2014 Entomology Project Report
Plant Protection Division, Pest Program
Washington State Department of Agriculture

1 May, 2014

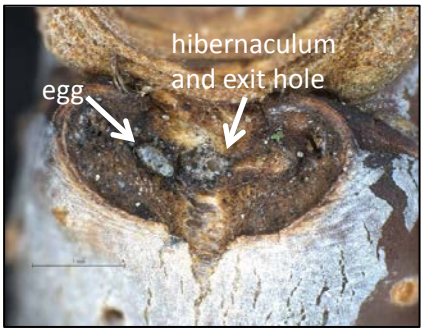
Argyresthia pruniella

A new cherry pest in Washington State

Background

Argyresthia pruniella Clerck, called the Cherry Blossom Moth in the United States, is a tiny (9-12 mm wingspan) moth in the family Argyresthiidae. This European native was first documented in North American from Vancouver, British Columbia, in 2007. A series of moths collected in the 1960s in Nova Scotia was later discovered in the US National Museum, but no further specimens have been recorded from the east coast. Pheromone trap surveys in 2011-2013 have discovered what may be a spreading population of this moth in NW Washington.

Biology



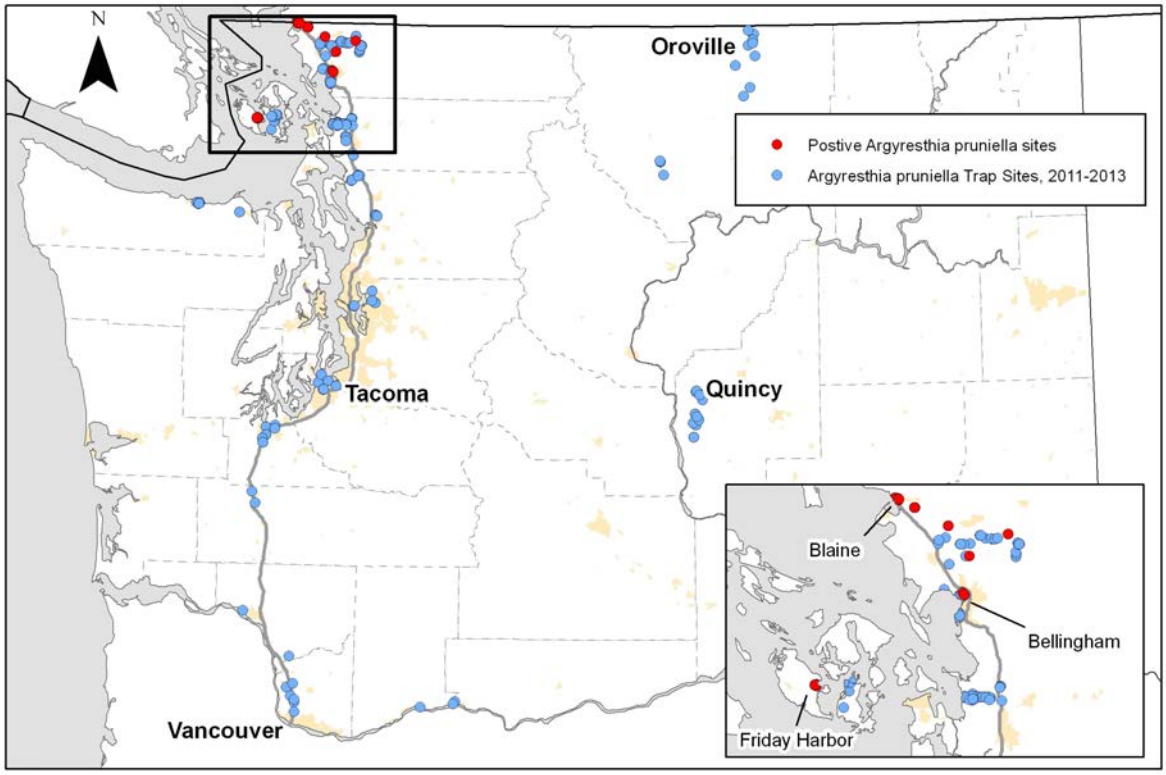
Argyresthia pruniella adults are active mid- to late summer. Mated females lay eggs on twigs of *Prunus* spp., often in bud scars. Immatures overwinter as eggs or first instar larvae, which emerge and shelter inside a hibernaculum. Larvae begin feeding the in the spring, in developing flower and leaf buds (petals removed in images to highlight ovary damage).

Biology

An individual larva can consume multiple ovaries. During outbreak years in Europe, up to 90% of buds in unsprayed orchards have been destroyed. Mature *A. pruniella* larvae prepare an outer, netlike cocoon, within which they spin a denser cocoon for pupation. Pupation usually occurs in the soil, or very rarely in bark crevices.

