

Implementation

Areawide Organic Pest Management: The Peshastin Creek Project, Three Years

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*Abstract:* In 2002, an Areawide Organic Management Program was established on 310 acres of contiguous pear in a small valley near Peshastin, WA. Organic pest management practices were implemented for insect and mite control throughout the project. Approximately 50% of the acreage was Certified Organic; however, other organic practices were not required in the remaining acreage (e.g., nutrient, rodent, and weed control were conventional). Over three years, there has been a reduction in pesticide use and an associated reduction in insecticide costs. In the first two years, there was no correlated increase in overall natural enemy densities, however, there was a slight increase in 2004. Fruit yield and quality have been maintained, and alternative marketing programs have been successful. In 2004, pear psylla densities remained as in 2003, much lower across the entire project area than 2002. Densities have not been allowed above economic threshold levels. Spider mite pressure has been generally low since project inception. Codling moth pressure was surprisingly high in 2003, but management programs proved very effective at controlling fruit damage, and populations were quite low in 2004 (less than 0.25% damage at all locations). Low predatory insect densities were found in all programs, with increases in late season correlated with increasing pear psylla. Damage thresholds for pear psylla may simply be too low to sustain higher densities of natural enemies, and replacement of insecticides by biological control is unlikely. The areawide organic IPM program will continue in 2005 and expand into an adjacent valley.