



Asian Gypsy Moth

Lymantria dispar asiatica Wnukowsky (Lepidoptera: Lymantriidae)

The Asian Gypsy Moth (AGM) is an exotic invasive insect pest that attacks over 500 species of trees and shrubs. Closely related to the Gypsy Moth (GM), a serious exotic pest long established in the eastern U.S., AGM are not known to be established here, but are repeatedly introduced from infested international ships and shipping containers. AGM spread by moth flight of both sexes, by “ballooning” of 1st instar larvae on silken threads blown by the wind, and by people unknowingly transporting egg masses and pupae attached to vehicles, firewood, camping equipment and other outdoor articles.

IDENTIFICATION:

NOTE: AGM and GM are nearly identical and can only be accurately differentiated with laboratory tests.

- Adult AGM moths are larger (male wingspan 1½” or 3.8 cm; female wingspan 3½” or 8.9 cm) than GM (male wingspan about 1” or 2.5 cm, female wingspan up to 2” or 5 cm).
- Notable trait of AGM females is the ability to fly; GM females do not fly.



- Male moths are tan or grayish-brown to dark-brown with blackish wavy bands across the forewings, and large, wide, feather-like oblong antennae.
- Female moths are creamy white with faint, dark wavy bands on the forewings and long, narrow antennae.
- Egg masses range from dime sized up to ~1½” long by ¾” wide, or 3.8 x 1.9 cm (right).
- Egg masses are covered with velvety, buff colored hairs from the abdomen of the female; color may bleach out over the winter.



- Younger AGM larvae are small, hairy, and dark in color.



- Older AGM larvae are hairy and body color may vary from tan, to black, gray or yellow, with 5 pairs of raised blue dots and 6 pairs of raised red dots along the back (below).



- Mature caterpillars are about 1-2” long (2-5 cm).

- Dark brown pupal cases may be attached to trees or other structures by silken threads (right).



What to Look For:

AGM eggs overwinter in protected egg masses which hatch early spring-May. Newly hatched larvae begin feeding in tree crowns immediately. Older larvae tend to feed in tree tops at night and crawl down the trunks during the day. Larvae cause all of the feeding damage done to host plants; adult moths do not feed. The caterpillar stage lasts 8-12 weeks (May-July). Pupation occurs late-June to early-August and lasts 10-14 days. Adult moths emerge July-September and live 1 to 3 weeks, during which time they mate and lay eggs. Each female lays up to 1,000 or more eggs in a single mass, covered with a dense protective layer of buff colored hairs from her body.

Symptoms of AGM infestation include:

- Buff to parchment colored velvety egg masses, about 1½ x ¾", stuck in sheltered spots on almost any sort of surface.



Adult AGM females and egg masses on tree trunk.

- Dark or tan colored hairy caterpillars up to 2 inches long (5 cm) with a double row of 5 blue and 6 red spots down the back (below).



UGA2652072



UGA1259094

- Shothole feeding damage from early instar caterpillars (above); defoliation damage of many plants species by late instar caterpillars (below).



UGA2168010

- Moderate sized, unremarkable, brown moths or larger white moths that fly and are most active during daylight

AGM is a USDA regulated pest. Although not currently established in the U.S., it is considered a major threat to North American trees and forests. Suspected sightings should be promptly reported. Federal and state quarantines and eradication programs are implemented as soon as possible upon detection of AGM.

Image Credits

UGA 2652080, UGA2652072, UGA1148048: USDA APHIS PPQ Archive, Bugwood.org
UGA5081022, UGA5081068: Ferenc Lakatos, University of West-Hungary, Bugwood.org
UGA1335001: John H. Ghent, USDA Forest Service, Bugwood.org
UGA1399198: Manfred Mielke, USDA Forest Service, Bugwood.org
UGA1259094: Landesforstpräsidium Sachsen Archive, Bugwood.org
UGA2168010: Haruta Ovidiu, University of Oradea, Bugwood.org

To report a possible sighting, visit the UMD Cooperative Extension Exotic Pest Threats Website:

<http://hgic.umd.edu/faq/sendAQuestion.cfm>

Issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, University of Maryland, College Park, and local governments. Cheng-i Wei, Director of Maryland Cooperative Extension, University of Maryland.

The University of Maryland is equal opportunity. University policies, programs, and activities are in conformance with pertinent Federal and State laws and regulations on nondiscrimination regarding race, color, religion, age, national origin, gender, sexual orientation, marital or parental status, or disability. Inquiries regarding compliance with Title VI of the Civil Rights Act of 1964, as amended; Title IX of the Educational Amendments; Section 504 of the Rehabilitation Act of 1973; and the Americans With Disabilities Act of 1990; or related legal requirements should be directed to the Director of Human Resources Management, Office of the Dean, College of Agriculture and Natural Resources, College Park, MD 20742.