Invasive Agricultural Plants Found In New York State

**Wild Chervil** *Anthriscus sylvestris*
- Herbaceous biennial or short-lived perennial
- Reproduces by seed and lateral root buds
- Reduces quality of forage and hay for grazers
- Invades hay fields, roadsides, pastures, disturbed areas, meadows, yards and gardens
- Host for virus disease that infects carrots, celery, and parsnip

**Mile-a-Minute** *Persicaria perfoliata*
- Spiny summer annual vine
- Reproduces by seed
- Invades Christmas tree plantations, landscapes, nursery crops, orchards, clear-cut areas, and drainage ditches
- May restrict access to areas due spines on the stem

**Japanese Stiltgrass** *Microstegium vimineum*
- Annual grass
- Reproduces by seed
- Alters soil chemistry and shades other plants
- Not preferred by grazers
- Invades fields, lawns, and gardens in addition to other natural areas

**Chinese Lespedeza** *Lespedeza cuneata*
- Semi-woody, perennial forb
- Reproduces by seed and lateral root buds
- Invades fields, meadows, pastures, and cultivated crops
- May develop an extensive seed bank in the soil
- Due to a high tannin content, the plant is unpalatable to livestock
- Has an extensive tap root
- A single plant may live for over 20 years

**Kudzu** *Pueraria montana*
- Herbaceous to semi-woody perennial vine
- Reproduces by seed, rhizomes, and adventitious roots
- Aggressive, climbing vine that overgrows anything in its path
- Invades abandoned fields, fence rows, and crop areas
- Massive tap root at more than 6 feet in length
- Once established, grows up to one foot a day

**Japanese Barberry** *Berberis thunbergii*
- Thorny, perennial shrub
- Reproduces mainly by seed, also by creeping roots
- Invades pastures, fields, roadsides, and fence rows
- May change soil chemistry
- Grazers tend to avoid eating Japanese barberry
- Thorns in large infestations may restrict access to areas

**Oriental Bittersweet** *Celastrus orbiculatus*
- Deciduous, woody, perennial vine
- Reproduces by seed (viable for several years) and creeping roots
- Twines around trees and shrubs girdling them
- Invades roadsides, hedgerows, grasslands, field edges, fencerows, and stands of trees

For more information on invasive species in New York visit: www.nyis.info
Agricultural Invasive Plant Species of High Priority to New York State: Why Should Agriculture and Agribusiness Care?

Nationwide:
- Invasive species (plants, insects, and pathogens) costs to U.S. agriculture: > $138 billion per year (USDA-APHIS 2001)

What’s at Risk in New York?
- 37,000+ farms (25% of NY’s 7.65 million acres)
- Milk: third highest production in the nation ($2± billion/year)
- Major industry of field crops supporting dairy: corn, oats, wheat, soybeans
- Human consumption field crops, fruits, and vegetables ($1± billion/year)
- Apple production along southern shore of Lake Ontario, the Hudson Valley, and in upper Lake Champlain Valley is 2nd highest in the nation
- Bedding and garden plants produced under 24 million square feet of glass; 5th largest in nation

What Are the Economic Impacts of Invasive Agricultural Plants to NY?
- Agricultural weeds cause estimated 12% crop losses = $33 ± billion/year
- $4 ± billion/year spent on herbicides to control invasive plants

What Segments of Agriculture and Agribusiness are Impacted by Invasive Species?
- Commodity production
- Harvesting impacts
- Price and market effects
- Production sustainability
- Food security and nutrition
- Human and livestock health

Invasive Agricultural Plants Found In New York State

Canada Thistle Cirsium arvense
- Rhizomatous perennial forb
- Reproduces by wind-blown seed and creeping rhizomes
- Spiny thistles can restrict access in infested areas

Leafy Spurge Euphorbia esula
- Colony-forming perennial
- Reproduces by seeds, buds of lateral roots and root segments
- Mildly toxic to cattle
- Extensive root system may be costly to manage once established
- Invades rangeland, pastures, uncultivated perennial crops, and reduced-tillage crops

