Invasive Species Reference

Terrestrial Invasive Plants Invasive Strike Force:

Intermediate Species

2018







Common Buckthorn

Rhamnus cathartica

Detailed ID Notes:

Flowers: Early summer

Fruits: Fruit matures in Oct.

Native Range: Europe, northern and western Asia

How to ID: Look for a coarse shrub, 2-6 m. tall. Glabrous branches have shoots that are tipped with sharp spines. Leaves are opposite to subopposite, elliptic to ovate and can be either acute or obtuse. The three lateral veins on each side are strongly up-curved. These leaves remain until late autumn, unlike many natives. Fragrant, non-showy yellow-green flowers appear in clusters of 2-6.



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



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



Jan Samanek, Phytosanitary Administration, Bug-wood.org



Paul Wray, Iowa State University, Bugwood.org

1.	Fruit	Plump, black fruits appear August-September
2.	Leaves	Shiny round leaves with small teeth and 3-5 pairs of secondary veins which curve towards leaf tips. Leaves grow opposite or nearly opposite on the branch.
3.	Bark	Young bark is smooth with dark raised areas which becomes quite rough as tree ages.
4.	Spines	Large thorns grow along branch with possible spine at branch tip.



Glossy Buckthorn

Frangula alnus

Native Range: Europe, western Asia, northern Africa

Rob Routledge, Sault College, Bugwood.org

1.	Leaves	Leaves have no teeth and 8-9 pairs of secondary veins which curve towards the leaf tip.
2.	Bark	Young bark appears greenish brown which ages to have light color blotches and raised white spots.
3.		Spines grow along the twig but not at the tip of the branch.



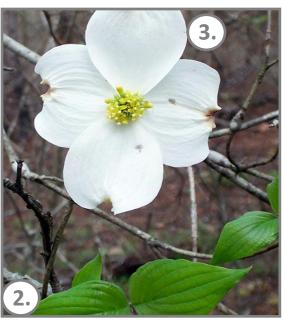
Leslie J. Mehrhoff, University of Connecticut, Bugwood.org



Dogwood •

Cornus spp.

Native Range: Throughout much of the United States



Chris Evans, University of Illinois, Bugwood.org

1.	Bark	Smooth grey bark matures to blocky appear- ance in some species.
2.	Leaf	Leaf has no teeth and can be shiny, but is lighter in color than Buckthorn.
3.	Flower	Very showy flower with 4 petals
4.	Twig (not shown)	Branching is opposite.

David Stephens, Bugwood.org

ALT Tree ♥ 20' ☆ ☆ ♦

Black Alder, European Alder • • • • • • • • • •

Alnus glutinosa

Detailed ID Notes:

Flowers: June-July

Fruits: October

Native Range: Europe, northern Africa and western Asia.

How to ID: Look for a tree with smooth, dark brown bark, which may have some fissures with age. The leaves are leathery with rounded bases and an indent or notch at the tip. Margins of the leaves are serrate with variable teeth.



Robert Vidéki, Doronicum Kft., Bugwood.org



Paul Wray, Iowa State University, Bugwood.org



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



Robert Vidéki, Doronicum Kft., Bugwood.org



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

1.	Leaves	Roundish leaves that grow alternately on the branch, <u>often having an indent or notch at</u> <u>the leaf-tip</u> when mature. Underside of the leaf is sticky when young.
2.	Bark	Bark is smooth and greenish-brown when young. Mature bark develops deep fissures and plates revealing lighter inner bark.
3.	Growth	Roots grow very quickly, often leading to sur- face root mats. <u>Grows either as a single</u> <u>stem tree or multi-stemmed shrub.</u>
4.	Twig	Older branches have white lenticels (dots on the bark) while young twigs have buds that are clearly stalked.
5.	Fruit	Catkins appear similar to cones and grow on a long stalk.
6.	Habitat	Always found near water or location with high water table



Keith Kanoti, Maine Forest Service, Bugwood.org



Robert Vidéki, Doronicum Kft., Bugwood.org

1.	Leaves	Roundish leaves that grow alternately on the branch, <u>without an indent or notch.</u> <u>Young leaves do not have a stick under-</u> <u>side.</u>
2.	Bark	Bark is smooth and pale reddish-grey- brown.
3.	Growth	Grows in multi-stemmed shrub form.
4.	Fruit	Catkins similar to A. glutinosa, but grow on a short stalk

Look-alikes

Alnus incana Growth: Tree Native Range: Northern portions of North America



Brett Marshall, Sault College, Bugwood.org



Mary Ellen (Mel) Harte, Bugwood.org



Linden Viburnum

Viburnum dilatatum

Detailed ID Notes:

Flowers: May-June

Fruits: Fruit matures in Oct.

