A NEW NORTHERN DISTRIBUTION RECORD AND REPORT OF THE PLANTHOPPER *COPICERUS IRRORATUS* SWARTZ (HEMIPTERA: DELPHACIDAE) FROM NEW YORK[1]

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The delphacid planthopper genus *Copicerus* Swartz includes five taxa: *C. obscurus* (Guérin-Méneville) and *C. swartzi* Stål from Brazil, *C. insignicornis* (Lethierry) from Venezuela, *C. irroratus thoracicus* (Guérin-Méneville) from Cuba, and *C. irroratus* Swartz which is widespread in the American tropics north into the United States. *Copicerus irroratus* is distinctive, easily distinguished from all other Nearctic fulgoroid genera and species by the spike-like, movable spur at the apex of the posterior tibiae, and the elongate, foliaceous or oar-like antennae (Crawford 1914; Metcalf 1923; Bartlett et al., 2011, 2014). Published distribution records for *C. irroratus* include Belize, Costa Rica, Cuba, Dominican Republic, Ecuador, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Puerto Rico, Trinidad, and Venezuela (Bartlett et al., 2014). In the United States *C. irroratus* has been reported from Arizona, Delaware, Florida, Georgia, Illinois, Maryland, Mississippi, Missouri, Ohio, Pennsylvania, Texas, Virginia, and West Virginia (Bartlett et al., 2011, 2014).

I observed five adults of *C. irroratus* while sweeping vegetation on a hillside in central New York State, and collected two males before they escaped. The collection information is as follows: New York: Chenango County, 2 miles north of Norwich on State Highway 23, N42°32'17" W75°33'05", 29 May 2011, coll. G. D. De Jong. One specimen has been placed as a voucher in the collections of the Gillette Museum of Arthropod Biodiversity at Colorado State University, Fort Collins, Colorado; the other is retained in my personal collection. I did not recognize the species in the field, identifying it using Metcalf (1923) only after returning to the lab in Colorado, therefore, I also did not note a plant association for these specimens. Host plants of species in the genus *Copicerus* are unknown but probably are dicots (Bartlett et al., 2011).

This note documents a new state record for New York, as well as a northern distribution record, for this species. Other planthoppers, such as the acanaloniid *Acanalonia conica* (Say), a common species in the southern United States, and *Nilaparvata lugens* Stål, the pestiferous Old World tropical brown planthopper, have also recently extended their ranges, with data indicating that some of these range extensions may be the result of global climate change (Pechuman and Wheeler 1981; Ali et al., 2014).

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LITERATURE CITED

Ali, M. P., D. Huwang, G. Nachman, N. Ahmed, M. A. Begumm, and M. F. Rabbi. 2014. Will climate change affect outbreak patterns of planthoppers in Bangladesh? PLoS One 9(3): e91678. Doi:10.1371/journal.pone.0091678

Bartlett, C. R. and contributors. 2014. Planthoppers of North America (accessed January 5, 2015). http://ag.udel.edu/enwc/research/planthoppers/

Bartlett, C. R., L. B. O'Brien, and S. W. Wilson. 2014. A review of the planthoppers (Hemiptera: Fulgoroidea) of the United States. Memoirs of the American Entomological Society 50: 1-287.

Crawford, D. L. 1914. A contribution toward a monograph of the homopterous insects of the family Delphacidae of North and South America. Proceedings of the U.S. National Museum 46: 557-640 + 49 plates.

Metcalf, Z. P. 1923. A key to the Fulgoridae of eastern North America with descriptions of new species. Journal of the Elisha Mitchell Scientific Society 38: 139-230 + 70 plates.

Pechuman, L. L. and A. G. Wheeler, Jr. 1981. Northern range extension of *Acanalonia conica* (Homoptera: Acanaloniidae). Entomological News 92: 98-100.