

Peachtree Borer Mating Disruption

Mating disruption is a management technique which relies on the release of pheromones in quantities that “confuse” the male moths and disrupt their ability to find and mate with female moths, reducing or eliminating future generations of the larvae which cause the damage. Successful mating disruption can greatly reduce peachtree borer pressure, often eliminating the need for chemical intervention and substantially reducing damage.

Several nursery growers in the North Willamette Valley in Oregon have adopted this practice in shade tree and shrub production. They report good success. In many cases they have reduced production costs, increased plant quality, and reduced the pesticides applied to their crops.



Several local agricultural product suppliers provide both dispensers, the monitoring traps and pheromone lures for growers making access to mating disruption readily available to Northwest growers. Research from other mating disruption trials such as those with codling moth in apples and pears shows the benefit of having contiguous growers using mating disruption, increasing the suppression of moth populations over a regional basis.

For further information on ISOMATE P and distributors in your area, contact Pacific Biocontrol Corporation:
<http://www.pacificbiocontrol.com/Home.html>

Acknowledgement: The author would like to thank our cooperating growers, Glenn Thayer and Pacific Biocontrol Corporation, Agricultural Research Foundation, and the ODA Nursery Research Grant Program for their assistance and support for this work.

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Information on the Use of
ISOMATE P Pheromone to Suppress
Peachtree Borer in Nursery Production

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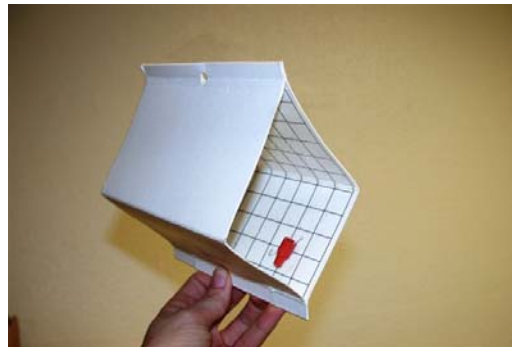


Peachtree borer (PTB), *Synanthedon exitiosa*, is a day-flying clearwing moth which attacks a number of economic hosts of *Prunus* including cherry, plum, peach, apricot, almond and shrubs such as cherry laurel. The larvae of peachtree borer tunnel through the bark at the base of the plant feeding in the cambium and often girdle plants leading to early death.

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PTB Monitoring

This strategy uses pheromone traps to monitor PTB. Traps need to be hung low, within three feet of the ground and spaced with at least one trap for every 2.5 acres. Traps should be placed at the beginning of adult emergence, usually in mid-late June. They should be monitored through the flight period, possibly through the end of September in the Willamette Valley. The pheromone lures are volatile and need replacement every 4-6 weeks depending on the temperature (they release faster at high temperatures).



A reduction or no males trapped in the monitoring traps (also known as “trap shutdown” at 100% reduction), is an indication of successful male confusion. The recommended action threshold (adapted for nurseries) is 1 moth/trap. A supplemental insecticide treatment may be required with counts at or above this level.



Disperser Application

The mating disruption dispensers are placed in the plantings prior to the flight period. The recommended rate is 100 dispensers per acre. The dispensers are long twist-ties which are simply tied around a twig in the middle third of the canopy. Treat entire blocks, not just sections or borders in order to minimize possible edge effects, i.e. mated females flying in from an adjacent untreated block. Best results are achieved by treating blocks of at least five acres but successful trap shut down has occurred in plots as small as an acre. The pheromone dispensers, unlike the pheromone lures in the traps, should last an entire summer flight season.



The dispensers are easy to apply, simply requiring gloves as PPE with no re-entry issues. This tactic is also compatible with existing pest management programs. ISOMATE P is not toxic to bees or beneficial insects and mites. ISOMATE P is not affected by rainfall or overhead irrigation.

For further information on peachtree borer check the PNW Nursery IPM website: http://oregonstate.edu/dept/nurspest/peach_tree_borer.htm