

SCIENTIFIC NOTE

New Distribution Records for *Crinodessus amyae* Miller (Coleoptera: Dytiscidae: Hydroporinae: Bidessini), With Comments on Variation and Relationships

While conducting a revision of the genus *Neoclypeodytes* Young, I discovered 17 additional specimens of *Crinodessus amyae* Miller which I described as a new genus and species from a single male specimen from Texas, USA in The Carnegie Museum of Natural History (Miller, K.B. 1997. Proceedings of the Entomological Society of Washington 99:483-486). Unfortunately, the specimens were discovered too late to include them in the original description. The following information on variation, generic relationships and distributional information supplements my original description of the genus and species.

Variation. Specimens vary in coloration from dark brown to light brown. Many specimens have vague, transversely elongate, pale areas anteriorly on the elytra while in others these maculae are strongly reduced or absent. Some specimens have the posterior angles of the pronotum less angulate than in the holotype. However, in all specimens the lateral pronotal margins are strongly rounded with the point of maximum pronotal width near or anterior to the middle making the lateral margin strongly discontinuous between the pronotum and elytron in dorsal aspect. Some females have fine microreticulation between the punctures on the surfaces of the pronotum and elytra.

All the specimens from Texas are very similar to one another. However, four specimens from Arizona and one specimen from New Mexico differ from the specimens from Texas in two ways. They lack extensive ventral microreticulation, and the median lobe is slightly different in shape. The lobe in lateral view is slightly more slender with the apex narrowed subapically and slightly expanded and rounded apically. Because of the few specimens available and the subtlety of the differing character states, I don't believe description of these specimens as a new species is warranted at this time. Additional specimens from other populations in New Mexico and western Texas could provide more information about the specific status of the populations.

Relationships. Although I argued before (Miller 1997, loc. cit.) that *Crinodessus* could be related to *Liodes* Guignot, I now believe that the genus may have affinities with *Neoclypeodytes*. Although the anterior clypeal margin is not strongly beaded or flattened in *Crinodessus*, it is anteriorly produced and angulate. Several of the *Crinodessus* specimens have indistinct anterior elytral maculae similar to those of some *Neoclypeodytes* species. Also, separation of the cervical and genal lines from the margins of the eyes, probably resulting from reduction of the eyes, is a character which is present in numerous *Neoclypeodytes* species, though to a considerably lesser degree (Miller, unpublished). Despite some similarities and lack of evidence for the monophyly of *Neoclypeodytes* (Miller, unpublished), I suggest that *Crinodessus* is distinct from *Neoclypeodytes* based on the cordate pronotum with lateral pronotal margins strongly rounded, the relatively unmodified anterior clypeal margin, the strongly depressed body (total length/greatest dorsoventral width = 3.64-4.28 [n = 12, \bar{x} = 3.95, s = 0.19] vs. 2.30-3.37 in *Neoclypeodytes* [n = 331 (all species), \bar{x} = 2.79, s = 0.21] (Miller, unpublished)), and the strongly reduced eyes (shortest dorsal width between eyes/greatest dorsal width of head = 0.68-0.72 [n = 12, \bar{x} = 0.70, s = 0.01] vs. 0.50-0.64 [n = 331 (all species), \bar{x} = 0.59, s = 0.02] in *Neoclypeodytes* (Miller unpublished)). Naturally, any or all of these apparent apomorphies could be derived from states present in *Neoclypeodytes*. However, despite relatively extensive study of the taxonomy of Bidessini, the generic phylogeny of the tribe is currently so poorly understood that I believe it is premature to conclude anything regarding relationships of *Crinodessus* to other genera.

New Distribution Records. Distribution records are followed by the number of specimens examined and the name of the collection in which the specimens are deposited. **United States. Arizona:** Cochise Co., Skeleton Canyon, 25 Aug 1962, H.V. Weems, Jr., (2, Florida State Collection of Arthropods). Chiricahua Mts., Shake Gulch, 8 June 1968, Menke and Flint (2, United States National Collection). **New Mexico:** Hidalgo Co.,

Guadalupe Canyon, 08 Aug 1986, L.H. Shaw (1, Gilbert L. Challet Collection). **Texas:** 13 m. S. of Kent, Davis Mts., 8 Sep 1952, B. Malkin (7, Florida State Collection of Arthropods); Limpia Canyon nr. Ft. Davis, 26 Jul 1956, E.G. Matthews (4, Cornell University Insect Collection); Limpia Creek Canyon, Davis Mts., 4–5 Sep 1952, B. Malkin (1, Florida State Collection of Arthropods).

I thank G. L. Challet (Santa Ana, CA), J. K. Leibherr (Cornell University), P.J. Spangler (United States National Collection) and M.C. Thomas (Florida State Collection of Arthropods), for providing specimens and an anonymous reviewer for commenting on the manuscript.

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(Received 28 September 1998; accepted 3 December 1998)