

## Oriental fruit moth in tree fruit

The Oriental fruit moth has three full generations and occasionally a partial fourth generation each year in the Midwest and the northeastern peach-growing regions. The moths overwinter as full-grown larvae in cocoons in tree bark crevices, weed stems, trash on the ground, fruit containers and packing sheds. Most of the larvae that overwinter on mature peach trees are found on the lower 2 feet of the trunk; the remainder, on the upper parts of the tree.

In the spring, the larvae change into pupae and the adults begin to emerge in early peach bloom time. Emergence of this generation continues for about two months with the peak approximately the last week in May or in early June. After mating, females lay from 30 to 60 eggs. The egg incubation period averages about seven days in warm weather, with a minimum of four days.

On hatching, most of the first-generation larvae bore into the twigs; only a few attack the fruit. First generation larvae usually damage two or three twigs before reaching maturity. The length of the larval feeding period can vary from 10 days to 10 weeks, with an average of about three weeks. During the summer, the average length of the development period from newly deposited eggs to adult emergence is about six weeks, with a minimum of 24 days during hot weather. The second adult generation generally begins to emerge about July 1. Larvae of this generation attack both peach twigs and fruits. As the twigs harden, the partially grown larvae leave them and enter the fruits. Fruit injury in July or early August is indicated by the exudation of large masses of gum mixed with brown frass. Second-generation larvae usually attack three or four twigs before reaching maturity.

Adults of the third generation emerge in early to early August, depending on the weather conditions. The third-generation larvae appear about mid-August and may continue to hatch in large numbers until mid-September. This generation is the major cause of wormy fruit at harvest, often with little or no external sign of injury. The majority of the third-generation larvae grow to maturity, spin cocoons and remain in them over winter. In very warm seasons, a few may pupate

and emerge as adults that may produce a few eggs and larvae late in the season.

### Are conditions right for Oriental fruit moth?

Forecast models for Oriental fruit moth are available at [Enviro-weather](#). Select a weather station from the map that is closest to your location. Then click on “fruit” for a list of weather resources and models for fruit production.

### References

Howitt, Angus. 1993. Common Tree Fruit Pests. NCR 63. Michigan State University



Adults are about 5 mm long, gray-colored with wavy, light lines on wing surfaces.



Mature larvae are about 10 mm long, creamy-white to pink, with a brown head capsule. Anal comb is present.