

Chemical Control/New Products

## FIELD AND LABORATORY TRIALS AGAINST WESTERN TENTIFORM LEAFMINER

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*Abstract:* Various insecticides were tested against leafminer in a heavily infested apple orchard near Brewster, Washington. Of the treatments tested, only Success + oil (peak sapfeeder) and Agri-Mek+oil (early tissuefeeder) were effective in reducing leafminer populations. There is some evidence to support changing the recommended timing to somewhat earlier than the traditional 10% tissuefeeder stage. Two greenhouse bioassays were performed by releasing 500-700 adult leafminers into cages containing 24 potted apple seedlings (4 treatments x 6 reps). Treatments were applied either prior to introduction, or at various times throughout the larval development period. Surround, Raynox and Intrepid when applied pre-exposure to adults gave  $\approx 50\%$  suppression of the numbers of total and live mines. In the Intrepid treatment, it appeared that if the larvae survived until the tissue feeder stage, they survived the treatment; most of the mortality occurred at the sapfeeder stage. Avaunt, applied either during the egg or sapfeeder stage, did not reduce leafminer populations in relation to the check. The standard treatment, Success plus oil targeting sapfeeders, reduced the the resulting population to a very low level.