Chemical Control/New Products

Control of pear psylla with chloronicotinyl insecticides

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Abstract: Two field trials were conducted to evaluate several insecticides for control of pear psylla in mid-summer. Each treatment had four single-tree replicates and applications were made with a handgun sprayer. In the first trial, the chloronicotinyl insecticides Actara, Assail, and Provado were examined as well as Mitac and Pyramite. Pear psylla nymph counts showed populations were significantly reduced on lower spur leaves after the application of all tested insecticides. Insecticide treatments significantly suppressed pear psylla nymph populations on upper terminal leaves for three weeks. Mitac had the lowest populations of pear psylla adults over the entire sample period. In the second trial, the chloronicotinyl insecticides examined were Actara, Assail, and Calypso. AgriMek and Mitac were also included. Counts from lower spur leaves showed Mitac and Calypso to significantly reduce pear psylla nymphs. Pear psylla nymph populations on upper terminal leaves were significantly reduced by all treatments compared to the control for up to three weeks. Mitac and AgriMek provided more immediate knock-down of pear psylla adults than other treatments. In addition, laboratory tests were conducted to evaluate ovicidal and nymph activity of various insecticides. Esteem and Pyramite had greater ovicidal activity than Provado, Mitac or AgriMek.