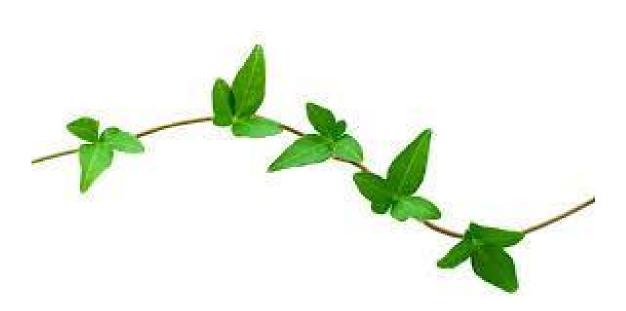




# Common vine quick review in Westchester





## **Invasive Bittersweet**

#### Invasive bittersweet (Celastrus orbiculatus)

- Vine, twines around other plants like a corkscrew
- Leaves alternate, rounded and toothed
- Leaves feel smooth, waxy
- Fruit is hard berries orange to red when ripe
- · Additional check: has orange root

#### Recommended Management Practice:

- For large vines, cut at base and again at eye height prior to fruiting in September\*
- Do not pull off entire large vines from tree; leave large vines after cutting\*
- For smaller vines, hand pull or dig roots and dispose of properly\*











## Japanese Honeysuckle Vine

#### Invasive honeysuckle vine (Lonicera japonica)

- Vine, trails along ground or twines around other plants
- Thin stems with pairs of leaves arranged opposite of each other along branch (looks like string with bow ties or airplane propellers)
- · Leaves oval, rounded, smooth edges
- Has fruit in pairs, juicy red berry

#### Recommended Management Practice:

 Pull vines and roots and dispose of properly prior to fruiting in September\*







## Mile-a-minute Persicaria perfoliata

#### Mile-a-minute (Persicaria perfoliata)

- Triangular leaves
- Curved prickles along the stem & leaf stalks
- Mint green color
- Fruit: blue berry ripening in July
- Stems have round leaf-like stipule looks like saucer for a teacup



Hand pull roots before July



#### Recommended Management Practice:

 Annual species - pull vines (using gloves) and dispose of properly prior to fruiting in July\*



### English ivy Hedera helix

#### WHAT TO LOOK FOR:

- Evergreen perennial climbing or trailing vine
- Vine clings to surfaces with root-like structures
- Leaves alternate, dark green, light veins, waxy
- Juvenile leaves are deeply 3-5 lobed; adult leaves are primarily unlobed
- Sap can cause a rash
- Small yellow/green flowers in the fall
- Purple/black berries late winter



James H. Miller, USDA FS



Chris Evans, River to River CWMA



Kingcounty.gov



## Porcelainberry Ampelopsis brevipedunculata

- Grape vine-like, with <u>tendrils</u>
- Twining woody vine with large simple leaves, variable, often with <u>deep</u> lobes.
- Leaves green beneath





Multi-colored hard berries,
 approximately pea-sized



## Native grapes: Look alike alert!

### **Native Grapes**

- Underside of leaf is <u>whitish</u> on some spp. some are green beneath
- Fruit hangs down in grapelike cluster
- Mature stems
   have purplish
   bark that <u>flakes</u>
   <u>off in strips</u>





## Porcelainberry: Key ID

- Porcelainberries <u>held erect</u> in flat-topped cluster
- •Mature bark does not flake off, has lenticels (dots on stem)

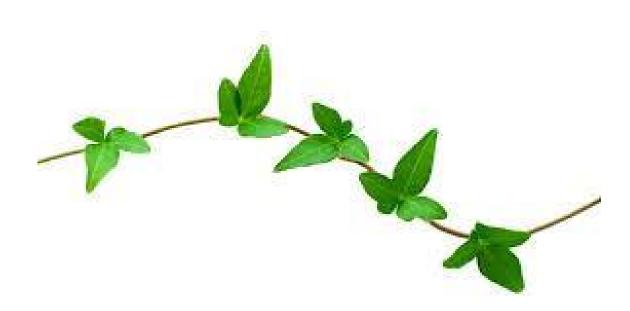








## **Emerging vines in Westchester**





## Hardy kiwi Actinidia arguta





Q Qwert, Bugwood.org

Mass Audubon

- Alternate branching
- Leaves simple, ovate, finely serrate
- Red/pink petioles
- Flowers late spring/early summer
- Fruits are grape-sized and green



Sten Porse, Bugwood.org



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



David J. Moorhead, University of Georgia, Bugwood.org

## Kudzu *Pueraria montana*



Forest and Kim Starr, Starr Environmental, Bugwood.org



Rebekah D. Wallace, University of Georgia, Bugwood.org

- Semi woody vine, up to 100' long
- Alternate branching
- Leaf shape variable; can be tear-drop or lobed, leaf margin entire with hairy edges
- Purple, fragrant flowers in July-August
- Vine itself is hairy, distinct hairy seed pods