Spotted Knapweed Centaurea stoebe
- Biennial, Short-lived perennial
- Reproduces by seed
- Important invader of rangeland, pastures, low-maintenance turfgrass, landscapes, nurseries, and crops
- Reducing livestock forage
- Produces chemical that is toxic to other plants

Wild Parsnip Pastinaca sativa
- Herbaceous biennial, sometimes perennial
- Reproduces by seed
- Invades and competes with cultivated crops
- Found along roadsides, stream banks, and waste areas
- Toxic to livestock when mixed in with hay

Hemp Dogbane Apocynum cannabinum
- Herbaceous perennial
- Reproduces by seed, crown buds, and over-wintering rootstocks
- Each flower produces 2 seed pods, each of which produce 80-200 seeds
- Rootstocks grow rapidly
- Produces licking point or toxin for cattle, horses, and sheep
- The milky sap of hemp dogbane is poisonous to livestock

Giant Hogweed Heracleum mantegazzianum
- Herbaceous biennial or perennial
- Reproduces by seed
- Phytophotodermatitis: contact with sap can result in severe burns, blistering, painful sores, and blindness
- Invades perennial crops, rangeland, pastures, perennial crops, and along fence rows
- May restrict access to infested areas due to extensive twining

Japanese Knotweed Fallopia japonica
- Herbaceous perennial
- Reproduces mainly by rhizomes, sometimes by seed
- Rhizomes bury under paved areas and are difficult to manage
- Most commonly found near water sources and low-lying areas such as ditches, waste places, and around homes

Pale swallow-wort Vincetoxicum rossicum
- Twining, vine-like perennial
- Reproduces by seed and axillary tillers from root crown if main stem is damaged
- Invasive weed in Christmas tree plantations, nursery crops, fields, pastures, perennial crops, and along fence rows
- Grazers tend to avoid swallow-wort because it is not as palatable as other plant species

Leafy Spurge Euphorbia esula
- Extensive, fast growing, horizontal roots, which give rise to additional shoots
- Invades perennial crops, rangeland, riparian areas, and areas of reduced tillage

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

Wild Parsnip Pastinaca sativa
- Found along roadsides, stream banks, and waste areas
- USDA APHIS PPQ Archive, USDA APHIS PPQ, Bugwood.org

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

Spotted Knapweed Centaurea stoebe
- Produces chemical that is toxic to other plants

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

Giant Hogweed Heracleum mantegazzianum
- Toxic to livestock when mixed in hay
- USDA APHIS PPQ Archive, USDA APHIS PPQ, Bugwood.org

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

Hemp Dogbane Apocynum cannabinum
- Producing licking point or toxic to livestock
- USDA APHIS PPQ Archive, USDA APHIS PPQ, Bugwood.org

Photo: Steve Dewey, Utah State University, Bugwood.org

Japanese Knotweed Fallopia japonica
- Produces chemical that is toxic to livestock

Photo: USDA APHIS PPQ Archive, USDA APHIS PPQ, Bugwood.org

Pale swallow-wort Vincetoxicum rossicum
- Producing licking point or toxic to livestock

Photo: USDA APHIS PPQ Archive, USDA APHIS PPQ, Bugwood.org

Multiflora Rose Rosa multiflora
- Perennial shrub
- Reproduces by seeds and stem runners, which form adventitious roots
- Tolerates a variety of soil types
- Thickets restrict human and animal access to areas
- Invades pastures, rangeland, landscapes, fence rows, and uncultivated areas

Photo: USDA APHIS PPQ Archive, USDA APHIS PPQ, Bugwood.org

Photo: James R. Allison, Georgia Department of Natural Resources, Bugwood.org

What’s at Risk in New York?
- What Are the Economic Impacts of Invasive Agricultural Plants to NY?
- What Segments of Agriculture and Agribusiness are Impacted by Invasive Species?
- Why Should Agriculture and Agribusiness Care?