



Invasive Plant Identification for Regional Mapping

Statewide Eyes Training
for Western Maryland

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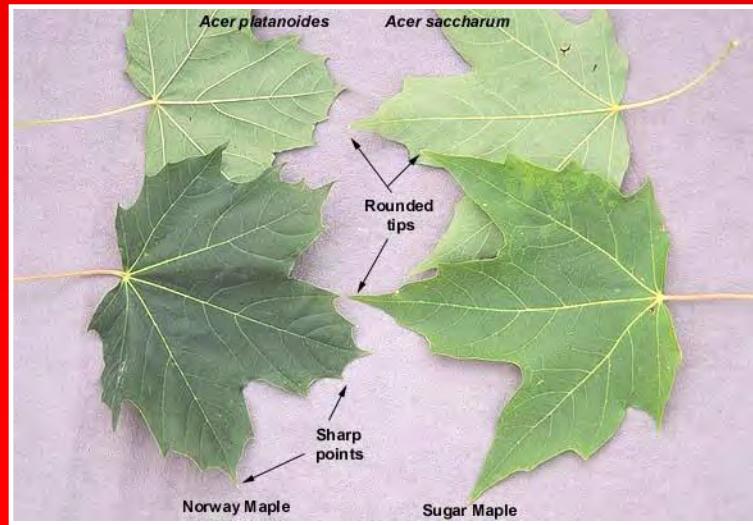


Trees

- Norway maple *Acer platanoides*
- Tree of heaven *Ailanthus altissima*
- Empress tree *Paulownia tomentosa*
- Callery pear *Pyrus calleryana*



[www.northshorewx.com/
images/2005/nature/Leave](http://www.northshorewx.com/images/2005/nature/Leave)



oregonstate.edu/dept/Idplants/images/acpl-sa2.jpg



Sugar maple fruit
© 2003 Steve Baskauf
bioimages.cas.vanderbilt.edu



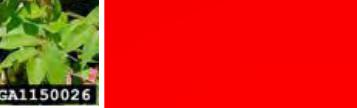
Sept-Oct

Norway maple

Acer platanoides



Rhus typhina
Native
lookalikes
staghorn
and smooth
sumac

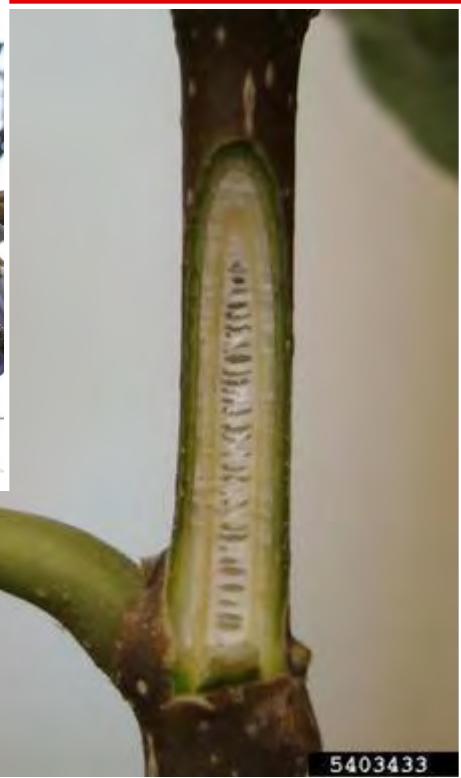


Rhus glabra



Tree of heaven
Ailanthus altissima





Empress tree

*Paulownia
tomentosa*

Chris Evans UGA www.Forestryimages.org

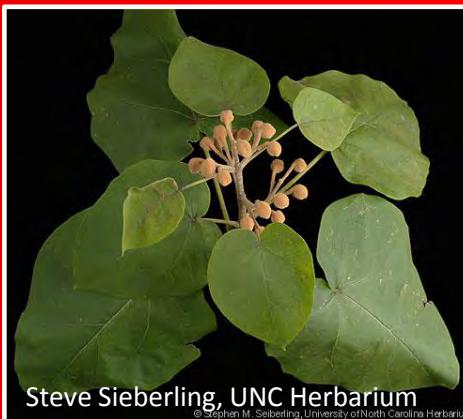
Empress tree

Paulownia tomentosa

Flowers



Leaves



Fruit



Northern catalpa

Catalpa speciosa

Bark



Callery pear

Pyrus calleryana



Photograph courtesy of Sara Tangren



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Shrubs

- Japanese barberry *Berberis thunbergii*
- Autumn olive *Elaeagnus umbellata*
- Privet species *Ligustrum spp.* IPAC T2 (Border)
- Shrub honeysuckles *Lonicera spp.* IPAC T1 (Amur)
- Multiflora rose *Rosa multiflora*
- Wineberry *Rubus phoenicolasius*
- Japanese spiraea *Spiraea japonica*

