A New Genus and Species of Ephemeridae (Ephemeroptera) from Madagascar

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Mme J. Fontaine (1968) has recently described a new mayfly nymph, belonging to the superfamily Ephemerioidea, from Madagascar. She was not, however, able to determine its correct taxonomic position, although she believed it to be an Ephemeridae. No scientific name was assigned to this nymph.

Based on a detailed study of the taxonomic characters and phylogenetic relationships of all the genera of the Ephemeridae, I find this nymph to be a new and unique genus, correctly placed in the family Ephemeridae. Therefore, based on her description, I propose the name Fontainica josettae gen. n. and sp. n., in honour of Mme J. Fontaine.

The nymph is clearly not referable to the African genus, Eatonica Navas. The characters given in Demoulin's (1968) description of a nymph, which he believes to be Eatonica, are clearly those which would seem predictable on the basis of the phylogenetic position as determined by adult characters. The nymph of Eatonica is most similar to Hexagenia Walsh of North America, although it differs in a number of characters.

Fontainica is most closely related to the North American genus, Pentagenia Walsh. The majority of nymphal characters, particularly in regards to the legs and mouthparts, display a high degree of similarity between these two genera. Also, the frontal process of Fontainica seems to represent a simple modification of the bifurcate condition in Pentagenia.

Female subimagos of Ephemeridae from Madagascar, which have previously been discussed by Demoulin (1966) and Fontaine (1968), cannot be definitely placed in any genus. These may prove to be the adults of Fontainica josettae. The wing venation, however, is similar to that of Eatonica, but quite unlike that of Ephemeria L.

REFERENCES

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