DISTRIBUTION OF STALK BORING INSECTS IN GIANT RAGWEED IN INDIANA AND SOUTHERN MICHIGAN. Eric J. Ott, William G. Johnson, Corey K. Gerber, Dana B. Harder, and Christy L. Sprague, Graduate Research Assistant, Assistant Professor of Weed Science, Department of Botany and Plant Pathology Purdue University, West Lafayette, IN 47907-2054, Entomologist, Department of Agronomy Purdue University, West Lafayette, IN 47907-2054, Graduate Research Assistant, Assistant Professor of Weed Science, Department of Crop and Soil Sciences Michigan State University. East Lansing, MI 48824.

Previous research has shown that stalk boring insects have an effect on glyphosate efficacy on large giant ragweed. Previous field surveys of stalk boring insects have only accounted for total numbers of each insect and not their distribution. Four regions in Indiana (Northwest, Northeast, Central, and Southwest) and three regions in Michigan (North Central, Southeast, and Southwest) were selected for a survey. In mid-August, five sites located in soybean fields were chosen randomly within each region. Ten giant ragweed plants were then collected from each site. Data collected for each plant include; plant height, if plant had escaped glyphosate application, if insect tunneling was present, length of tunnel, if a stalk boring insect was found, and if an insect was found, the insect was collected in a vial with isopropyl alcohol for preservation for later identification. Insects were then identified to the family level. Seven different insect families (Cerambycidae, Curculionidae, Languriidae, Noctuidae, Torticidae, Argyresthiidae, and Agromyzidae) from three insect orders (Coleoptera, Lepidoptera, and Diptera) were identified from all of the regions. The most common insect families found in giant ragweed in mid-August were the Curculionidae and Noctuidae. Curculionidae made up a larger proportion of the larvae found in Indiana than in Michigan, whereas Noctuidae made up a larger proportion of the larvae found in Michigan than in Indiana.

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