

NEW YORK AGRICULTURAL INVASIVE SPECIES

Why should you 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

For more information on invasive species in New York, visit: www.nyis.info



Canada Thistle Cirsium arvense

- Rhizomatous, perennial forb
- Reproduces by wind-blown seed and creeping rhizomes

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



Spotted Knapweed *Centaurea stoebe*

- Biennial or short-lived perennial
- Reproduces by seed

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



Pale Swallow-wort Vincetoxicum rossicum

- Twining, vine-like perennial
- Reproduces by seed and axillary tillers from root crown Photo: Leslie J. Mehrhoff, University of Connecticut, Bugwood.org



Black Swallow-wort Vincetoxicum nigrum

- Twining, vine-like perennial
- Reproduces by seed and axillary tillers from root crown Photo: Leslie J. Mehrhoff, University of Connecticut, Bugwood.org





Wild Parsnip Pastinaca sativa Herbaceous biennial, sometimes perennial

Reproduces by seed

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



Hemp Dogbane Apocynum cannabinum

- Herbaceous perennial
- Reproduces by seed, crown buds, and over-wintering rootstocks

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



Multiflora Rose Rosa multiflora

- Perennial shrub
- Reproduces by seeds and stem runners, which form adventitious roots

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

Kudzu Pueraria montana

Reproduces by seed, rhizomes, and

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

Herbaceous to semi-woody

perennial vine

adventitious roots



Leafy Spurge Euphorbia esula

- Colony-forming, herbaceous perennial
- Reproduces by seeds, buds of

lateral roots and root segments Photo: Leslie J. Mehrhoff, University of Connecticut, Bugwood.org



Mile-a-Minute Persicaria perfoliata

- Spiny, summer annual vine
- Reproduces by seed

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



Japanese Knotweed

- Fallopia japonica
- Herbaceous perennial
- Reproduces mainly by rhizomes, sometimes by seed

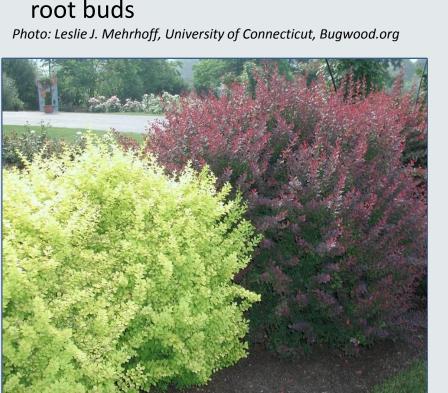
Photo: Tom Heutte, USDA Forest Service, Bugwood.org



Japanese Stiltgrass Microstegium vimineum

- Annual grass
- Reproduces by seed

Photo: Chris Evans, Illinois Wildlife Action Plan, Bugwood.org



Wild Chervil Anthriscus sylvestris

Herbaceous biennial or short-lived

Reproduces by seed and lateral

perennial

Japanese Barberry Berberis thunbergii

- Thorny, perennial shrub
- Reproduces mainly by seed, also by creeping roots Photo: Leslie J. Mehrhoff, University of Connecticut, Bugwood.org



Chinese Lespedeza

Lespedeza cuneata

• Semi-woody, perennial forb

root buds

Reproduces by seed and lateral

Photo: Chris Evans, Illinois Wildlife Action Plan, Bugwood.org

Oriental Bittersweet Celastrus orbiculatus

- Deciduous, woody, perennial vine
- Reproduces by seed and creeping roots

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









The Cornell Cooperative Extension Invasive Species Program (CCE ISP)

- Provides high quality science-based invasive species education
- Helps New Yorkers detect, prevent, and control invasive species
- Helps New Yorkers protect our agricultural and natural resources, human and animal health, and economy from invasive species

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