The taxonomy and zoogeography of the planthopper family Cixiidae in the United States

JAMES P. KRAMER

The Cixiidae comprise one of the larger and more successful families of the Fulgoroidea and is worldwide in distribution excepting the polar regions. A recent taxonomic study of the North American fauna revealed 13 genera and 172 species. The genera are readily distinguished on the basis of easily observed external features of both males and females, but species identification depends largely upon structures found within the male genital capsule.

Three genera, shared with the Palaearctic Region, are *Cixius*, *Oliarus*, and *Myndus*. These three dominate in the United States by providing 110 of the 172 recorded cixiid species. *C. meridionalis* Beirne is found in Alaska above the Arctic Circle and is the northernmost member of the family in North America. Even though all three occur in Canada, only *Cixius* and *Oliarus* are dominate there.

Five genera, *Oecleus*, *Bothriocera*, *Pintalia*, *Microledrida*, and *Nymphocixia*, are shared with the Neotropical Region. These five genera provide 57 of the 172 recorded cixiid species in the United States. Collectively, they are richer in species in the Neotropical Region than in the Nearctic Region. These genera are essentially tropical elements whose northern ranges include the warmer parts of the United States.

Five genera, *Monorachis*, *Platycixius*, *Oliaronus*, *Stegocixius*, and *Asotocixius*, are known only from the United States. All are monotypic and thus provide only 5 of the 172 recorded United States cixiids. Their distribution is generally restricted to the southern half of the United States, where they are uncommon to rare.

In summary, the cixiid fauna of the United States is a composite of widespread (64 %), tropical (33 %), and endemic (3 %) generic elements.