Native Range: Eastern Asia

Distribution and Habitat: Prominent in disturbed areas, edges, and may invade forests.

How to ID: Look for a multi-stemmed , rounded, deciduous shrub. It may have dense foliage to the ground. Look for simple, opposite leaves that are obovate to broad-elliptic in shape. The leaves may vary between nearly round to almost strap-like on the same plant. Scalloped margins result in coarse, irregular teeth. Small creamy, white flowers occur in flattened clusters and are typically numerous on the shrub. The bark of the stem is dark brown with prominent orange lenticels and are densely pubescent.



Doug Manning, National Park Service, Bugwood.org



Leslie J. Mehrhoff, University of Connecticut, Bug-wood.org

1.	Leaves	Oval shaped leaves with scalloped edges and a soft, hairy surface; vary in size and thick- ness.
2.	Form	Opposite branching shrub.
3.	Flowers	Bunches of white flowers appear at branch tips in May-June
4.	Fruit	Fruit is a red berry which grows in flat-topped clusters which ripen in September



University of Connecticut Plant Database, http://hort.uconn.edu/ plants, Mark H. Brand, Department of Plant Science and Landscape Architecture, Storrs, CT 06269-4067 USA



University of Connecticut Plant Database, http://hort.uconn.edu/ plants, Mark H. Brand, Department of Plant Science and Landscape Architecture, Storrs, CT 06269-4067 USA

Vern Wilkins, Indiana University, Bugwood.org

Arrowwood Viburnum • • • • • • • • • • •

Viburnum dentatum Flowers: May-June Fruits: Mature in Oct. Native Range: Eastern United States



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



Joyce Tomsaelli, CCEDC

Qı	uick II	D: • • • • • • • • • • • • • • • • •
1.	Fruit	Fruit is a blue berry which grows in clusters at the branch ends.
2.	Leaf	Oval shaped leaves with pointed teeth on the leaf edge and may be rough, hairy, or smooth on mature plants.
3.	Flowers	Bundles of small white flowers appear at the same time as Linden Viburnum but are less showy



Viburnum seiboldii

Detailed ID Notes:

Flowers: May

Fruits: Fruit matures in Sep.

Native Range: Japan

Distribution and Habitat: Thrives in moist, well-drained soils. Prevalent in disturbed areas.

How to ID: Look for a tall shrub that is about half as wide as it is tall. The simple, 2-5 inch long, leaves are arranged alternately along the branches. The leaves are glossy, and dark green with serrated margins. When they're crushed, they emit a foul odor. Abundant small white flowers occur in clusters and may take up much of the surface when they bloom.



University of Connecticut Plant Database, http:// hort.uconn.edu/plants, Mark H. Brand, Department of Plant Science and Landscape Architecture, Storrs, CT 06269-4067 USA



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Qwert1234. Viburnum sieboldiivar. obovatifolium, Aizu area, Fukushima pref.,Japan. 6 June 2010. Wikimedia. Web. Retrieved June 27, 2016. https://commons.wikimedia.org/wiki/ File:Viburnum_sieboldii_var._obovatifolium_3.JPG

1.	Leaves	Oppositely arranged, this deciduous leathery leaf is 2-5" long and has a foul odor when crushed. Leaf edge is coarsely toothed with deep veins.
2.	Fruit	Small, oval fruits go from red to black in Sep- tember
3.	Flower	Abundant off-white flowers bloom in May and may cover substantial areas of the plant.

Richard Webb, Bugwood.org



Dow Gardens , Dow Gardens, Bugwood.org

Leatherleaf Viburnum

Viburnum rhytidophyllum Flowers: Mid-May Fruits: Ripens in September Native Range: Central and western China



Dow Gardens , Dow Gardens, Bugwood.org

Q	uick II	D: •	•	•	•	•	•	•	•	•	•	•	•	•	•	•
1.	Leaves	Also d	opp	osi	tel	y a	rrai	nge	ed,	Lea	the	erle	af			
		vibur	nur	n is	: ev	erg	Jre	en	ind	łivi	dua	al le	av	es :	are	

		hairy with a very wrinkled leaf surface and have no teeth.
2.	Flower	Flower is similar and may not be used as an key ID characteristic.