Japanese barberry

Berberis thunbergii



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Autumn olive

*Elaeagnus
umbellata*



Privet



Ligustrum obtusifolium

Border privet

L. sinense

Chinese privet

L. vulgare

Common/European privet



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L. sinense



Troy Evans, Great Smoky Mt Natl. Park,
Bugwood.org

UGA5079012

L. vulgare



Nava Tabal, IPANE, Bugwood.org

UGA5078032

L. obtusifolium

IPAC Tier 2

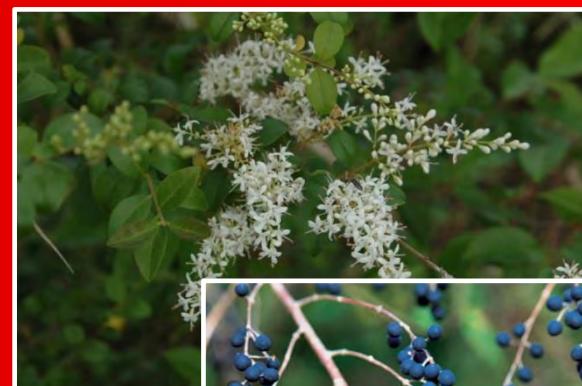


Robert Vidéki, Doronicum Kft, Bugwood.org

5396203

5453163

Leslie J. Mehrhoff, Univ of Conn., Bugwood.org



Chris Evans,
Univ of
Illinois,
bugwood.org



James H. Miller, USDA Forest Service,
www.Forestryimages.org

UGA2307079



Photo by Pancrat, Creative Commons



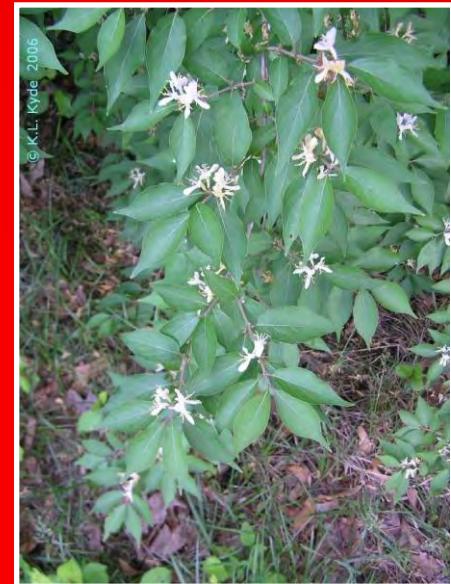
5453225

Shrub honeysuckle

Lonicera spp.



**Amur honeysuckle
IPAC Tier 1
(proposed)**



Multiflora rose

Rosa multiflora



Stipules



K.L. Kyde 2006



Wineberry

Rubus phoenicolasius



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



UGA5274056



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Japanese spiraea



Spiraea japonica



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Vines

- Porcelainberry
 - Oriental bittersweet
 - English and Irish ivy
 - Japanese hop
 - Japanese honeysuckle
 - Mile-a-minute weed
 - Crown vetch
 - Wisteria species
- Ampelopsis brevipedunculata*
Celastrus orbiculatus
Hedera helix, H. hibernica
Humulus japonicus (*herbaceous*)
Lonicera japonica
Persicaria perfoliata (*herbaceous*)
Securigera varia
Wisteria floribunda, sinensis, hybrid
IPAC T2

