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THE OCCURRENCE IN FLORIDA AND VIRGINIA OF *CORIXIDEA MAJOR*, AN EXCEPTIONALLY RARE NORTH AMERICAN BUG (HETEROPTERA: SCHIZOPTERIDAE) -- *Corixidea major* McAtee and Malloch recently has been collected in eastern Virginia, and a specimen from Florida has come to our attention. Although described eighty years ago, this minute insect (length under 1.5 mm) has remained one of the rarest North American heteropterans, previously known only from the unique male holotype found at Clarksville, Tennessee. Our records from Virginia and Florida extend the range of *C. major* just over 1000 km to the east and southeast of the type locality.

Herein, we give two new records from Virginia, and one from Florida based on a specimen discovered (by SMR) in the American Museum of Natural History (AMNH), New York. To facilitate recognition of this species captured by blacklight trap or other static collecting devices, we provide an adult diagnosis and a dorsal habitus drawing (Fig. 1) made from the Zuni, Virginia specimen. The two sketches provided by McAtee & Malloch (1925) are accurate in details of the hemelytral venation and lateral aspect of the head and thorax, but do not convey what the entire animal actually looks like.

New records: FLORIDA: 1♀, *Sumter Co.*: Center Hill, 12 March 1953, no collector data (determined by P. W. Wygodzinsky, AMNH). VIRGINIA: 1♀, *Isle of Wight Co.*: Blackwater Ecological Preserve, 7.4 km SSW of Zuni, UV trap in pine barrens, 4 September 2002, S. M. Roble & C. S. Hobson (Virginia Museum of Natural History [VMNH], Martinsville; identified by TJH by direct comparison with the holotype deposited in the National Museum of Natural History, Washington, D.C.); 1♀, *Northampton Co.*: Savage Neck Dunes Natural Area Preserve, 5 km SW of Eastville, UV trap, 7 July 2004, A. C. Chazal (VMNH, det. RLH).

Diagnosis: The body, including head, pronotum, and scutellum, is generally uniform dark gray, and very finely pubescent; the legs are entirely yellow to pale brown; the eyes are bright crimson. The hemelytral veins, especially of the primary costal cell, are darkly pigmented, as well as the cell itself (in our specimens, the crossvein scarcely visible); other cells are not so darkly shaded. The membrane is a uniform pale dusky brown, without markings; the veins are a diffuse pale brown. The specimen from Zuni is somewhat darker overall, perhaps a little more mature.

Discussion: In general appearance, *C. major* is superficially similar to *Hypselosoma matsumurai* Esaki

and Miyamoto (as illustrated by Schuh & Slater, 1995), although the two species are placed in different subfamilies in current classifications (e.g., Emsley, 1969). There is much less resemblance to *Glyptocombus saltator* Heidemann (illustrated by Henry, 1988) and most other species of the consubfamilial genus *Hypselosoma* Reuter, which have predominantly "coleopteriform" or beetle-like hemelytra. Visible external male genitalia (parameres and vesica) of *C. major* are similar to those illustrated for *C. lunigera* (McAtee & Malloch, 1925, fig. 84), the type species of the genus, with only the parameres slightly more thickened and the vesica more slender and coiled (unique holotype not dissected). Slater & Baranowski (1978) keyed the North American Schizopteridae and considered the truncate labium diagnostic for recognizing *C. major*.

Although schizopterids generally are thought to be inhabitants of the soil-litter biotope (Henry, 1988), as *G. saltator* is known to be (Roble & Hoffman, 2000), at least three of the four known specimens of *C. major* were taken at lights, providing little new biological information. With the information and illustration presented in this paper, we hope to alert collectors to the presence of this tiny, enigmatic, and rare resident of the eastern United States.

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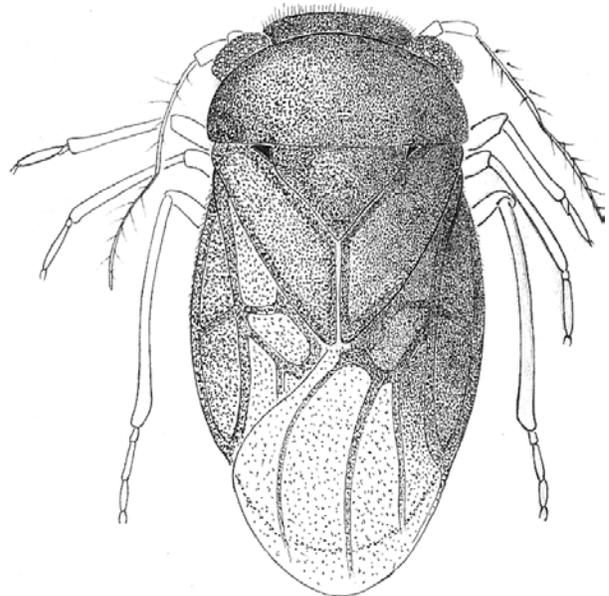


Fig. 1. Dorsal view of female *Corixidea major*.

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## LITERATURE CITED

Emsley, M. G. 1969. The Schizopteridae (Hemiptera: Heteroptera) with the description of new species from Trinidad. *Memoirs of the American Entomological Society* 25: 1–154.

Henry, T. J. 1988. Family Schizopteridae. Pp. 682–683 *In* T. J. Henry & R. C. Froeschner (eds.), *Catalog of the Heteroptera, or True Bugs, of Canada and the Continental United States*. E. J. Brill, Leiden and New York. 958 pp.

McAtee, W. L., & J. R. Malloch. 1925. Revision of bugs of the family Cryptostemmatidae in the collection of the United States National Museum. *Proceedings of the United States National Museum* 67(13): 1–42.

Roble, S. M., & R. L. Hoffman. 2000. Three true bugs new to the Virginia fauna, including the first record of the family Schizopteridae (Heteroptera). *Banisteria* 16: 41–45.

Schuh, R. T., & J. A. Slater. 1995. *True Bugs of the World (Hemiptera: Heteroptera)*. Cornell University Press, Ithaca, NY. 337 pp.

Slater, J. A., & R. M. Baranowski. 1978. *How to Know the True Bugs (Hemiptera-Heteroptera)*. Wm. C. Brown Company Publishers, Dubuque, IA. 256 pp.

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