

Thresholds/Monitoring/Sampling

Presence-Absence Sampling Prospects for Pear Psylla

Thomas R. Unruh  
USDA-ARS, Wapato, WA

*Keywords:* pear psylla, *Cacopsylla pyricola*, pear

Presence-absence sampling can greatly speed the assessment of population levels in field populations of insects. Its value is the freedom from counting all insects observed although more sample units may need to be examined. For pests like pear psylla, where many insects can occur on single shoots but few shoots are infested, freedom from enumerating all insects represents a significant cost savings. Pest consultants have developed some home-grown recipes for presence-absence sampling of pear psylla and for the second half of the 1999 we began examining the accuracy of these. Presence-absence designs must be based on a strong regression relationship between insect abundance and percentage infested. Percent infested and average numbers that occur are compared for spring egg counts of pear psylla (from historical data sets) and for eggs and nymphs from July and August of 1999 and from older data sets.