3. Stems Stems are and twigs are also hairy.

Bush Honeysuckle

Lonicera spp.

Flowers: May-June

Fruits: June-July, Oct-Nov

Native Range: China, Korea, Manchuria **Distribution and Habitat:** Open woodlands, old fields, forest edges, and hedgerows throughout the region.

How To ID: Look for a shrub with leaves that are opposite with an entire margin, and have some rough pubescence. During May-June, look for groups of 3-7 small white to yellow flowers. Fruits are small, fleshy, and red to yellow. Look for a hollow pith, which distinguishes this honeysuckle from the native honeysuckles.



Chris Evans, University of Illinois, Bugwood.org



Chris Evans, University of Illinois, Bugwood.org



Rob Routledge, Sault College, Bugwood.org



Rob Routledge, Sault College, Bugwood.org

1.	Flowers	All white to yellow, paired, tubular.
2.	Leaves	Leaf margins entire. Opposite, ovate with tapered tip, lightly pubescent
3.	Fruit	Small, red to yellow round berry. They persist through winter.
4.	Stem	Hollow pith, unlike other honeysuckles.



Karan A. Rawlins, University of Georgia, Bugwood.org



Privet

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Flowers: April-June

Fruits: July-March

Distribution and habitat: Thrives in well drained soils and disturbed areas.

Native Range: Parts of Europe and Asia

How to ID: Look for a semi-evergreen shrub up to 20 ft. with trunks that occur as multiple stems and have many long, leafy branches. Leaves are always opposite and lanceolate.

Quick ID:•••••••••••

1.	Leaf	Opposite, leathery oblong leaves that end with a pointed tip.
2.	Fruit	Globe-shaped, glossy drupes that turn to black as they ripen.

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



Bush Honeysuckle

Diervilla lonicera

Growth: Deciduous Shrub

Flowers: May-June

Fruits: June-Aug

Native Range: Woodlands, mixed forest edges throughout the region. More common in dry woods. Uncommon in NY-NJ.

Rob Routledge, Sault College, Bugwood.org

1.	Fruit	Small, red berry
2.	Leaves & Flower	Leaf margins toothed, sometimes ciliate. Flowers turn red with age and found in groups of 3-7.
3.	Twig (not shown)	Twig has a pith, not hollow.



Rob Routledge, Sault College, Bugwood.org



Privet ••••••••••

Ligustrum sp.

Flowers: April-June

Fruits: July-March

Distribution and habitat: Thrives in well drained soils and disturbed areas.

Native Range: Parts of Europe and Asia

How to ID: Look for a semi-evergreen shrub up to 20 ft. with trunks that occur as multiple stems and have many long, leafy branches. Leaves are always opposite and lanceolate. Border Privet has foul-smelling downy white flowers with anthers as long as the petals.

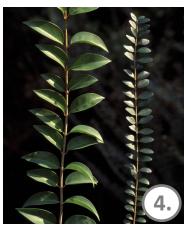


Chris Evans, University of Illinois, Bugwood.org



Richard Webb, Bugwood.org

1.	Flower	Many small, white flowers appear in cone- shaped branching clusters
2.	Growth	Evergreen shrubs that can reach 30 ft. in height.
3.	Fruit	Globe-shaped, glossy drupes that turn to black as they ripen.
4.	Leaves	Left: Chinese privet Right: Glossy privet. Always opposite and varying degrees ovate.
5.	Leaves	Opposite, leathery oblong leaves that end with a pointed tip.



James H. Miller, USDA Forest Ser-



James H. Miller, USDA Forest



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



Dow Gardens , Dow Gardens, Bugwood.org



Blackhaw Viburnum

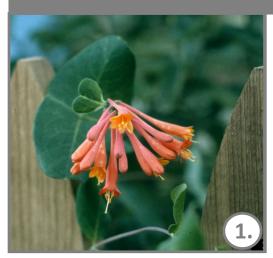
Look-alikes

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Viburnum prunifolium Flowers: May-June Fruits:: Aug.-Oct. Native Range: Eastern and central North America

Quick ID: • • • • • • •

1.	Flower	White flowers with 5 petals grow in broad clusters
2.	Leaf	Oppositely arranged leaves, round in appear- ance which lack "bunny ears" at the end of branch
3.	Twig (not shown)	Branches and twigs lack the papery wings of E. alatus.