### **Kudzu: Behavior**



- Climbing or trailing semi-woody perennial vine
- •Up to 100'long
- •Stems up to 2" thick
- Fleshy tap root up to7" wide and 9' deep,

Kerry Britton, USDA Forest Service, Bugwood.org



### Kudzu: Look alikes

**POISON IVY** (Toxicodendron radicans)



Brett Marshall, Sault College, Bugwood.org

-Leaf margins are
toothed on P.I.
whereas kudzu leaf
margin is entire
-Inconspicuous
flowers in May-June
-Fruits are berries,
as opposed to hairy
seed pods



## Japanese hops *Humulus japonicus*





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

Opposite, toothed leaves with <u>5-9 lobes</u>; <u>rough</u> to the touch;
 on long petioles with no tendrils

Photo © deboas, CC BY 4.0.

- Common hop 3-5 lobes
- Japanese hops stems have small prickles

Photo © jeffreyaewick, Public Domain



## Japanese hops vs. Common hop

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#### Common Hop (Humulus Iupulus)



Sinuses between lobes are usually rounded.

#### Japanese Hop (*Humulus japonicus*)

Sinuses between lobes usually end at an acute angle.



Photo © Ira Gershenhorn, Public Domain.





Fruit concealed by overlapping bracts (leaf-like structures) on fruiting spikes, making the spike look more rounded and conelike. Inflorescence bracts enclose 2 fruits each.

Bracts of fruiting spikes curl outward, leaving fruit visible, and making the spike as a whole look more sharp-pointed. Each bract encloses only one fruit.



Photo @ David, CC BY-SA 4.0.

Photo © Spencer, CC BY 4.0.



## Japanese hops: Look alikes

### Common hops

(Humulus lupulus)



David Gent, USDA Agricultural Research Service, Bugwood.org

#### Virginia creeper

(Parthenocissus quinquefolia)



John Cardina, The Ohio State University, Bugwood.org

- Common hops has 3-lobes
- Virginia creeper has 5 leaflets, tendrils and no thorns



## Japanese/Chinese Wisterias *Wisteria spp.*

#### WHAT TO LOOK FOR:

- Twining woody vine with compound leaves
- Leaflets <u>untoothed</u>,
- WAVY leaves
- Terminal leaflet
- Leaves alternate
- Purple flowers in May
- Seed pod is bean-like, large, green and hairy

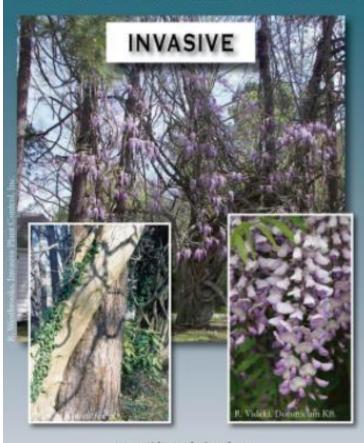


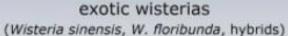




## #KnowTheDifference

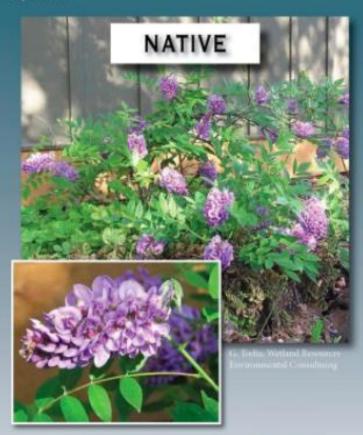
Exotic wisterias will readily hybridize with each other and are difficult to distinguish. Native wisteria will not hybridize with exotics and maintains a lower profile.





- · Very aggressive growth-climbs up to 40 ft. in height;
- Seed pods velvety, covered in short hairs;
- · Less cold-tolerant, blooming in Spring typically;
- Clusters of flowers growing to 20 in. in length.





#### American wisteria (Wisteria frutescens)

- Will climb, but has more shrub-like growth tendency;
- Seed pods smooth and hairless;
- Blooms slightly later in year (June-July); will sometimes bloom again in fall;
- Clusters of flowers are shorter, rounder, more compact (shaped like a pine cone).



## Wisteria: Japanese vs Chinese





 $Ch_{inese} = Ch_{eck mark}$ 

## Japanese virgin's bower/sweet autumn clematis Clematis terniflora

 Perennial twining vine in buttercup family

CONFER

- Oppositely arranged compound leaves, 3-5 leaflets
- White corkscrew seedheads
- Blooms Aug.-Sept. fragrant white flowers





Clematis (terniflora) blanketing roadside vegetation on Spring Street in Darlington, SC.



