



Invasive Plant Identification for Regional Mapping

Statewide Eyes Training for Central Maryland

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Trees

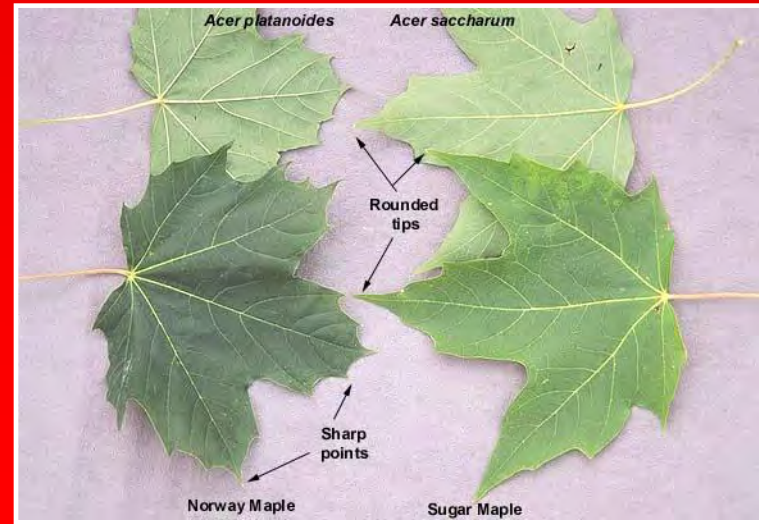
- Norway maple
- Tree of heaven
- Empress tree
- Callery pear

Acer platanoides

Ailanthus altissima

Paulownia tomentosa

Pyrus calleryana



oregonstate.edu/dept/1dplants/images/acpl-sa2.jpg



Sugar maple fruit

© 2003 Steve Baskauf

bioimages.cas.vanderbilt.edu



Norway maple fruit

Judy Sedbrook

www.colostate.edu

www.northshorewx.com/
images/2005/nature/Leave

Norway maple

Acer platanoides



Rhus typhina
Native
lookalikes
staghorn
and smooth
sumac



Rhus glabra



Tree of heaven
Ailanthus altissima





Empress tree
Paulownia tomentosa

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*
- Winged euonymus *Euonymus alatus* **IPAC T2**
- Privet species *Ligustrum spp.* **IPAC T2 (Border)**
- Shrub honeysuckles *Lonicera spp.* **IPAC T1 (Amur)**
- Multiflora rose *Rosa multiflora*
- Wineberry *Rubus phoenicolasius*

Japanese barberry

Berberis thunbergii



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Barry Rice, sarracenia.com,
www.forestryimages.org

Autumn olive

*Elaeagnus
umbellata*



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IPAC Tier 2



Burning
bush

Euonymus alatus

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



Privet *Ligustrum obtusifolium*

Border privet

L. sinense

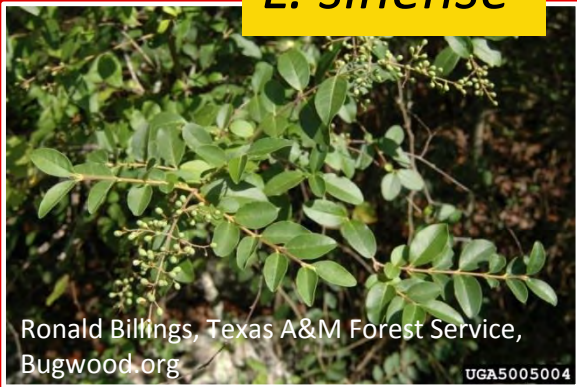
Chinese privet

L. vulgare

Common/European privet



L. sinense



Ronald Billings, Texas A&M Forest Service,
Bugwood.org

UGA5005004

L. vulgare



Nava Tabal, IPANE, Bugwood.org

UGA5078032

L. obtusifolium

IPAC Tier 2



5453163

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



Chris Evans,
Univ of
Illinois,
bugwood.org



UGA2307079

James H. Miller, USDA Forest Service,

www. Forestryimages.org



Robert Vidéki, Doronicum Kft, Bugwood.org

5396203



Photo by Pancrat, Creative Commons



5453225

Shrub honeysuckle

Lonicera spp.



Amur honeysuckle
IPAC Tier 1
proposed



Multiflora rose

Rosa multiflora



Stipules



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Wineberry

Rubus phoenicolasius



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



UGA5274056



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Vines

- Porcelainberry
- Oriental bittersweet
- English and Irish ivy
- Japanese honeysuckle
- Mile-a-minute weed
- Kudzu
- Wisteria species

Ampelopsis brevipedunculata

Celastrus orbiculatus

Hedera helix, H. hibernica

Lonicera japonica

Persicaria perfoliata (*herbaceous*)

