CARINIOCORIS, A NEW PHYLINE PLANT BUG GENUS FROM THE EASTERN UNITED STATES, WITH A DISCUSSION OF GENERIC RELATIONSHIPS (HETEROPTERA: MIRIDAE)

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Abstract.—The new genus Cariniocoris is described to accommodate Plagiognathus geminatus Knight, P. ilicis Knight, and the new species C. nyssae from Florida and Maryland. Photographs of adults, illustrations of male genitalia, and micrographs of certain other structures are given and distributions and host plants are outlined. A neotype is designated for P. ilicis. Evidence supporting the group's monophyly and its relationship to several other phyline genera are discussed. Keys are provided to facilitate recognition of the genus and species.

Recent collecting and discovery of a plant bug feeding on ornamental black gum, *Nyssa sylvatica* Marsh., and subsequent efforts to place it in an existing genus, have revealed the need for a new genus. Further research shows that two other species, described in the genus *Plagiognathus*, require transfer to this new genus.

Herein, Cariniocoris is described to accommodate Plagiognathus geminatus Knight, P. ilicis Knight, and the new species C. nyssae. Evidence for its monophyly and relationship to several other phyline genera are discussed. A neotype is designated for C. ilicis. Photographs of adults, illustrations of male genitalia, and micrographs of certain other structures are given. Keys to males and females of the genus and modifications for Knight's (1941) key to the genera of Phylinae are provided to facilitate recognition of the genus and species.

The following abbreviations are for institutions cited in this paper: AMNH (American Museum of Natural History, New York); CU (Cornell University, Ithaca, New York); JTP (John T. Polhemus and University of Colorado Museum, Englewood, Colorado); PDA (Bureau of Plant Industry, Pennsylvania Department of Agriculture, Harrisburg); and USNM (U. S. National Museum of Natural History, Washington, D.C.).

Cariniocoris, new genus

Type species. Cariniocoris nyssae, new species.

Diagnosis. Sexes dimorphic (males slender, color variable; females broader, color mostly green), head shorter in lateral aspect than distance from eye to apex of tylus, male genital capsule with a distinct mesal carina on the ventral surface, bases of tibial spines immaculate or nearly so, and male vesica C-shaped with a spiculate base on the primary spiculum and a middorsal flange.

Description. Small to medium sized species, length 3.0-4.0 mm, with recumbent simple setae. Head impunctate, much broader than long, width nearly 2× length;