

Oriental Fruit Moth

Giving Grove Orchard Resource

The Oriental fruit moth (Grapholita molesta) is a damaging pest of stone fruits, apple and pear. Multiple generations are possible, causing shoot and fruit damage. For region-specific information, please contact your local Giving Grove partner.







Appearance:

- Adult oriental fruit moths are small, grayish moths about 0.4 inch long
- Mature larvae are about 0.5 inch long, pinkish to white in color.

Damage:

- · Early generation oriental fruit moth larvae feed on new shoots, causing the death of shoot tips
- Later generation larvae burrow into fruit and feed around the fruit pit. Infested fruit often drops from the tree.

Timing:

- Adults emerge in the early spring.
- Eggs are laid on new shoots. Larvae then feed on the shoots. These are called "shoot strikes."
- Later generation larvae burrow and feed around the fruit pit and then pupate in the fruit or its crevices.
- 4-6 generations of larvae hatch per year.
- Full grown larvae overwinter in bark crevices and leaf litter.

Treatment:

The Oriental fruit moth is difficult to control, but there are things you can do to slow down their damage:

- Monitor OFM with pheromone traps (set out in early spring). If there are >15 moths per trap per week for the first flight, there could be potential fruit infestation problems if control steps are not taken.
- Spray with Spinosad, Bt, or Neem after shuck-split (when developing stone fruit bursts from the bloom) to kill the
 first OFM generation. Then, continue applications on the trees every 2 weeks.
- Use bagging method to protect individual fruit.
- Prune out OFM "flags" (the wilting ends of twigs infected by the first generation of larvae) in the new growth of branches. If the larvae are still in these tips, cutting them out will prevent the OFM from growing and reproducing.

Sources: Washington State University-WSU Tree Fruit, Patrick L. Byers, Horticulture Specialist and Michael Phillips, "The Holistic Orchard"