

Thresholds, Monitoring and Sampling

Practical Evaluation of Adult Tentiform Leafminers (TLM) in Apple Orchards in California
Using Traps Baited with Different Pheromone Formulations

Mario S. Moratorio¹ and William W. Barnett²

¹Farm Advisor, UCCE—El Dorado County

²IPM Specialist (Emeritus), UCCE—Kearney Agricultural Center

Keywords: tentiform leafminer, lures, apple

Commercially available Pherocon® traps baited with tentiform leafminer pheromone lures (Trécé™ Inc., Salinas, CA) used to monitor TLM adult population were compared in three apple orchards in Apple Hill®, Camino, CA. During the 1996 and 1997 seasons the traps baited with the commercially available lures (No. 3144) produced high biweekly counts of more than 500 adult TLM, from mid-June until early October. The extra time required to service the traps, i.e., counting adults and changing trap bottoms more frequently, limits the usefulness of the monitoring system. If a different lure formulation able to track TLM populations present in the orchard while attracting lower number of adults were available, considerable scouting time will be saved.

The performance of six different TLM pheromone formulations, including the one commercially available, was compared in 1996. Two of the formulations (8234 and 8235) attracted lower numbers of adults and followed the TLM population closely.

Further testing was undertaken during 1997. Based on the 1996 results, the performance formulations No. 8234, 8235 and 3144 (the latter used as control) were compared. Adult counts on traps baited with pheromone formulations No. 8234 and 8235 were considerably lower than 3144, while 8235 was slightly lower than 8234. Traps lured with both 8234 and 8235 formulations tracked TLM population closely and were much faster to count.