David Gent, Bugwood.org



Trumpet Honeysuckle •

Lonicera sempervipens Growth: Vine Flowers: May-July Fruits: June-Oct. Native Range: North America

1.	Flowers	Flower clusters terminal, produced only at the end of stems. Varying shades of red in
2.	Leaves	Smooth, glossy, paired evergreen leaves. Ovate to oblong in shape



Rhodotypos scandens

Detailed ID Notes:

Flowers: Late spring-early summer

Fruits: Fruit matures in Oct.

Native Range: Japan and China

Distribution and Habitat: Very prominent in disturbed areas, forest edges and can invade forests

How to ID: Look for a small, multi-stemmed shrub. The bright green leaves are opposite, simple and doubly serrate. They also have ribbed veins and a long, pointed tip. Solitary white flowers with four-petals open in late spring. Groups of four green-yellow berries occur and turn to jet black as they ripen. The fruits have four persistent sepals surrounding them.



Leslie J. Mehrhoff, University of Connecticut,



Mike Young, new York, New Jersey Trail Conference



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

1.	Fruit	Fruits appear as 4 berries which turn from dark red to black from September through December.
2.	Leaves	Oppositely branched, leaves has ribbed veins with noticeably elongated leaf tips
3.	Flower	White flowers with four petals may be pre- sent from April until early June

Arrowwood Viburnum





Viburnum dentatum

Quick ID:

2.

- Leaves Leaves are more deeply toothed and lack the elongated leaf tip of R. scandens
 - Fruit Dark blue fruit grows in clusters

Troy Evans, Great Smoky Mountains

Vern Wilkins, Indiana University, Bugwood.org

Linden Viburnum Viburnum dilatatum

Viburnum dilatatum

toothed

September

Leaves are fuzzy and shallowly

Fruit is a red berry which grows in

flat-topped clusters which ripen in

Quick ID:

Fruit

1.

2.

Doug Manning, National Park Service, Bugwood.org



University of Connecticut Plant Database, http://hort.uconn.edu/plants, Mark H. Brand, Department of Plant Science and Landscape Architecture, Storrs, CT 06269

•••• Birches

Betula spp.



Paul Wray, Iowa State University, Bugwood.org



Joseph OBrien, USDA Forest Service, Bugwood.org

Quick ID:

1.LeavesBirches all have alternate branches
although the shape varies based on
species.2.GrowthAll birches grow as trees and have
lenticels (off-colored spots or lines)
on the bark which may or may not
peel.

opp Vines ☆ ¥ ≘

Japanese & Chinese Wisteria • • • • • • • • • • •

Wisteria floribunda Wisteria sinensis

Flowers: April-May

Fruits: August-Early October

Native Range: Japan/China

Distribution and Habitat: Forest edges and frequently disturbed areas.

How To ID: Look for a deciduous, woody vine that has substantial stems, grey to brown in color. The vine will twine around its host. Seeds contained in flattened, hairy 6-inch long, bean-like pods.



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



John Ruter, University of Georgia, Bugwood.org



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



Chris Evans, University of Illinois, Bugwood.org

-Chinese wisteria

1.	Stems	Stems can be up to 10 ft in diameter with smooth, grey-brown bark.
2.	Flowers	Lavender, purple, or white fragrant flowers occur in long, dangling clusters
3.	Growth	Deciduous, woody vine may be seen girdling other plants and killing them. Twines counter- clockwise around host.
4.	Leaves	Alternate, pinnately compound leaves are tapered at the tip with wavy edges



Genia Todia, Wetland Resource Environmental Consulting, Bugwood.org

Detailed ID Notes:

- High climbing, woody vine 25-30 ft. long
- Clock-wise twining stems
- Deep green, opposite leaves
- Brown, bean-like pods persist through the winter

Quick ID: • • • • • • • • • • • • • •

1.	Growth	Woody vine, frequently seen in cultivation
2.	Flowers	Large, drooping clusters 6-9 inches long that appear after the plant has leafed out. Lilac or bluish purple and fragrant.
3.	Leaves	Dark green, pinnately compound leaves with 9-15 opposite leaflets.