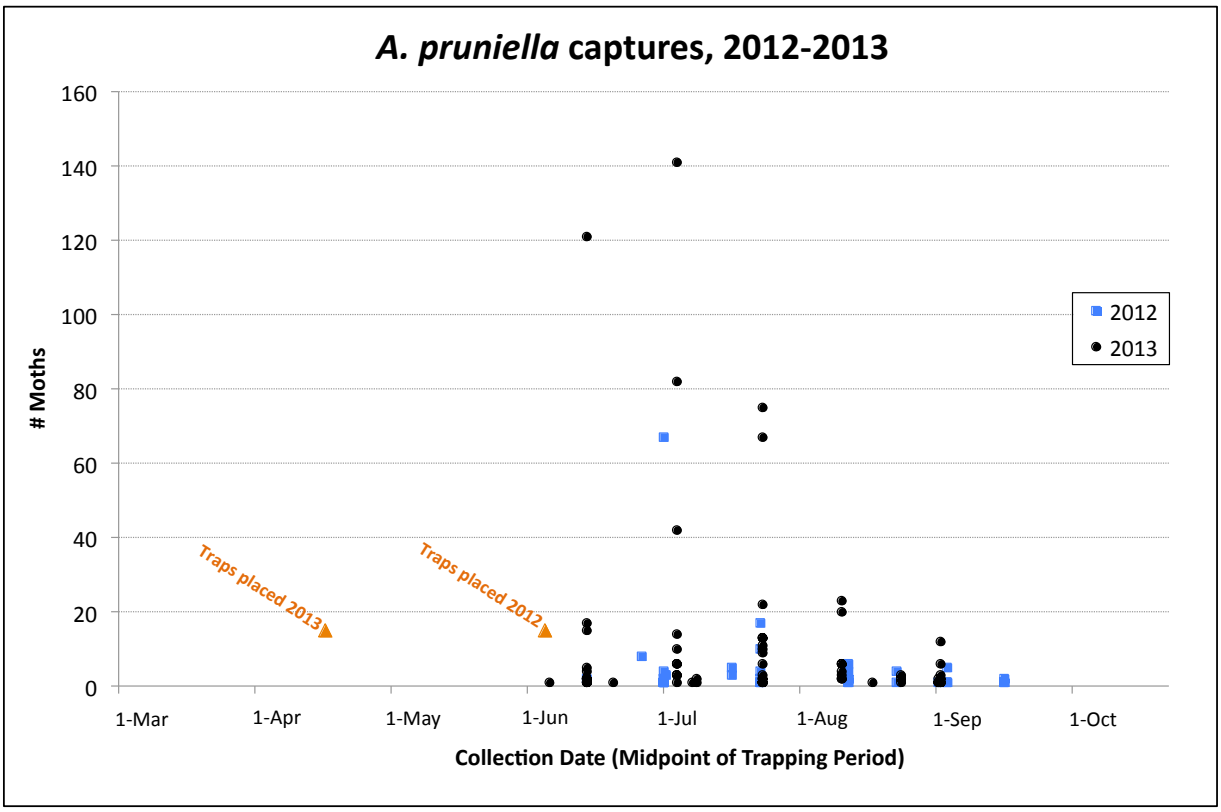
Washington Distribution

Between 2011 and 2013, plastic delta traps with sticky inserts were baited with pheromone lures (Z11-16:ALD) and placed in *Prunus* spp. host trees. Traps were deployed in mid July 2011, early June in 2012, and mid April in 2013. Traps were left in the field until mid-September in each year. Larval surveys were made of *Amelanchier alnifolia*, *Oemleria cerasiformis*, *Malus* spp., and *Prunus* spp. in Blaine, WA, in the spring of 2013.



Trap locations and *A. pruniella* detections, 2011-2013. 2011 traps ran from 27 July-15 Sept; 2012 traps ran from 6 Jun-25 Sept, and 2013 traps ran from 18 Apr-19 Sept.

Seasonality



Preliminary Findings

• *A. pruniella* is present in at least two NW Washington counties, and has been collected at 30 sites.

• Seven sites trapped in 2012 were newly positive in 2013. These included two southerly and one easterly extensions.

• The number of moths trapped/trapping day increased from 1.5 in 2012 to 5.4 in 2013.

• No *A. pruniella* larvae were found on host plants other than *Prunus* sp.

• Further monitoring is required to determine if the increased detections and numbers seen in 2013 are a result of an expanding range or a favorable year.

Distribution / Content Note
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