

ILLINOIS MOST “UNWANTED” INVASIVE PESTS

Your assistance in helping us find invasive pests is needed and appreciated. Please report suspected invasive plant pests to the Illinois Cooperative Agriculture Pest Survey Program at invasives@illinois.edu



SPOTTED LANTERNFLY
(Lycorma delicatula)

Photo: Pennsylvania Dept. of Agriculture



ASIAN LONGHORNED BEETLE
(Anoplophora glabripennis)

Photo: Donald Duerr, US Forest Service



RED IMPORTED FIRE ANT
(Solenopsis invicta)

Photo: Pest and Diseases Image Laboratory, Bugwood.org



BOX TREE MOTH
(Cydalima perspectalis)

Photo: Alison Morris, Bugwood.org



OLD WORLD BOLLWORM
(Helicoverpa armigera)

Photo: Julietta Brambila, USDAAPHIS PPQ



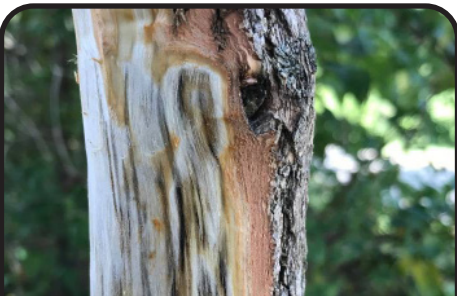
FLIGHTED SPONGY MOTH COMPLEX
(Lymantria dispar asiatica)

Photo: Paul Weston, Cornell University



GIANT AFRICAN SNAIL
(Lissachatina fulica)

Photo: Pest and Disease Image Library, Bugwood.org



LAUREL WILT
(Raffaelea lauricola)

Photo: Tennessee Dept of Agriculture



MILE-A-MINUTE VINE
(Persicola perfoliata)

Photo: Leslie J. Mehrhoff, University of Connecticut, Bugwood.org



SALT CEDAR
(Tamarix ramosissima)

Photo: U.S. Dept of the Interior, Bureau of Land Management



HYDRILLA
(Hydrilla verticillata)

Photo: Vic Ramey



GIANT HOGWEED
(Heracleum mantegazzianum)

Photo: Donna R. Ellis, University of Connecticut

A primary objective of the Illinois Cooperative Agriculture Survey (CAPS) program is to safeguard our nation's food and environmental security from exotic pests that threaten our production and ecological systems. This program focuses domestic surveys for harmful or economically significant plant pests and weeds that have eluded first-line inspections at ports of entry.

Illinois has been faced with the arrival of many unwanted, invasive plant pests and will continue to do so well into the future. Each of these invasive species has the potential to significantly impact the urban and natural landscapes of the state. Preventing the arrival of these pests is the best and most economical form of protection against invasive species. However, should they arrive, early detection is the key to protecting our natural resources.

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Spotted Lanternfly (*Lycorma delicatula*)

- **Identification:** Spotted lanternfly nymphs are black with white spots, and develop red spots on their wing pads and thorax as they develop. Adults are 1" long and ½" wide. Forewings are light brown with black spots, scarlet hind wings with black spots, and have bright yellow abdomen with black stripe.
- **Importance:** While only detected in Pennsylvania, expansion of its range may be implicated in serious economic losses of the countries' grape, orchard, and logging industries as nymphs are known to feed upon and damage more than 70 native plant species. *Confirmed in Cook County, September 2023.*

Asian Longhorned Beetle (*Anoplophora glabripennis*)

- **Identification:** Asian longhorned beetles (ALB) can be from 1-1 ½" long, are black with white specks on their elytra (wing covers) and have long white and black banded antennae. Females tend to be a bit larger than the males.
- **Importance:** Larvae tunnel through the living tissues of the phloem and xylem. Ultimately the tree loses its ability to transport water and nutrients to its canopy and roots and dies. Because ALB can be quite large it can also weaken the structural integrity of a tree. It has an extensive list of acceptable host species with Maples, Buckeyes, Willows, and Elms being the most preferred. *Declared eradicated from Illinois in 2007.*

Red Imported Fire Ant (*Solenopsis invicta*)

- **Identification:** Red imported fire ants (RIFA) are variable in size (1/16-1/5") and dark reddish brown in color. Taxonomic characteristics help separate them from native ants, but they are most readily recognized by their aggressive behavior.
- **Importance:** RIFA are most often associated with their painful sting. However, in many areas where they have become established, they are major agricultural and urban pests and cause considerable environmental harm and are important to public health. *Not known to occur in Illinois.*

Box Tree Moth (*Cydalima perspectus*)

- **Identification:** Box tree moth caterpillars are green and yellow with white, yellow, and black stripes and black spots; they are only caterpillars in the region that feed on boxwood. Most adult box tree moths are white with a brown border. Some adult moths may have an additional brown border on the edge of the forewing. A small percentage of moths are entirely brown except for the white commas on the forewings.
- **Importance:** This invasive can significantly damage and potentially kill boxwood plants. The caterpillars feed mostly on boxwood and heavy infestations can defoliate host plants. Once the leaves are gone, larvae consume the bark, leading to girdling and plant death. *Not found in Illinois.*

