

Peach Tree Borer (*Synanthedon exitiosa*)

March, 2016

Hosts

Apricot, cherry, chokecherry, nectarine, peach, plum, prune.

Damage

Larvae tunnel under the bark at or below the ground level, creating masses of gum mixed with sawdust and excreta near the soil line of the tree trunk. Young trees can be girdled and killed; older trees are weakened and become susceptible to attack by other pests such as shothole borer and ambrosia beetle.

Identification

Larva - Cream coloured with brown heads; up to 30 mm long when mature.

Pupa - Brown, covered with chewed wood fragments.

Adult - Clear-winged moths that somewhat resemble wasps.

Bodies are metallic blue-black in colour, 25 mm long. Males have narrow yellow bands around the abdomen; females have a single wide orange band around the abdomen.

Life History

Overwinter as larvae at base of tree, becoming active in the spring. Pupation occurs in the feeding tunnels. Adults are active from late June into September. Females lay their eggs on tree trunks, mainly near the soil line. Larvae bore into tree after hatching and may take up to 2 years to mature. Only one generation is produced each year.

Monitoring

Monitor male moths using pheromone traps. In mid-June, hang traps at a density of one trap per hectare with a minimum of two per orchard. Place traps along the edge of the planting to monitor moths entering from adjacent plantings. Check the traps weekly and replace traps and pheromone caps every 6 weeks. Inspect tree bases for signs of larval attack (excreta mixed with jelly-like gum).



Gummy resin oozes at base of tree from tunnels larvae make under bark



Peach tree borer larvae. Photo Courtesy of Hugh Philip, IPM 2 GO Consulting Service, Kelowna



Peach tree borer pupae

Control

Cultural - Install a metal cone-shaped collar around the base of the tree before eggs are laid to prevent larvae from boring into tree base. Kill larvae in tunnels by probing with a wire or by opening the tunnels to find and destroy them. Alternatively, wrap polyester batting around the base of infested trees prior to adult emergence to trap and remove emerging adult moths.

Chemical - Protect transplanted trees for at least 1 year by dipping the roots and crown (up to the bud union) at any time before planting in a Thionex solution. Ensure constant agitation of the WP solution.

For protection of planted trees, spray if traps capture an average of one moth per trap per week in a block of young trees, two moths per trap per week in a mature block. Apply Thionex when first moths are captured in pheromone traps (mid to late June) or Rimon within 7-10 days after first moth capture. Spray trees from ground level to lower scaffold limbs and repeat applications 3 weeks later. For effective control it is essential to apply sprays for 2 or more consecutive years. Ensure thorough and uniform application using a hand gun sprayer operated at not more than 300 kPa. Rimon may be harmful to predatory mites. Note: last date of use for Thionex is December 31, 2016.

Mating Disruption - An alternative to chemical sprays is to use Isomate-P dispensers for mating disruption of adult peach tree borers in all soft fruit blocks. Consult the product label for instructions on application. It is important to apply the dispensers before moth emergence in order to delay mating. Blocks less than 1 ha in area, with uneven tree density and size, and irregular borders are less suited for optimum performance of Isomate-P. It is important that the population level is very low in the block and there are no nearby outside sources of mated females. Monitor outside rows adjacent to unmanaged host trees for moths and apply spray to border rows as necessary. This tactic is proving very effective when applied as per label instructions.



Female peach tree borer
Photo courtesy of Ontario Crop IPM



Male peach tree borer moth
Photo courtesy Agriculture & Agri-Food Canada