OBLIQUEBANDED LEAFROLLER (OBLR)

Choristoneura rosaceana

Description:

Adults:

Tan in color, with alternating light and dark brown (oblique) bands across their forewings. Female moths are larger and more distinctively marked.

Eggs:

Dull, greenish yellow eggs are laid in flattened, overlapping masses of up to 200 on leaves. Egg mass is approximately 0.8 by 3 in or 3 by 12 mm in diameter.

Larvae:

Fully-grown larvae are 0.75-1 in or 19 to 25.4 mm long, yellowish green with brown to black head capsule.

Hosts:

Apples, pears, walnuts, filberts, pistachios, stone fruit, oaks, berries, grapes, hops, azaleas.

Left: OBLR adult (Source: UC IPM)
Top right: OBLR egg mass (Source: www.gov.mb.ca)
Bottom right: OBLR larva
(Source: Washington State Univeristy)

Damage:

- Larvae from overwintering generation become active in March and April, feeding on leaves and developing fruit.
- Severely damaged fruit or clusters are often aborted by trees. Those remaining are deeply scarred and deformed.
- Summer generation larvae cause the most serious damage by shallow feeding in the skin (0.06 inch or 0.016 mm deep) or small holes near the stem end of the fruit.
- In hazelnuts, the second generation can cause nut drop by feeding on the shell of the developing nut.

OBLR damage (Source: NC State University)

OBLR damage
(Source: UC IPM)

Phenology:

- 2 to 3 generations per year (in hazelnuts only 2 generations).
- Overwinters as third instar larvae in hibernacula in bark crevices.
- Adult emerges in mid-May in warmer regions, mid-June in cooler districts.
- Earliest emergence is May 15 (Hood River, OR), June 1 (Yakima, WA).

Lure Type and Maintenance:

- **PHEROCON® OBLR controlled release lure.**
  - Replace PHEROCON OBLR lures every 4 weeks.
- **PHEROCON LR COMBO™ DUAL™ controlled release lure.**
  - Replace PHEROCON LR COMBO DUAL lures every 6-8 weeks.

Lure Storage:

- Store in unopened factory sealed packages in a cool place (< 74° F or 24° C maximum) for short periods or refrigerate longer term.
- Refrigerate or freeze unopened packages to carry over for annual storage.

Trap Design:

- PHEROCON 1C Trap.

Placement Time:

- 1 to 2 weeks before emergence.
- May 1 – May 10 (7-10 days post petal fall in apples).
- Usually early June to mid-July in hazelnuts.

Placement Pattern:

- Pattern within orchard – grid pattern.
- Within tree – 6 feet or 1.8 meters high, in canopy.
- 3 rows in from edge.

Trap Density:

- Use 1 trap per 10 acres or 4 ha.
- Hazelnuts: Use 1 trap for every 5 acres or 2 ha.

Trap Maintenance:

- Check traps 2-3 times weekly depending on required information.
- Replace trap liners every 4-6 weeks or when fouled with dust or insect debris.

TRÉCÉ INCORPORATED
INSECT PHEROMONE & KAIROMONE SYSTEMS
Your Edge – And Ours – Is Knowledge.

© 2023, Trécé Inc., Adair, OK USA • ® is a registered trademark and TM is a trademark of Trécé Inc., Adair, OK 74330 USA

Recommendations: (Using only Pherocon 1C traps)

First Generation

- Spray 10 days after peak following warm winter, or 14 days after peak following cold winter.

Second – Fourth Generations:

- Spray 4-5 days after peak in warm summer, or 6-7 days after peak in cold summer.
- Use trap counts for detection of adult emergence.
- Alternatively, treat when capture at peak of flight meets or exceeds 20 moths per trap per week.
- Continue to monitor for second flight.

Alternative Recommendations:

- Spray for thorough coverage, and pay particular attention to the tops of trees.
- Spray each generation once with registered insecticide at recommended label rates.
- Sample 100 fruit clusters from upper third of canopy at bud stage for larvae.
- Treat if two or more larvae are found in 100 buds in springtime, four or more in summer.
- For the larval stage in hazelnuts treat when 20-25% of samples are infested.
- There is a range of several days on either side of this date when effective control can be expected.
- Shear and shape trees only between peaks in moths flights.
- Remove and destroy clippings.
- Keep trees well watered and stress free

Source: Recommendations and certain other sections were sourced from UC IPM Obliquebanded leafroller Pest Management Guidelines for Apples and Pears.

Note, always:

- Use only 1 lure per trap.
- Count and record captures as recommended.
- Change trap as needed.
- Discard lures in trash far from the area of use and remove trash afterwards.
- Follow recommendations.
- Contact local extension authorities and consultants for regional advice.

TRÉCÉ INCORPORATED
INSECT PHEROMONE & KAIROMONE SYSTEMS
Your Edge – And Ours – Is Knowledge.

© 2023, Trécé Inc., Adair, OK USA • ® is a registered trademark and TM is a trademark of Trécé Inc., Adair, OK 74330 USA