Connecting People w Mostly 3 Leaflets
Per Leaf

## **Native**

Virgin's Bower Clematis virginiana Mostly 5 Leaflets
Per Leaf

## Invasive

Autumn Clematis Clematis ternifolia



Toothed Leaflet Margins

Smooth Leaflet Margins





## Wintercreeper/Fortune's spindle Euonymus fortunei

- Spreading groundcover or clinging vine
- Glossy waxy look to leaves
- Opposite leaf arrangement
- Distinct whitish veins along axis
- Toothed margins





Photo credits: umd.edu, mortonarb.org



## Chocolate Vine Akebia quinata

- Green stem turns woody and brown with age
- Alternate branching
- Palmately compound leaves
  - Five ovate waxy leaves
- Blooms spring/early summer
  - Fragrant
  - o Blooms spring
- Purple brown seed pods rare





## Chocolate vine Threat

- Fast growing (up to 40'/season)
- Aggressive, forms dense stands
- Ground cover and smothers trees
- Tolerant of a range of soil and sun conditions, and drought
- Ornamental
- Vegetative and bird dispersed



### Cinnamon Vine/Air Potato/Chinese Yam

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### Dioscorea polystachya

- Pointed, heart shaped opposite leaves
- Vine spirals counter clockwise
- Air tubers present from June-Septemberlook like little potatoes!
  - Native yams don't have aerial tubers and spiral clockwise
- Small white/greenish yellow flower spikes (smell like cinnamon)



Troy Evans, Great Smoky Mountains National Park, Bugwood.org



Chris Evans, Illinois Wildlife Action Plan, Bugwood.org



## General Management

- For young plants, use tools to loosen soil and gently tease out roots. This is easiest to do after a rain and in non-rocky soil
- Manage mature plants before they fruit
- Larger/older vines' root removal causes extensive soil disturbance. Cut large vines high and low multiple times throughout the growing season
- Do not pull down vertically growing vines
- Make brush piles on non-soil surfaces
- Monitor and retreat areas frequently (every few weeks) during the growing season
- Multiyear effort to deplete the seed bank and root fragments left behind



# THE NUMBER OF THE PARTY CONFERENCE

## Management Tools

- Tools
  - Pick mattock/shovel
  - Hand saw
  - Pruners/pruners
  - Tarp
  - Weed whacker
- Protective equipment
  - Eye protection
  - Rubber coated thin gloves
  - Leather gloves
  - Long sleeves
  - Long pants
  - Sturdy shoes
  - Hard hat



# THE NUMBER OF THE PROPERTY OF

## Herbicidal Management

- Can apply on personal private property without a license in NY
- Systemic active ingredients glyphosate and triclopyr
- Cut stump concentrated herbicide applied to freshly cut and clean stumps
- Basal bark concentrated herbicide is applied to the lower part of bark
- Foliar spray low concentration of herbicide is applied to leaves
- Read the label and safety data sheet in full. The label is the law
- 2(ee) label addendums for species that are not on the product label



## Management Grouping 1

- Hardy roots, hardy stems, perennial
  - Cut high at a comfortable height and cut low
  - Pull/dig what you can
  - Monitor/management every few weeks
- Bittersweet
  - Flowers May, fruits August
- Hardy kiwi
  - Flowers May, fruits September
- Japanese honeysuckle
  - Flowers May, fruits September
- Japanese virgin's bower
  - Flowers August, fruits October
- Porcelainberry
  - Flowers June, fruits September
- Wintercreeper
  - Flowers May, fruits October
- Wisteria
  - Flowers May, fruits September



Photo: Alliance for the Chesapeake Bay



## Management Grouping 2

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- Hardy roots, delicate stems, perennial
  - Cut high at a comfortable height and cut low
  - Do not pull unless plants are very young or soil is very loose
  - Dig what you can
  - Monitor and continue management every few weeks
- Chinese yam
  - Can resprout from bulbils and deep tubers
  - Air bulbils can start new plants
  - Flowers June, fruits August
- Chocolate vine
  - Flowers May, fruits September



Photo: Trees Atlanta



## Management Grouping 3

- Shallow roots, delicate stems, annual
  - Removal before seed set is very effective
  - Removal after seed set is futile
- Japanese hops
  - Covered in tiny hairs that irritate skin
  - Flowers and fruits July-August
- Mile-a-minute
  - Small curved prickles along the stem
  - Flowers July, fruits September



Photo: NH Dept of Agriculture

## English ivy



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#### Climbing vines

- Use a handsaw or pruners to cut high and low, careful not to cut into the tree
- Carefully peel ivy off tree
- Monitor/retreat every few weeks

#### Groundcover

- Use a shovel to cut strip
- Rake back leaves along strip
- Roll back strip, pulling roots horizontally as you go
- Monitor/retreat every few weeks
- Flowers September, fruits October-November



TreesAtlanta.org



PiedmontMasterGardeners.org



- Dig to expose the base of the root crown
- Cut below the root crown, above tubers
- Kudzu cannot regrow from below the root crown, but buried vines can root and produce new shoots
- Flowers August, fruits
   October