Pueraria montana var. *lobata*

Wisteria floribunda, sinensis, hybrid

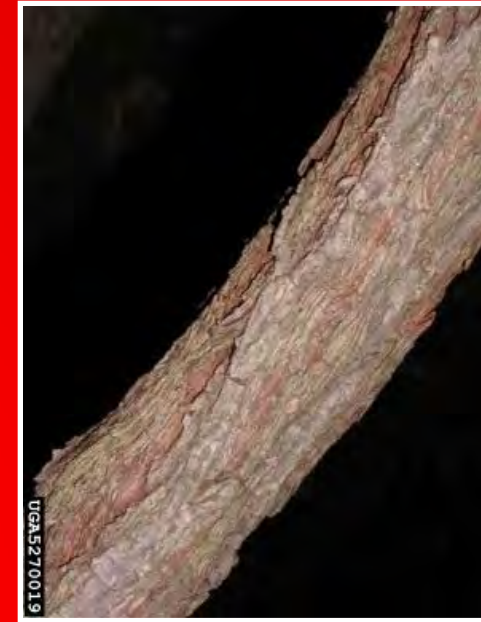
IPAC T2

Porcelainberry

*Ampelopsis
brevipedunculata*



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



UGA5270019

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



English and Irish ivy

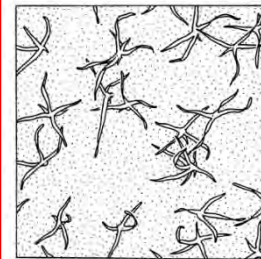
Hedera helix, *H. hibernica*



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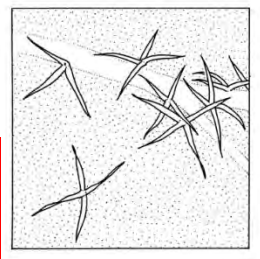
UGA9005075



H. helix

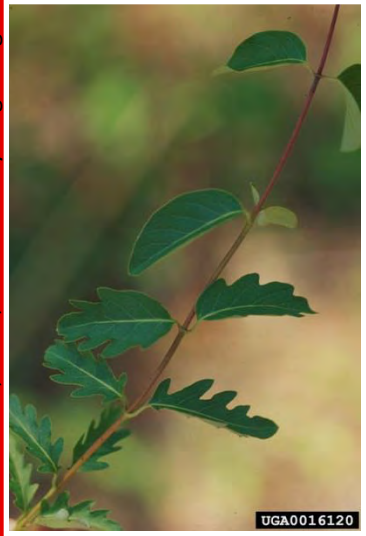
Drawings by
S. Bellanger

<http://alienplantsbelgium.be/content/hedera-hibernica>



Japanese honeysuckle

Lonicera japonica



Mile-a-minute

Persicaria perfoliata



Native lookalike
Halberd-leaved tearthumb
Polygonum arifolium



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





Kudzu

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

Pueraria montana var. lobata

Wisteria

Wisteria floribunda, *sinensis*, x *formosa*



IPAC Tier 2

Herbs & Grasses

- Garlic mustard *Alliaria petiolata*
- Japanese knotweed *Fallopia japonica*
- Lesser celandine *Ficaria verna* **IPAC T1**
- Giant hogweed *Heracleum mantegazzianum*
- Purple loosestrife *Lythrum salicaria*
- Japanese stilt grass *Microstegium vimineum*
- Golden bamboo *Phyllostachys aurea*
- Wavyleaf basketgrass *Oplismenus undulatifolius*
- Beefsteak plant *Perilla frutescens*
- Common reed *Phragmites australis*

Garlic mustard

Alliaria petiolata



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Native violet



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Britt Slattery, US Fish and
Wildlife, Bugwood.org



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

Japanese knotweed

Fallopia japonica



Armin Jagel, Bochum
Botanical Club

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

Lesser celandine

Ficaria verna



IPAC Tier 1

Other photos by Leslie J. Mehrhoff, University of Connecticut



Giant hogweed



Native Cow Parsnip



*Heracleum
mantegazzianum*



<http://www.dec.ny.gov/animals/72766.html>

Purple loosestrife



Lythrum salicaria



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Japanese stilt grass



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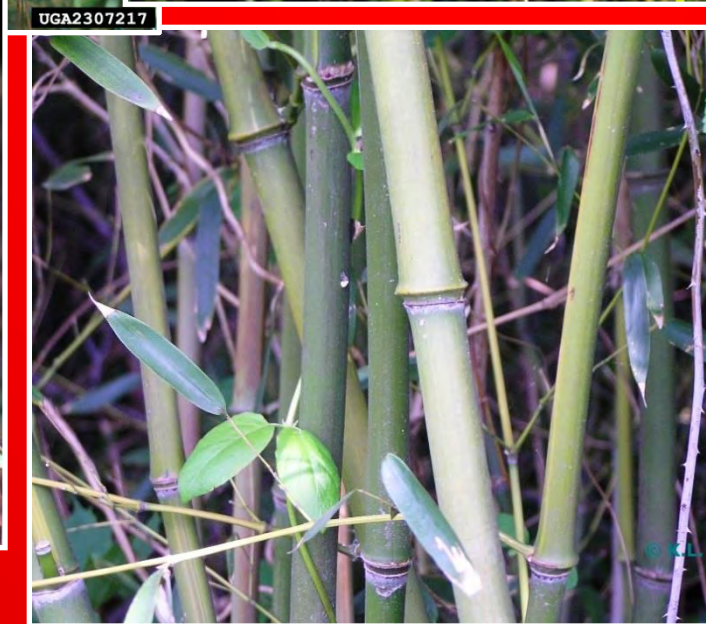


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Microstegium vimineum

Bamboo

Phyllostachys spp.



