

SPATIAL AND TEMPORAL DISTRIBUTION OF STALK BORING INSECTS IN INDIANA AND MICHIGAN GIANT RAGWEED. Eric J. Ott, William G. Johnson, Corey K. Gerber, Dana B. Harder, and Christy L. Sprague, Graduate Research Assistant, Associate Professor, 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, Department of Crop and Soil Sciences Michigan State University. East Lansing, MI 48824.

Our previous research has shown that stalk boring insects can reduce glyphosate efficacy on large giant ragweed. Previous field surveys of stalk boring insects have only accounted for the presence of insects and not their spatial and temporal distribution in giant ragweed plants. Four regions in Indiana (northwest, northeast, central, and southwest) and three regions in Michigan (central, southeast, and southwest) were selected for a field survey. Survey timings included June 2005, August 2004 and 2005, and September 2005. Five soybean fields with giant ragweed present were chosen within each region. Ten giant ragweed plants were collected from each site at each timing. Plants were examined for the presence or absence of stalk boring insects. If an insect was found, the insect was collected in a vial with isopropyl alcohol to preserve for later identification. Insects were then identified to the family level. Cerambycidae insects were frequently found in September in Indiana and Michigan. Curculionidae insects were frequently found in August in Indiana. Noctuidae insects were primarily found in June throughout Indiana, and northern Indiana in August. Tortricidae insects were found in primarily in southern Michigan and northern Indiana, and a majority of the insects collected were from the September survey timing. Languriidae and Pyralidae insects were also found, but not in large numbers.