

Invasive Species & Exotic Pests

Christmas Berry Webworm

Cryptoblabes gnidiella

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Introduction

A native to the Mediterranean region, *Cryptoblabes gnidiella* has made its way through parts of Asia, Africa, Europe, South America, and the Caribbean. However, records of specimens intercepted in countries where it has yet to be reported indicate that the spread may be more widespread than originally thought. As of yet, the insect has not reached the continental United States. While this pest can infest a wide variety of crops, the ones of greatest concern are avocado, corn, citrus, and grape.

Concern

This species has been confirmed already in Hawaii on coffee, corn, green beans, and Sorghum. At US ports, Christmas berry webworm has been intercepted over 450 separate times. When established, the pest has caused up to 50% fruit damage and 5% yield reduction. The greatest dangers arise when the pest works in tandem with other insects and fungi to further damage the fruits. In New York, grape production would be threatened by a Christmas berry webworm invasion.

Description

Cryptoblabes gnidiella adults are 2/10 to 1/4 in (or 5-7 mm) long with brownish-grey forewings and paler white hindwings that have dark brown scales along the veins. Their eggs are white oval shaped when first laid and gradually yellow before hatching. Christmas berry webworm larvae are about 1/2 in (12 mm) when fully grown. They can



Christmas berry webworm adult. Photo: Hanna Royals, Screening Aids, USDA APHIS PPQ, Bugwood.org.



Adult Christmas berry webworm on a leaf. Photo: Friedmar Graf, lepiforum.de/2_forum_2013.pl





be olive, yellow, or red in color with reddish-brown to black stripes on the head capsule. They go through five instars. Pupae measure 1/5 to 1/4 inches (5-6 mm) and occur near the larval feeding points on the fruit or on the soil beneath the plant. They can overwinter in this stage or in the larval stage. Depending on plant host and climate, this pest may complete three to seven generations in a year. Southern Europe typically has three or four generations in a year. The generations can move between hosts depending on the crops being grown.

Damage

This pest typically takes advantage of damage caused by an infestation of other insects, such as scale insects and mealybugs. Female Christmas berry webworms lay eggs directly on the fruits. The larvae initially feed only on the honeydew excreted by other insects infesting the crop. As they grow, they begin to feed superficially on the fruit skin, stem, and junction between fruit and stalk. In the case of grapes, this results in shriveling and browning of fruit, and fruit drop, but also rot due to juice leakage if the infestation occurs closer to harvest.

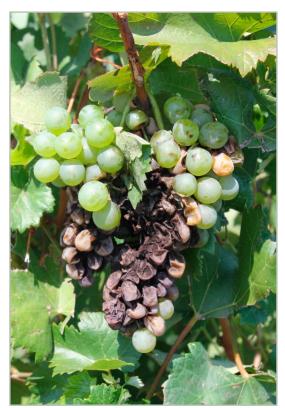
For More Information

Screening Aid: http://idtools.org/screeningaids/2017/Cryptoblabes_gnidiella.pdf

Pest Profile: https://pest.ceris.purdue.edu/pest.php?code=ITBMDPA



Christmas berry webworm larva. Photo: MAF Plant Health & Environment Laboratory (2011) Honeydew Moth (*Cryptoblabes gnidiella*).



Grape cluster damage from Christmas berry webworm infestation. From *Pest Management and Ochratoxin A Contamination in Grapes: A Review*, by L. Mondani et al, https://www.mdpi.com/2072-6651/12/5/303/htm, CC by 4.0.