Porcelainberry

*Ampelopsis
brevipedunculata*



http://www.hort.uconn.edu/plants/a/ampbre

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

All other photos by Kerrie L. Kyde

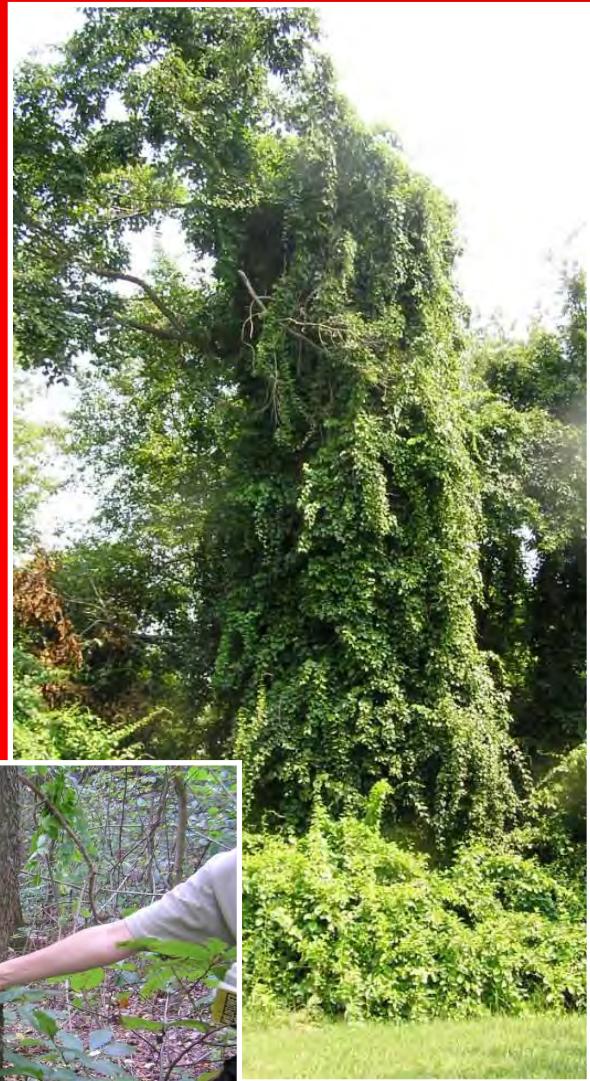
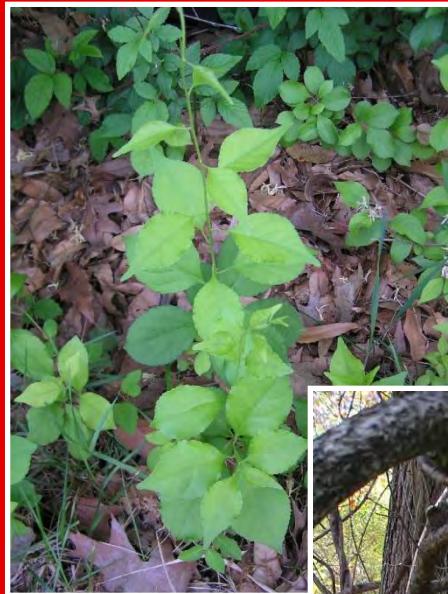


