



## ***Fontidessus* Miller and Spangler, a new genus of Bidessini from Venezuela (Coleoptera: Dytiscidae: Hydroporinae) with three new species**

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### **Abstract**

A new genus, *Fontidessus* n. gen., and three new species *F. toboganensis* n. sp., *F. ornatus* n. sp., and *F. wheeleri* n. sp., are described from Venezuela. The new genus is similar to *Uvarus* and *Bidessodes* but is distinguished from all other Bidessini (including these) by a combination of the following: 1) transverse occipital line absent, 2) basal pronotal striae present, 3) basal elytral stria absent, 4) elytral sutural stria faintly present in some specimens, 5) anterior clypeal margin unmodified, 6) elytron without longitudinal carinae, 7) epipleuron without transverse carina at humeral angle, 8) lateral lobes of aedeagus two-segmented, 9) habitus elongate, oval, with lateral pronotal and elytral margins nearly continuously and shallowly curved, and 10) metatrochanter extremely large relative to metafemur, approximately  $0.6 \times$  length of metafemur.

**Key words:** diving beetles, classification, taxonomy, new genus, new species, Venezuela

### **Introduction**

The tribe Bidessini is among the most diverse groups of Dytiscidae. Fortunately, the group has received considerable attention at the genus and species level making specimens largely identifiable, though new species are discovered regularly. Particularly important work in the group include reviews of the Neotropical taxa (Young, 1967, 1969) and a documentation of the world genera and species (Biström, 1988). Most of the Neotropical/Nearctic and Afrotropical genera have been revised in modern times by F. Young and O. Biström advancing dramatically an understanding of the diversity in the group. Although species in this tribe are usually distinct, it has a phylogenetically problematic genus-level classification. There are large numbers of genera defined largely by either a particular distinct apomorphy or by a unique combination of about five or six different characters. In the first case, recognition of the genus often results in a probably paraphyletic group left behind once the group with the apomorphy is erected. In the second case, it is clear that there is extensive homoplasy (including losses) in the characters in question, and, therefore, it is not clear how homologous features are actually distributed among the taxa. It is a difficult taxon at the genus rank. Nevertheless, new taxa with new combinations of features are discovered regularly and must either be placed into an existing genus or a new one. Ideally, the decision about where to place a new species with a distinct character combination would be based on a cladistic analysis of the tribe, but such an analysis does not exist and will be a major undertaking. The following new species from Venezuela represent just such a group of problematic taxa with a unique character combination requiring a new genus to accommodate them.