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

These are *P. aurea*.

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UGA2307217

UGA2307214

kyde 2013

(c)K.L. Kyde 2005

Wavyleaf
basketgrass

*Oplismenus
undulatifolius*





Japanese stiltgrass

WLBG

Hairy joint grass



Beefsteak plant



Perilla
frutescens

Common reed

Phragmites australis



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

Kevin Heffernan, VA DCR Heritage

Aquatics

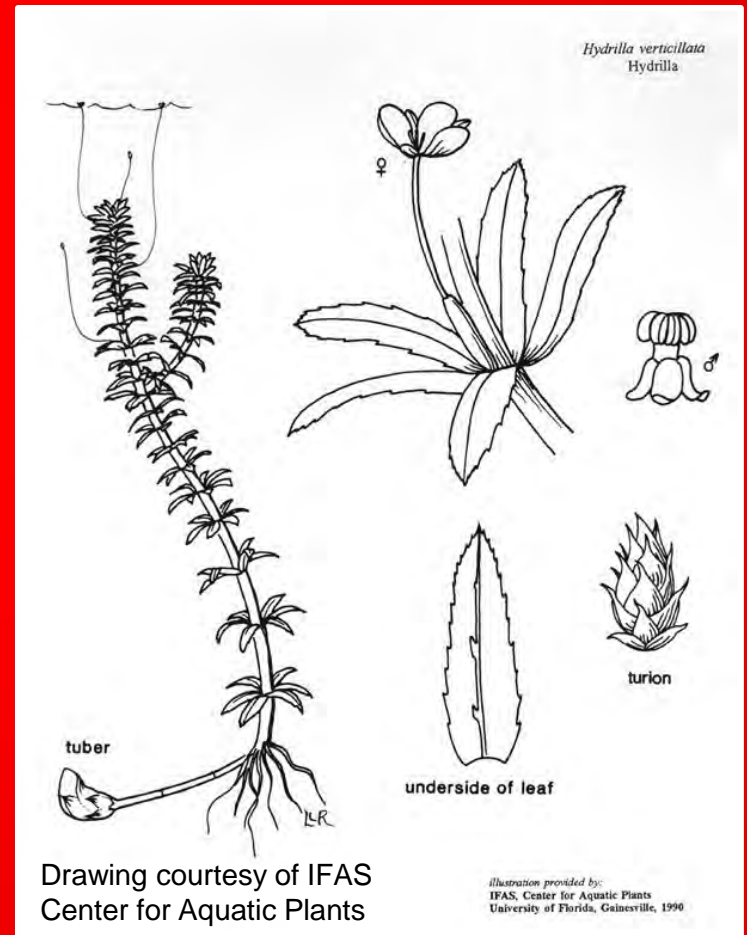
- Hydrilla *Hydrilla verticillata*
- Yellow flag iris *Iris pseudacorus* **IPAC T1**
- Marsh dewflower *Murdannia keisak*
- Parrot-feather *Myriophyllum aquaticum*
- Eurasian watermilfoil *Myriophyllum spicatum*

Hydrilla

Hydrilla verticillata



Vic Ramey,
Univ of Florida



IPAC Tier 1



Nancy Loewenstein,
Auburn University,
Bugwood.org



UGA5272046

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



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

Yellow flag

Iris pseudacorus

Marsh dewflower

Murdannia keisak

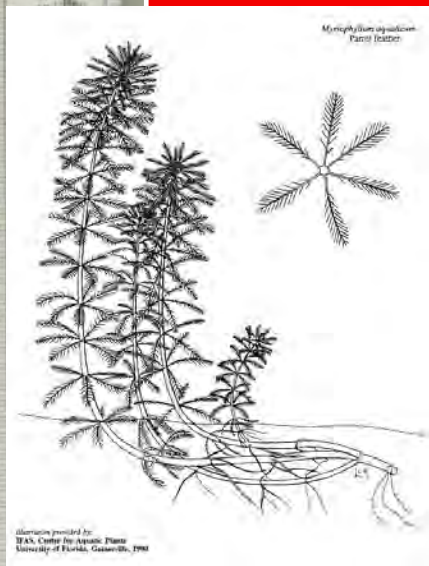


Native *Commelina virginica*
By Jim Stasz, hosted by
USDA-NRCS Plants
Database

Nancy Loewenstein,
Auburn University,
Bugwood.org

Myriophyllum aquaticum and *spicatum*

All other images from Maryland DNR



Parrot feather

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



Parrot feather
Myriophyllum aquaticum
Photo by Vic Ranney
Copyright 2001 Florida



Eurasian watermilfoil



THANK YOU!

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301/948-8243