Jil Swearingen, NPS, Bugwood.org

UGA0580071

Oriental bittersweet

Celastrus orbiculatus

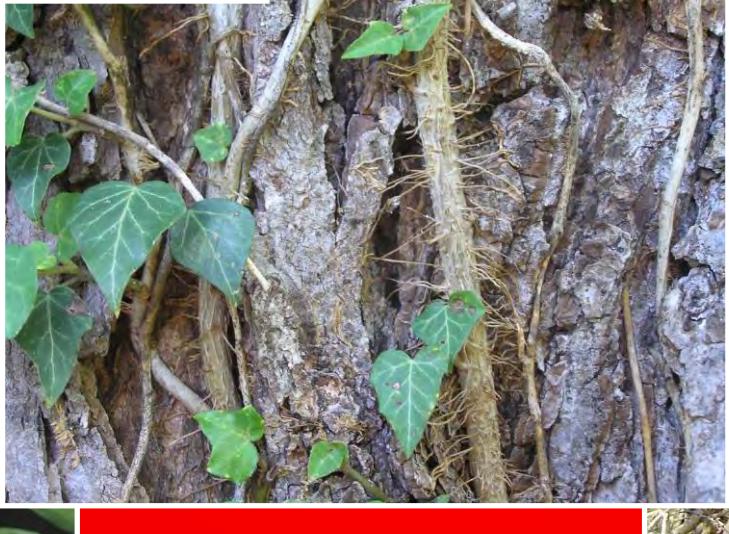
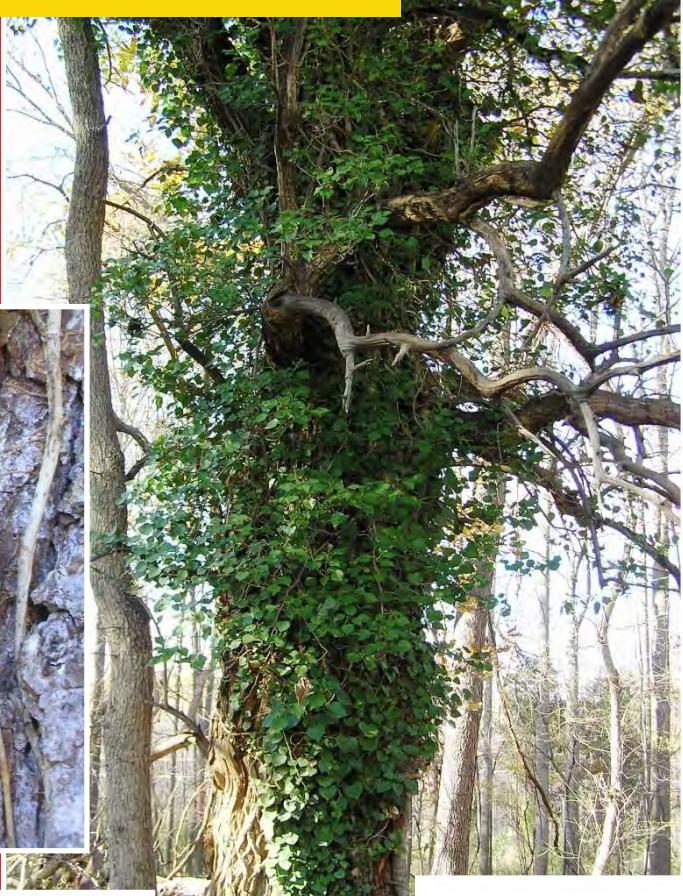




