

Biology/Phenology

Using a Novel Marking Technique to Answer an Old Question: Do Predator Populations in the Ground Cover Move into the Canopy and Affect Pear Psylla?

Vincent P. Jones, David Horton, Callie C. Eastburn, Tawnee D. Wilburn  
Washington State University Tree Fruit Research and Extension Center, Wenatchee, WA

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*Abstract:* We used a novel marking technique to mark insects occurring in the ground cover of a small pear block. Our marking technique used egg white solutions that were applied with a modified weed sprayer mounted on a four-wheeler. Insects were collected from both the canopy and ground cover and evaluated for percentage marking. We have processed about half of the samples (1233 insects so far). We found that 97.5% of the pear psylla predators collected from the ground cover were marked and 23% of all predators collected from the canopy were also marked. Overall, about 20% of all *Anthocoris* and *Deraeocoris* collected from the trees were marked, indicating they either originated in or visited the ground cover. Other groups were marked at even higher percentages, but more samples need to be processed to have a reasonable sample size.