



# BOX TREE MOTH ALERT

By Caitlin Splawski, Erin Lizotte, Jeremy Jubenville, David Lowenstein and Jaden Gimondo, Updated July 2025

Box tree moth (*Cydalima perspectalis*) is a new invasive pest in Michigan that can defoliate and kill boxwood shrubs. Your help in spotting and reporting this pest is critical. Use the information provided below to look for box tree moth (BTM) and report any possible sightings via Eyes in the Field using the QR code below or by contacting your local Michigan State University Extension Office.

## Caterpillar damage on boxwood



Ferenc Lakatos, University of Sopron, Bugwood.org



Ferenc Lakatos, University of Sopron, Bugwood.org

The first sign of an infestation is defoliation from caterpillar feeding. Caterpillars remove all leaf tissue except the midvein. If defoliation is observed, check canopy for BTM caterpillars.

## Caterpillar identification



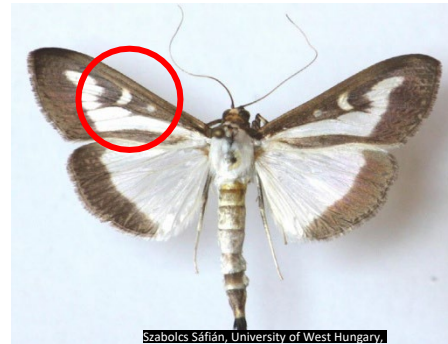
Mujezinovic Osman, Faculty of Forestry, Bugwood.org



Ferenc Lakatos, University of Sopron, Bugwood.org

BTM caterpillars have lime green bodies with black stripes, white spots and hairs and a shiny black head. Caterpillars may be present all year.

## Moth identification



Szabolcs Sáfán, University of West Hungary

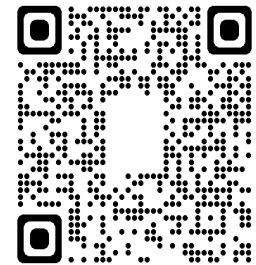


Szabolcs Sáfán, University of West Hungary

Adult moths, active from June to October in Michigan, can be either light or dark in coloration, with white forewing spots (circled in red). The light form is typical of N. American populations. Wings are held open at rest.

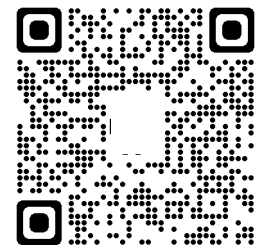
## Report

If you believe you've detected the box tree moth *outside* of the current quarantine zone, scan the QR code to report sightings to MDARD's Eyes in the Field or visit [www.Michigan.gov/ReportBTM](http://www.Michigan.gov/ReportBTM)



## Learn more

For additional information on box tree moth, including the latest Michigan updates scan the QR code or visit [www.canr.msu.edu/tag/box-tree-moth](http://www.canr.msu.edu/tag/box-tree-moth)







# What you can do about box tree moth

If you have found box tree moth in your landscape, there are options for control, steps you can take to prevent further spread, and landscape alternatives to consider when replacing damaged or dead shrubs. You can find more in-depth information on each of these topics at our MSU Extension box tree moth website or by contacting us through the Ask Extension service, <https://www.canr.msu.edu/outreach/ask-an-expert/>.

## Michigan's Quarantine

MDARD first implemented a quarantine on boxwood shrubs (*Buxus spp.*) in 2023. The quarantine helps prevent the spread of box tree moth by limiting the movement of boxwood shrubs. Within the regulated quarantine area, growers and retailers must comply with internal quarantine measures and movement of boxwood from inside the regulated area to outside the quarantine zone requires a signed compliance agreement. For homeowners and landscapers, moving any boxwood material is **strictly prohibited**, including live or dead shrubs and trimmings. No matter your location, it is encouraged that you monitor for infestations and dispose of plants properly, according to the regulations.

## Options for Control

For small infestations:

- Hand-pick larvae from plants
- Apply Horticultural oil, Insecticidal soaps, Spinosad & *Bacillus thuringiensis* var. *kurstaki* (Btk) to control young larvae. Note: several applications may be needed throughout the season to target larvae of multiple, overlapping generations.

For heavy infestations:

- Avoid making preventative applications with broad-spectrum insecticides when BTM is not present.
- Insecticide effectiveness against eggs, pupae, and older caterpillars may be low since they tend to be on the undersides of leaves and hidden deep in a canopy of leaves and webbing.
- To prevent resistance issues, rotate pesticide mode of action.
- Select products that are least harmful to pollinators and other insects.

For proper disposal:

- Clean up leaf litter and debris to remove potential overwintering sites.
- Double-bag in plastic and place in municipal waste.

## Landscape Alternatives

Few shrubs offer the compact size, evergreen foliage, and resistance to deer browsing that boxwood offers. However, with the amount of pest and disease pressure these shrubs are now facing, homeowners may opt for plants that will require less maintenance. Consider the following shrubs when replacing boxwoods:

- Japanese Holly (*Ilex crenata*)
- Inkberry Holly (*Ilex glabra*)
- Junipers (*Juniperus spp.*)
- Yew (*Taxus spp.*)
- Arborvitae (*Thuja spp.*)

These shrubs among others offer similar form and function in the garden. Be sure to consider your local climate, soil conditions, and deer pressure when finding a suitable boxwood replacement.



Example of regulated article sticker on 'Green Velvet' boxwood.



Landscape alternative option, Inkberry Holly, *Ilex glabra*. Photos by Caitlin Splawski, MSU Extension.

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