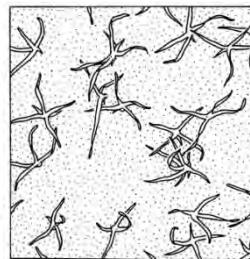
© K.L. Kyde 2011

English and Irish ivy

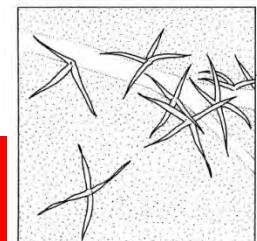
Hedera helix, H. hibernica



H. helix



Drawings by
S. Bellanger
<http://alienplantsbelgium.be/content/hedera-hibernica>





Japanese hop

*Humulus
japonicus*



Native Virginia creeper leaf

Japanese honeysuckle

Lonicera japonica





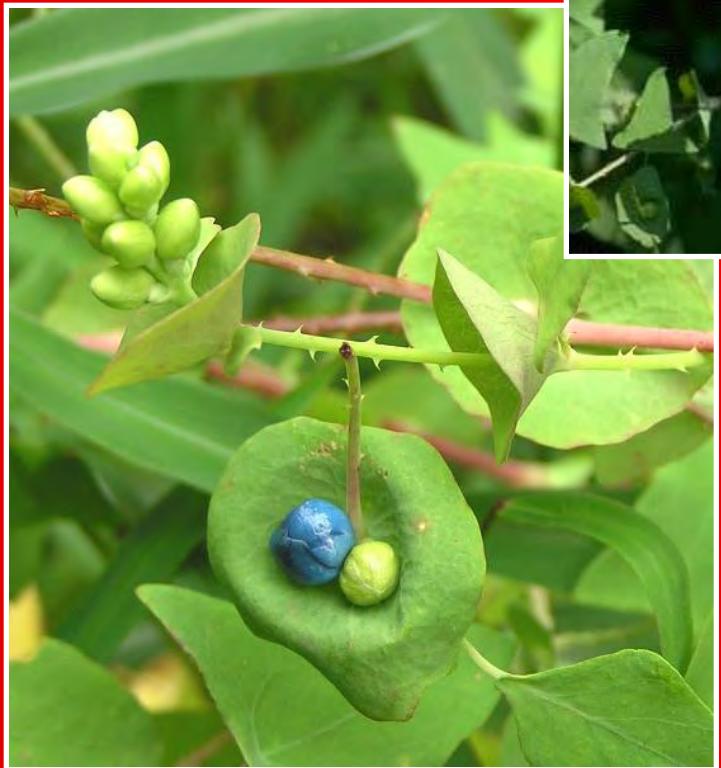
Mile-a-minute

Persicaria perfoliata

Native lookalike
Halberd-leaved tearthumb
Polygonum arifolium



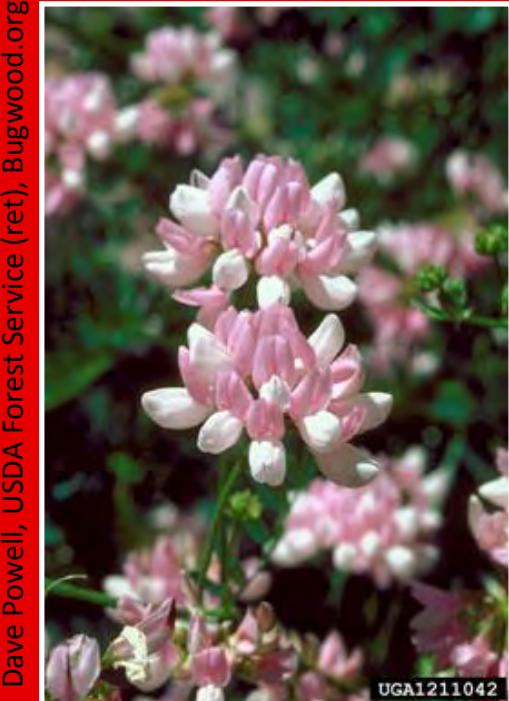
<http://ag.udel.edu/enwc/research/biocontrol/index.htm>



Steve Baskauf, Vanderbilt University Dept. of
Biological Sciences, Bugwood.org

Crown vetch

Dave Powell, USDA Forest Service (ret), Bugwood.org



Ohio State Weed Lab , The Ohio
State University, Bugwood.org



James H. Miller, USDA Forest Service, Bugwood.org

Ohio State Weed Lab , The Ohio
State University, Bugwood.org

Wisteria

Wisteria floribunda, sinensis, x formosa



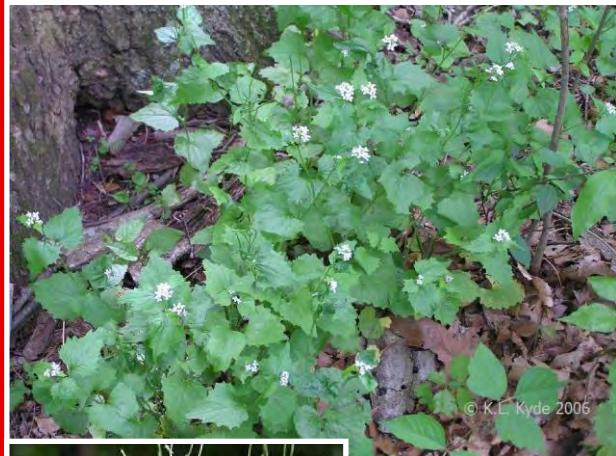
IPAC Tier 2

Herbs & Grasses

- Garlic mustard *Alliaria petiolata*
- Spotted knapweed *Centaurea stoebe*
- Japanese knotweed *Fallopia japonica*
- Giant hogweed *Heracleum mantegazzianum*
- Purple loosestrife *Lythrum salicaria*
- Japanese stilt grass *Microstegium vimineum*
- Golden bamboo *Phyllostachys aurea*
- Beefsteak plant *Perilla frutescens*

Garlic mustard

Alliaria petiolata



Native violet

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Britt Slattery, US Fish and Wildlife, Bugwood.org



Leslie J. Mehrhoff,
University of CT,
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Caleb Slemmons, National Ecological Observatory Network, Bugwood.org



