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Box Tree Moth

Last Modified:



Box tree moth is an invasive pest that can significantly damage and potentially kill boxwood (*Buxus* species) plants if left unchecked. The caterpillars are ravenous feeders, and heavy infestations can completely defoliate host plants. After the leaves are gone, they feed on the bark which eventually kills the plant. Boxwoods are a popular ornamental evergreen shrub common to many landscape environments in the United States.

The moth is native to East Asia and has become a pest in Europe where boxwood is native. In 2021, APHIS detected box tree moth in New York, and since then, it has been confirmed in Delaware, Kentucky, Maryland, Massachusetts, Michigan, Ohio, Pennsylvania, Virginia, and West Virginia.

What To Look For

The box tree moth can ravage plant life. Here's what to look for:

- Appearance
  - A box tree moth starts out as a lime-green caterpillar, with black stripes, white spots, hairs, and a shiny black head. Adult box tree moths generally have white wings with a thick brown border.
- Brown leaves and defoliation
  - Missing sections of leaves or skeletonized leaves
- Caterpillars and webbing
  - Young caterpillars hide among twigs and leaves, which can grow up to 1.5 inches.
- Frass
  - Sawdust-like excrement from insects
- Pupa
  - May be wrapped in webbing
- Adult moths
  - They're difficult to spot, as they're most active at night.

Check Your Boxwoods for the Box Tree Moth! (Video)

View signs and symptoms of box tree moth in our photo gallery

How To Prevent This Pest

- Contact your local Cooperative Extension Service for information on pest management tools or locate an Extension specialist near you.
- Allow State or Federal agricultural officials to inspect your boxwood plants and place detection traps.

- Remove infested boxwood plant branches. For heavy infestations, cut the boxwood from its base. (Your plant should grow back from its roots.) All boxwood debris should be double bagged in plastic and placed in the trash.

How It Is Treated

Property owners are encouraged to monitor their boxwoods and report any damage. Contact your local Extension office for treatment options.

Nursery owners should monitor their boxwoods and implement safeguards to limit their pest risk.

Report Plant Pests and Diseases

Have you seen this pest or signs of pest damage? Immediately report your findings.
Find your State plant regulatory official
Find your State plant health director

Controlling Box Tree Moths

Expand All

APHIS' Response

APHIS works closely with State departments of agriculture where the pest has been found. They restrict boxwood movement, monitor the infestation’s boundaries, engage stakeholders, and conduct outreach.

- APHIS Expands Box Tree Moth (Cydalima perspectalis) Quarantine in New Jersey October 2026
- APHIS Establishes a Box Tree Moth (Cydalima perspectalis) Quarantine in Maryland and Pennsylvania August 2026
- Box Tree Moth Regulated Areas *(10/1/2026)*
- Box Tree Moth Federal Quarantine Boundary Viewer

- APHIS Amends Import Requirements for Box Tree Moth and Plants for Planting From Canada into the United States and Territories December 2023

Cooperator Information

- Box Tree Moth Compliance Agreement
- New Pest Response Guidelines: Box Tree Moth (3.38 MB)
- Insecticide Options for Box Tree Moth Management

Box Tree Moth Forecasting Tools

- PestCast: Box Tree Moth Adult Emergence Forecast
- Box Tree Moth Larval Activity Forecast
- Box Tree Moth Forecasting Tools Tutorial

Spread the Word

- Pest Alert: Box Tree Moth (587.74 KB)
- New York Residents: Check Your Boxwoods for the Box Tree Moth! (2.23 MB)

Reports and Assessments

View All Final Environmental Documents

Contact Us

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