Growth Stage Effects on Alfalfa Response to Potato Leafhopper Injury. (C06-diedrick114033-Poster)

Authors:

- K.A.Diedrick The Ohio State University
- R.M.Sulc The Ohio State University
- R.B.Hammond The Ohio State University
- A.L.Barta The Ohio State University

Abstract:

The potato leafhopper (Empoasca fabae) is the most serious insect affecting alfalfa (Medicago sativa) in Ohio. Varieties are being released with increasing resistance to the potato leafhopper, but field studies indicate that during the period of establishment, the resistance mechanism against potato leafhopper (PLH) feeding is not fully active, and insect damage on resistant plants can exceed economic injury level. An experiment was carried out in the greenhouse to test the effects of plant age on root:shoot ratios and total nonstructural carbohydrate (TNC) accumulation in the plant roots using three densities of PLH on two varieties of alfalfa differing in PLH resistance (susceptible and highly resistant). Data will be presented on the effect of plant age on the expression of PLH resistance by TNC contents in the roots, a sensitive PLH damage indicator.

Corresponding Author Information:

Keith Diedrick The Ohio State University 2021 Coffey Rd. Columbus, OH 43210-1086 phone: 614-292-2863 fax: 614-292-7162 e-mail: diedrick.2@osu.edu

Presentation Information:

Presentation Date: Tuesday, November 12, 2002 Presentation Time: 4:00-6:00 pm Poster Board Number: 834

Keywords:

Alfalfa, Potato leafhopper, host plant resistance, growth stage