Leslie H. Mehrhoff, Univ of Conn., Bugwood.org



Joseph M. DiTomaso, University of California – Davis, Bugwood.org

Spotted knapweed

Centaurea stoebe

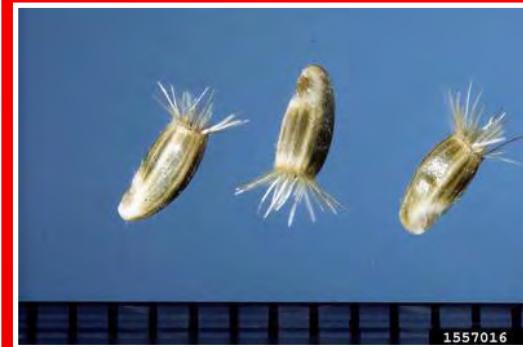


1557012



1557015

John Cardina, The Ohio State University



1557016

Ken Chamberlain, The Ohio State University, Bugwood.org



UGA5271011

Leslie H. Mehrhoff, Univ of Conn., Bugwood.org

Japanese knotweed

Fallopia japonica



Armin Jagel, Bochum
Botanical Club

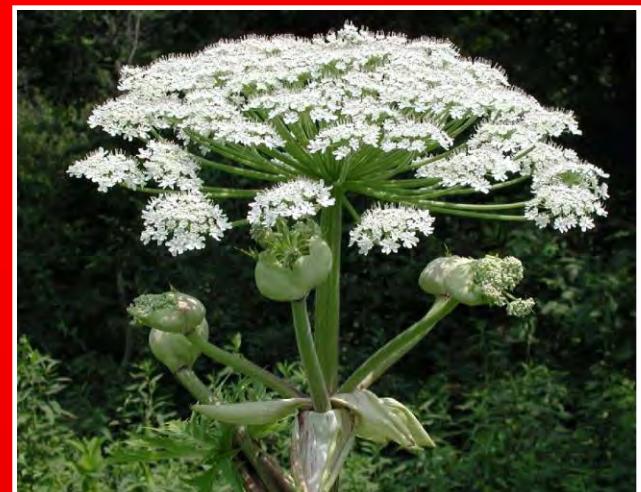
Left to right: leaves of *F. sachalinensis*, *x bohemica* and *japonica*



Native Cow Parsnip

Giant hogweed

*Heracleum
mantegazzianum*



[http://www.dec.ny.gov/
animals/72766.html](http://www.dec.ny.gov/animals/72766.html)

Purple loosestrife



Lythrum salicaria



Japanese stilt grass



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Microstegium vimineum

Bamboo

Phyllostachys spp.

James H. Miller, USDA Forest Service, Bugwood.org



These are *P. aurea*.

Beefsteak plant



*Perilla
frutescens*



Aquatics

- Hydrilla *Hydrilla verticillata*
- Yellow flag iris *Iris pseudacorus* **IPAC T1**
- Marsh dewflower *Murdannia keisak*
- Parrot-feather *Myriophyllum aquaticum*
- Eurasian watermilfoil *Myriophyllum spicatum*

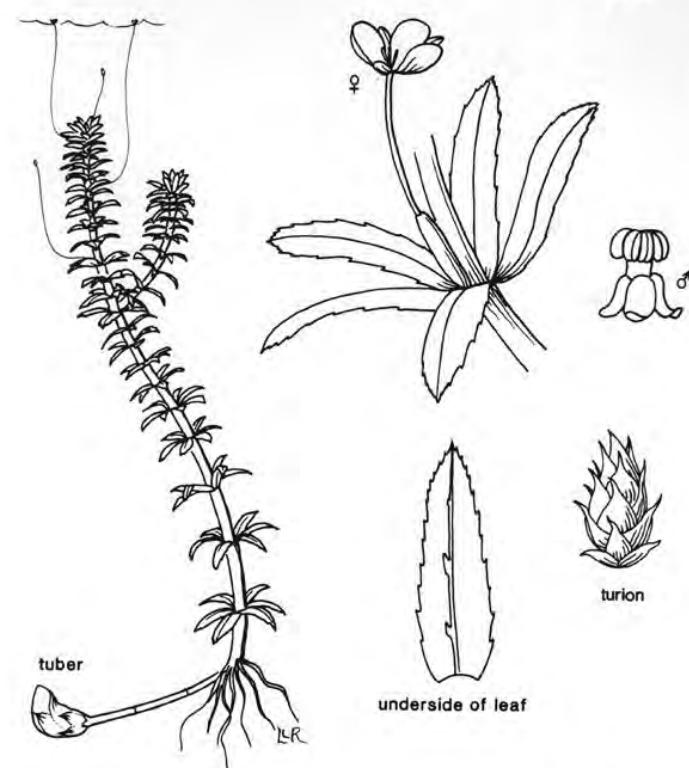


Vic Ramey,
Univ of Florida



Hydrilla

Hydrilla verticillata



Drawing courtesy of IFAS
Center for Aquatic Plants

Illustration provided by:
IFAS, Center for Aquatic Plants
University of Florida, Gainesville, 1990

IPAC Tier 1



Nancy Loewenstein,
Auburn University,
Bugwood.org



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Joseph M. DiTomaso, University of California - Davis, Bugwood.org



