

Mating Disruption/SIR

Development of Mating Disruption for Leafrollers

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Three approaches for mating disruption of leafrollers in Washington's tree fruits are being investigated: hand-applied dispensers for both codling moth and leafrollers, a sprayable microencapsulated formulation for leafrollers, and the use of aerosol puffers.

The effectiveness of a polyethylene tube dispenser (ISOMATE-SPECIAL) loaded with a blend of codling moth and leafroller sex pheromones (**Dual**) was evaluated in three 20 acre orchards in Brewster. Each orchard was paired with a similar orchard treated only with ISOMATE-C+ for codling moth. No significant treatment effects were found for larval population densities. Codling moth lure-baited traps caught few moths and no difference was found between treatments. Moth catches in leafroller traps were significantly reduced in blocks treated with the **Dual** dispenser. Fruit injury was 64% lower in the orchards treated with the **Dual** dispenser.

The effectiveness of a sprayable leafroller pheromone product (NoMate LRX) was evaluated in replicated 20 acre orchards. Three applications were spaced 4-5 weeks apart. No reductions in fruit injury occurred in the sprayable-treated blocks compared with the untreated checks.

Preliminary trials were conducted with aerosol puffers loaded with leafroller pheromone. Moth catches in lure-baited and female-baited traps compared with similar untreated check blocks were reduced nearly 99 and 91%, respectively. Studies conducted in small plots suggested that releasing pheromone for 24 h was marginally better than 12 h for disruption of pandemis leafroller to lure-baited traps.