

October 1987

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Recommended Citation

Katovich, Steven A. and Kulman, Herbert M. 1987. "*Leptoglossus Corculus* and *Leptoglossus Occidentalis* (Hemiptera: Coreidae) Attacking Red Pine, *Pinus Resinosa*, Cones in Wisconsin and Minnesota," *The Great Lakes Entomologist*, vol 20 (3)

DOI: <https://doi.org/10.22543/0090-0222.1607>

Available at: <https://scholar.valpo.edu/tgle/vol20/iss3/2>

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**LEPTOGLOSSUS CORCULUS AND LEPTOGLOSSUS OCCIDENTALIS
(HEMIPTERA: COREIDAE) ATTACKING RED PINE, *PINUS
RESINOSA*, CONES IN WISCONSIN AND MINNESOTA**

Steven A. Katovich and Herbert M. Kulman¹

ABSTRACT

Leptoglossus corculus and *Leptoglossus occidentalis* are recorded feeding on red pine cones and conelets in Wisconsin and *L. occidentalis* is recorded feeding on red pine conelets in Minnesota.

This paper reports observations of both *Leptoglossus corculus* (Say) and *Leptoglossus occidentalis* Heidemann feeding on cones of red pines, *Pinus resinosa* Ait., in a southern Wisconsin seed orchard (Grant County), and *L. occidentalis* on red pine cones on the University of Minnesota campus in St. Paul (Ramsey County). *L. corculus*, the southern pine seed bug, and *L. occidentalis*, the western conifer seed bug, are major pests of pine seed production in regions of the country outside the Great Lakes states (DeBarr and Ebel 1974, Koerber 1963).

Neither Minnesota nor Wisconsin have been included in the published distribution range of either species (Allen 1969, Hedlin et al. 1981). Schaffner (1967) reported that *L. occidentalis* was present in Iowa and Indiana with Scots pine, *Pinus sylvestris* L., being the observed host plant. Specimens of *L. corculus* have been collected from Wisconsin and Illinois (DeBarr, pers. comm.). No specimens of either species are present in the University of Minnesota Insect Collection, the University of Wisconsin-Madison Insect Research Collection, or the insect collection at the Milwaukee Public Museum.

Thirty *Leptoglossus* individuals were collected at the Wisconsin site during the summer of 1985 (27 *L. corculus* and three *L. occidentalis*). Adults of both species were first collected on 26 June. Nymphs of *L. corculus* were present from mid-June to mid-September, but no *L. occidentalis* nymphs were found. Five *L. occidentalis* nymphs were collected on the St. Paul campus on 6 September 1986. In Wisconsin, adults of both species were observed with their stylets inserted into cones. Nymphal *L. corculus* were observed feeding on both pine conelets and cones in Wisconsin, while in Minnesota *L. occidentalis* nymphs were observed feeding only on cones. Radiographic analysis of seed collected at the Wisconsin orchard indicated that 67% were empty. Factors other than seedbugs, such as inadequate pollination, can cause empty seed. However, because of their implication in causing empty seed in southern and western pines, and because they were observed feeding on red pine cones, seedbugs were probably responsible for part of the empty seed in the orchard. Their large host range within the genus *Pinus* make them a potential threat to many Lake States pine seed sources.

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ACKNOWLEDGMENTS

We thank Dr. Gary DeBarr, US Forest Service, for identifying the *Leptoglossus* spp. specimens. We also thank Gerald Noonan, Milwaukee Public Museum, and Steven Krauth, University of Wisconsin-Madison for checking their respective insect collections. Partial funding was provided by the USDA Forest Service, Northeastern Area State and Private Forestry, St. Paul, MN. This article is Paper No. 15,097 in the Science Journal Series Minnesota Agricultural Experiment Station, St. Paul.

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