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 Ephemeroidae, 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 detail 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
josefatae 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 Demoulins'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, Pent-
tagenit 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 Pent-
tagenia.

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

REFERENCES

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