

# Bruce Spanworm

(*Operophtera bruceata*)

August, 2020

## Hosts

Fruit trees, native trees and shrubs including willow, poplar, maple and alder.

## Damage

**Buds** - Large areas chewed from buds, petals and flower parts.

**Leaves** - Large areas chewed from leaves before bloom; severe infestations can almost defoliate trees (Fig. 1)

**Fruit** - Holes in small fruit resulting in small russeted scars in mature fruit.



Figure 1. Bruce Spanworm damage



Figure 2. Bruce spanworm caterpillar

## Identification

**Larva** - Yellowish-green to dark green caterpillar with light to dark brown head; larger larva with cream to white lateral stripes and moves with looping motion (Figure 2).

**Adult** - Wingless female; male moth with thin, semitransparent wings banded with brown and gray.

## Life History

Bruce spanworm overwinters as eggs, laid singly on twigs. The eggs hatch near the green tip stage of apple. Most larvae mature and drop to the ground by petal fall. Larvae remain in the soil until pupation in the fall. Adults appear in October and November. Wingless females crawl up the tree, mate and lay overwintering eggs.

## Monitoring

Examine fruit bud and blossom clusters for larvae and feeding damage. Limb taps can also detect larvae.

## Control

**Chemical** - Heavy infestations require a spray at the pink bud stage. Since the larvae are mainly leaf feeders, only spray at pink if the larvae are feeding on the buds. Application of insecticides for bud moth or two-generation leafrollers at pink and petal fall will also control Bruce spanworm present.