UGA5272046

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

Yellow flag

Iris pseudacorus

Marsh dewflower

Murdannia keisak



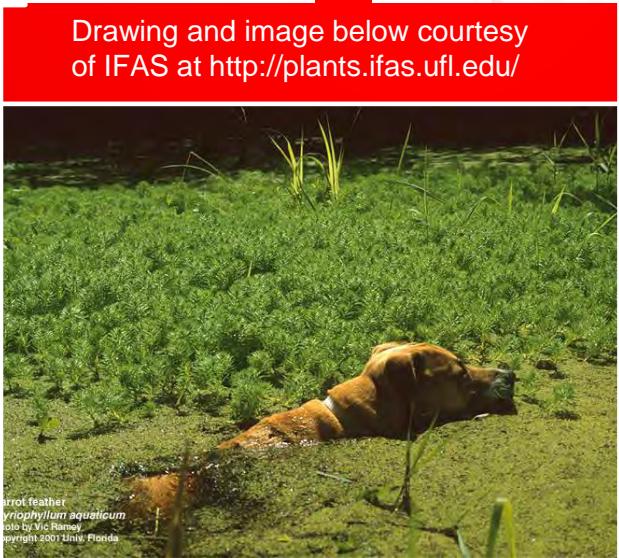
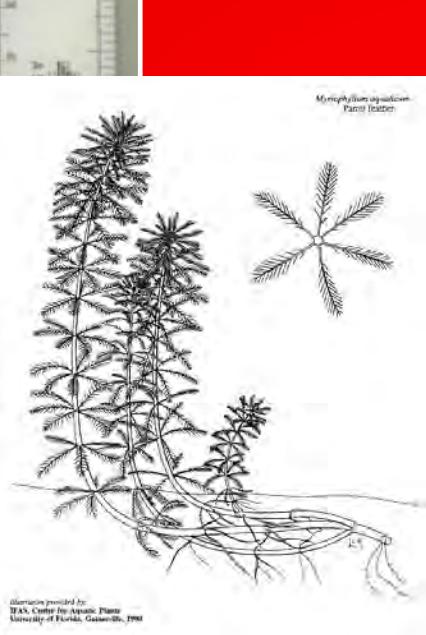
Native *Commelina virginica*
Virginia dayflower

By Jim Stasz, hosted by
USDA-NRCS Plants
Database

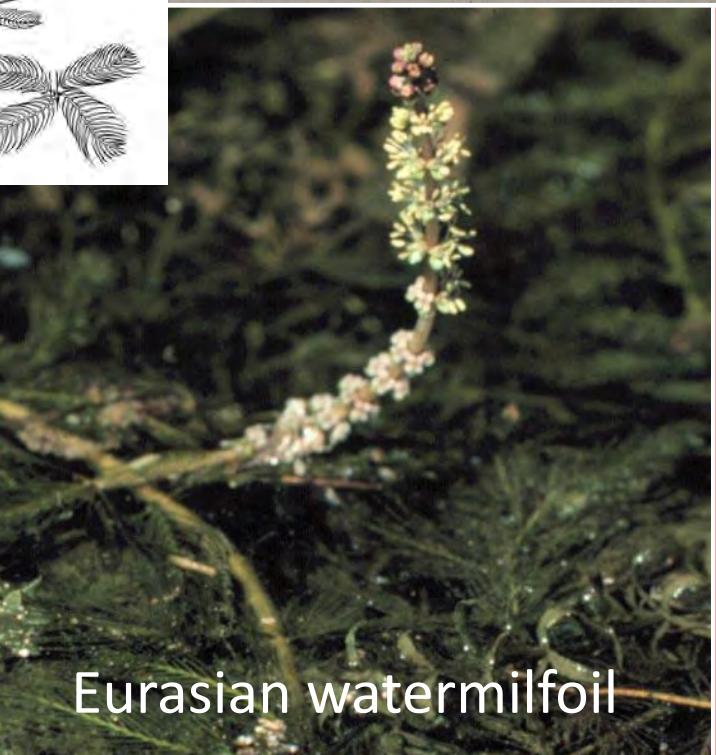
Nancy Loewenstein,
Auburn University,
Bugwood.org

Myriophyllum aquaticum and *spicatum*

All other images from
Maryland DNR



Parrot feather



Eurasian watermilfoil

Drawing and image below courtesy
of IFAS at <http://plants.ifas.ufl.edu/>



THANK YOU!

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