



PEST ALERT

Box Tree Moth

Box Tree Moth, *Cydalima perspectalis* (Lepidoptera: Crambidae) is an invasive insect from East Asia that primarily feeds on boxwoods (*Buxus* spp.). It was first spotted in North America in Ontario, Canada in 2018 and then spread to the U.S. through New York in 2021. It has since spread to nearby states like Pennsylvania and Delaware. The box tree moth (BTM) is a capable flier and, along with human-assisted travel, it can potentially spread rapidly, impacting nurseries and *Buxus* plantings across the U.S.

Description

Adult BTM have two color forms. A white form with brown borders and white spots, and a rare, fully brown form that also has white spots on the forewing. The adults lay pale yellow eggs in clusters of 5-20 on boxwood leaves. As eggs develop, a black spot (the head) appears inside them. Young larvae are yellow with black heads and as they grow, they develop white and black stripes with black dots along the bodies. Once they pupate, they encase themselves in a silk cocoon while retaining the larval coloration that eventually darkens.

Lifecycle

BTM has two to five generations per year, depending on climate. Overwintering larvae typically start to feed again around March, and then pupate, between April and May. The adults generally emerge from April to July and live for about two weeks. Once the adults lay eggs, their eggs take around 4-6 days to hatch, depending on the climate. The subsequent generations then cycle until the final season's larvae begin to overwinter again.



Adult



Rare Brown Form



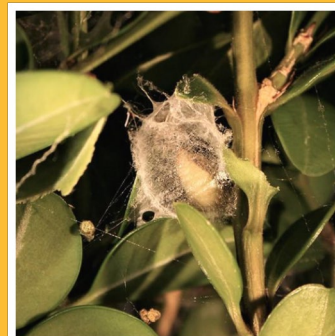
Egg Mass



Young Larvae



Full-grown Larvae



Silk Cocoon



Pupal Case

Feeding Damage

Boxwood species, including cultivars, have been found to host BTM. The larvae spin leaves together to protect themselves as they continuously feed, particularly in lower parts of the shrub. With heavy defoliation, the larvae can move onto bark, girdling and restricting water/nutrient transport, which could possibly kill the shrub.



Healthy



Heavy Defoliation

How to Help

Help prevent the spread of BTM by inspecting your boxwoods. Manual removal of any of its life stages is an easy method of preventative control. But first, be certain that the insect is BTM. If you are unsure or if you suspect BTM is present, you can contact the Maryland Department of Agriculture at ppwm.mda@maryland.gov or by phone at **410-841-5920**, with a clear photograph of damage/suspect if possible.

Maryland Department of Agriculture
Plant Protection & Weed Management
50 Harry S. Truman Parkway | Annapolis, MD 21401
Phone: (410) 841-5920
ppwm.mda@maryland.gov

