



MSU Agriculture Innovation Day

Focus on Fruit and Vegetable Technologies

New techniques for outwitting insect pests in tree fruit orchards

Disrupting the sex life of a pest is just as satisfying as killing it

Pheromone-based mating disruption is an effective means of managing many tree fruit pests, including codling moth, Oriental fruit moth, leafrollers and peach tree borers.

Novel technologies have been developed to reduce costs

A single application provides season-long control The technique does not affect beneficials

All peach growers should rely on mating disruption as the principal management option for Oriental fruit moth

Mating with sterile males surely stops the reproductive process

Weekly releases of sterile moths have reduced codling moth populations by over 90% in British Columbia apple orchards

On-going research aims to make the technique available to Michigan apple growers

Knowing how many sterile moths to release is critical

UAV's or drones are an intriguing option for releasing sterile moths

New trapping systems help tree fruit growers track pest activity

“Ghost” traps that rely on insecticide treated netting to kill attracted insects are a new tool for monitoring brown marmorated stink bug

Commercially available lures attract spotted wing drosophila as well or better than liquid baits

Moth captures in pheromone traps coupled with degree day models are a highly effective means of timing control treatments

Good management practices require proper trap placement and maintenance.

Placing pheromone traps at trunk-window-height on the edge of an orchard is ineffective