Old World Bollworm (*Helicoverpa armigera*)

- **Identification:** The old world bollworm is virtually indistinguishable from the closely related corn earworm (widely spread in Illinois). Moths have a typical noctuid appearance. Males are usually yellowish-brown, and females are orange-brown. Forewings have a dark colored, kidney-shaped marking near the center. Hind wings are creamy white with a dark band on the outer margin.
- **Importance:** This invasive is known to attack more than 180 plant species and cause serious crop losses, especially in tomato, corn soybean, and cotton. It has the potential to seriously harm agricultural production and the environment. *Intercepted in Illinois.*

Asian Spangy Moth (*Lymantria dispar asiatica*)

- **Identification:** The Asian spangy moth is very similar to the European spangy moth (present in Illinois) in both appearance and impact. Male moths have grayish-brown wings with a wingspan of about 1 ½". Adult females are white and much larger, with wingspans of about 3 ½". The only way to differentiate between the two species is with DNA tests.
- **Importance:** Asian spangy moth has a much larger host range and the female has the ability to fly (European does not), which could lead to much more rapid spread of this invasive. It could cause serious damage to the landscape and natural resources. Females can lay hundreds of eggs. Caterpillars feed on more than 600 species of trees and shrubs. Repeated defoliation severely weakens trees and can result in death as well as predispose them to other pathogens and pests. *Not known to occur in Illinois.*

Giant African Snail (*Lissachatina fulica*)

- **Identification:** Giant African land snails typically reach sizes of 3" tall and 8" long. Their shells, typically brown in color, form a conical shape and may coil in either direction.
- **Importance:** In the U.S., these snails have been found 'hitch-hiking' aboard shipping containers as well as being smuggled in by international travelers as exotic pets. Their escape and establishment into natural and agricultural areas could be devastating as they feed on over 500 plants. They also may carry a parasite that can be transmitted to people. It is illegal to sell, possess, or transport these animals in the U.S. *Not found in Illinois.*

Laurel Wilt (*Raffaelea lauricola*)

- **Symptoms:** Rapid wilting of the leaves, red-brown leaves still attached to dead or dying trees and dark, streaky staining in wood just under bark.
- **Importance:** Recently detected in western Kentucky and western Tennessee. This pathogen has the ability to rapidly kill sassafras trees and potentially spicebush trees as it attacks members of the Lauraceae family. *Not known to occur in Illinois.*

Minute-a-Minute Vine (*Persiccola perfoliata*)

- **Identification:** This herbaceous twining vine has reddish stems with small prickly spines. Leaves are triangular and typically 1 to 3" wide. Cup-like leafy structures called 'ocreas' are spaced along stems where flowers give way to shiny blue fruits.
- **Importance:** Though not yet found in Illinois this is a serious concern as it can grow over 20' long (reportedly as much as 6" per day). It is a rapidly growing vine that can cover and kill underlying vegetation. It's rate of growth and climbing characteristics makes this invasive similar to kudzu, but is considered more cold tolerant. *Not found in Illinois.*

Saltcedar (*Tamarix spp*)

- **Identification:** Thid deciduous, loosely branched shrub or tree can reach heights of 20 or more feet. Leaves are appressed, scale-like, and arranged alternately. Between April and August, blooms of whitish or pink flowers are abundant.
- **Importance:** Saltcedar readily displaces native stands of wetland and riparian vegetation. Its primary root (which can reach depths of 90 or more feet) can consume large quantities of water. Large plants can transpire up to 300 gallons of water each day. Salt also concentrates in the leaves of this plant and the accumulation of leaf litter increases the salinity of the surface soil, killing native plants nearby. *Reports of saltcedar along the western border of Illinois.*

Hydrilla (*Hydrilla verticillata*)

- **Identification:** This submerged aquatic perennial may grow up to 20' long and roots at depths in excess of 20' below the water surface. Leaves are whorled in groups of 3 to 8 around stem at nodes, ¾" long and ¼" wide. Spines are found along the leaf margins and midrib giving it a rough texture. Its foliage is slightly reddish as new growth emerges.
- **Importance:** Hydrilla has not yet established itself in Illinois but is a noxious weed of major concern. This submerged aquatic plant is found in fresh, slow moving, or still water and forms dense subsurface mats that outcompete native plants, destroy fish and wildlife habitat and impedes water flow creating mosquito breeding grounds. *Not known to occur in Illinois.*

Giant Hogweed (*Heracleum mantegazzianum*)

- **Identification:** This biennial or short lived perennial can grow up to 10 -15' tall. It has enormous compound leaves, up to 5' wide on the bottom sets, with 3 deeply incised leaflets. Thick stems are from 2 to 4" thick, hollow and covered in purple blotches and coarse white hairs. Numerous small white flowers are present in June or July in large flat-topped umbels up to 2 ½' across.
- **Importance:** Giant hogweed outcompetes native vegetation and causes increased erosion along stream banks. In addition to being a federal noxious weed, giant hogweed can be harmful to humans. Within the plant is a sap containing furocoumarins that when in contact with skin and exposed to ultraviolet rays can lead to severe burning and blistering. *Confirmed in Cook and Lake counties.*