nouvelle espèce — West Africa — Côte d'Ivoire — Eaux douces.

KOPELKE (1980) described the adults of two species of *Cloeon* Leach, *C. insuetum* and *C. permirum*, from eastern Zaire, which were distinguished by highly unusual genital forceps. In recording the presence of one of these in Tanzania (GILLIES, 1985), I transferred them both to the new genus *Rhithrocleon* to which was added a third species, *R. indicator*, also from Tanzania. The nymphs were not known at that time, but it was noted that all the material came from the vicinity of torrential waters. I was subsequently able to collect the nymphs and rear the adults of both Tanzanian species, GILLIES (1988). This showed that, as had been expected, the genus is not at all closely related to *Cloeon*, the nymphs being adapted to life in a lotic environment.

I recently received 2 ♂ imagines of a new species of *Rhithrocleon*, collected in a light-trap by Dr J.-M. ELOUARD in the Ivory Coast. A description of this follows.

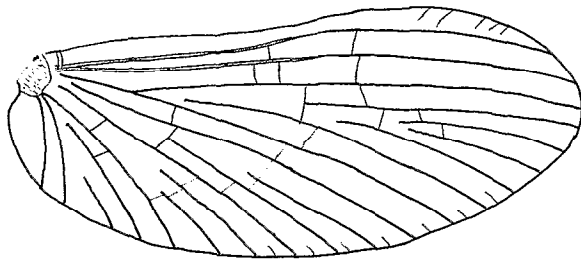
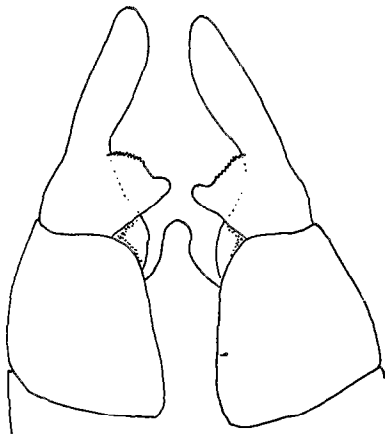
RHITHROCLOEON ELOUARDI sp. n.

Male imago

Antennae clear, vertex cream. Turbinate eyes greyish-purple, tall, rounded in dorsal aspect, contiguous.

Thorax dark brown. Wings (fig. 1) clear, MA2 extending as far as crossvein between MA1 and

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1. — Fore wing. *Aile antérieure*

0.1 mm

2. — Male forceps. *Pince de mâle*FIG. 1-2. — *Rhithrocloeon elouardi*

MA2; marginal intercalaries weakly developed. (All legs lost in both available specimens).

Abdominal segments I-VI translucent white, VII washed with brown, VIII-X reddish-brown. Forceps base brown, limbs white; forceps segments fused, stout, basally with a broad medial extension terminating in a blunt, recurved spur (fig. 2); posterior margin of this extension finely serrated. A prominent median, spur-like process present on posterior margin of IXth sternum. (Tails lost).

Dimensions

Male body 3-3.3 mm, wing 3.3 mm.

Material

Ivory Coast: holotype male imago, tributary of R. CAVALLY between Grabo and Tiboto, 11.ii.88, J.-M. ELOUARD [deposited in British Museum (Natural History)]. Paratype, male imago, same provenance.

R. elouardi most closely resembles the Zairean species, *R. insuetum*. It differs from this in its smaller size, in the presence of a recurved spur on the inner extension of the basal segment of the forceps and the reduction in the number of marginal intercalaries in the wing.

The material came from a light-trap set up beside a small torrential stream, cascading down the hillside into the River Cavally. This suggests that, in its ecology, *elouardi* does not differ very much from that of the East African species, all of which inhabit similar waters.

Rhithrocloeon is one of the 4 known genera of Cloeoninae in Africa in which the hind wing has been lost, (GILLIES, 1990). Identification of the adults at both the generic and the specific level therefore depends on the male terminalia. Separation of the females from *Cloeon* or from species of *Afroptilum*, in which the hind wing has been lost, may be difficult.

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REFERENCES

- GILLIES (M. T.), 1985. — A preliminary account of the East African species of *Cloeon* Leach and *Rhithrocloeon* gen. n. (Ephemeroptera). *Aquatic Insects*, 7 (1) : 1-17.
- GILLIES (M. T.), 1988. — Descriptions of the nymphs of some Afrotropical Baetidae (Ephemeroptera). I. *Cloeon* Leach and *Rhithrocloeon* Gillies. *Aquatic Insects*, 10 (1) : 49-59.
- GILLIES (M. T.), 1990. — A revision of the African species of *Centroptilum* Eaton (Baetidae, Ephemeroptera). *Aquatic Insects*, in the press.
- KOPELKE (J.-P.), 1980. — Ephemeroptera aus der Emergenz des zentralafrikanischen Bergbaches Kalengo (Zaire). I. Baetidae. *Entom. Abh. Mus. Tierk. Dresden* 43 : 99-129.