Chemical Control/New Products

Pear Rust Mites: Alternatives to Carzol—2005

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Abstract: This trial to test several acaricidal tactics for control of pear rust mite was performed in a young (2-yr-old) commercial pear orchard located near Cashmere, WA, in 2005. The trial was by randomized complete block design, with seven single tree replications per treatment. Applications were made by handgun to drip to simulate 400 gpa. A pre-treatment count was performed early (1 Aug) and then repeated 3 days posttreatment on 4 Aug. Sampling was repeated at weekly intervals for the next three weeks. A single application was made on 1 Aug. All of the treatments provided a rapid and effective response on the pear rust mite population relative to the untreated control. An additional grower application of Envidor was made in a nearby mature pear orchard for comparison, and it quickly knocked down the rust mite population. However, the small untreated control was likely drifted upon, and rust mites also were controlled in the untreated pear.

A laboratory bioassay was developed for determining responses of pear rust mite to acaricides for the purpose of monitoring for resistance. Results of these bioassays will be used as baseline levels for monitoring resistance in the future.