Reduced Insecticide Rates and Host Plant Resistance for Controlling Potato Leafhopper in Alfalfa. (C06-diedrick115447-Oral)

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Abstract:

The potato leafhopper (Empoasca fabae) is the most serious insect affecting alfalfa (Medicago sativa) in Ohio. The most common control of the potato leafhopper (PLH) is accomplished by use of chemical insecticides. 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 feeding is not fully active, and insect damage on resistant plants can exceed economic injury level. An experiment was carried out in the field to test the effects of full and reduced rates of lambda-cyhalothrin (Warrior 1CS) on establishment year and established stands of two varieties of alfalfa varying in PLH resistance (susceptible and highly resistant). Data will be presented to describe the effects of reduced insecticide applications on PLH population, plant height, and yield on both PLH-resistant and susceptible alfalfa stands in seedling and established growth stages.

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Presentation Information:

Presentation Date: Thursday, November 14, 2002
Presentation Time: 9:15 am

Keywords:

Alfalfa, Potato leafhopper, Host plant resistance, Insecticide