Look-alikes

American Wisteria

Wisteria frutescens

Flower: April-May

Distribution and Habitat: Moist thickets, swampy woods, and stream borders.

Native Range: Southeastern and southcentral portions of the United States. Uncommon in New York and New Jersey.



Genia Todia, Wetland Resource Environmental Consulting, Bugwood.org



Karen A. Rawlins, University of Georgia, Bugwood.org

opp Vines ☆ ★ ★

Porcelain Berry

Ampelopsis brevipedunculata

Flowers: May-August

Fruits: September-October

Native Range: Russia, China, Korea, Japan

Distribution and Habitat: Found in moist woods, thickets, and floodplains in the southern part of the region.

How To ID: Look for a woody vine with branched tendrils. They have lenticels that are continuous across the nodes. Alternate leaves are simple, heart-shaped and have coarse teeth along the margins. There's variance in the leaves, from slightly lobed to significantly dissected. It also has a notable white pith unlike other native berries. These plants also have a strong, starchy odor resembling corn.



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



Chris Evans, University of Illinois, Bugwood.org



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



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

Q	Quick ID:		
1.	Fruit	Flesh is white, and white outer layer turns blue or purple as they ripen.	
2.	Leaves	There are hairs present only on veins and not on the leaf surface.	
3.	Flowers	Green-to-white inconspicuous flowers develop in small clusters and bloom mid-summer	
4.	Pith (not shown)	The pith is white, unlike native berries that are brown.	

Ecological Impacts: These vines form in dense mats, climbing over native vegetation, reducing available light to other plants. Seeds are dispersed widely by animals and birds that ingest the fruit. It is most invasive to disturbed edges, gaps and riparian areas.



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

Native Grapes

Vitis Spp.

Flowers: May-June

Fruits: Aug-Nov

Native Range: Throughout the region

Distribution and Habitat: Most native species are found in forests, thickets, and streambank habitats.

How To ID: There are around 8 different species of native grapes that resemble porcelain berry.

Characteristics in their climbing habits, presence of tendrils, leaf shape and small yellow-green flowers may be resemblances between these species. Native grapes have varying degrees of hairiness. Flowers and fruits are always arranged in elongate inflorescence.

Quick ID: ••••••••••••

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1.	Fruit	Ranges from green to black to purple. The flesh of the grape is watery, but not white.
2.	Leaves	If hair is present, it will be on the leaf surface
3.	Growth	Peeling or shredding in narrow papery shreds occurs in mature vines.
4.	Pith (not shown)	Pith on all grape species is brown.



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

Ecological Value: Native grapes are a valuable summer wildlife food. Wild grapes are eaten by at least 45 species of birds within our region. Many mammals favor grapes as a staple during the summer. Box turtles also favor native grapes in addition to their usual diet. The vines provide nesting cover for many birds, with the strips of bark often being utilized for nest construction.



Ansel Oomman, Bugwood.org

OPP Vines ☆ ¥ ⊕

Black swallow-wort

Vincetoxicum nigrum

Flowers: May-July

Fruits: September

Native Range: Northern and southwestern Europe

Distribution and Habitat: It occurs in disturbed locations, forest edges, forests, meadows and fields, shores, rivers, or lakes. It requires moist soils, and will grow in shaded areas.

How To ID: Look for a vine with oval leaves that have pointed tips and occur in pairs along the stem. The leaves are 3-4 inches long, and 2-3 inches wide. Star shaped flowers have five purple-black petals and have white hairs. These flowers grow in clusters where the leaf stem meets the vine. Their fruits are slender, green to brown, and packed with seeds attached to puffy fibers.



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



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



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

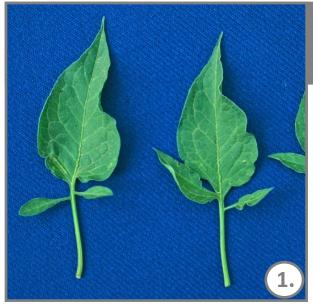


Rob Routledge, Sault College, Bugwood.org

Quick ID: • • • • • • • • • • • • • •

1.	Growth	Herbaceous twining vine with hairy stem
2.	Flowers	Usually tiny purple-black 5-petaled flower about 1/4" wide that grow in small clusters where the leaf stem meets the vine
3.	Fruit	Long, green seed pods reminiscent of milk- weed pods
4.	Leaves	Dark, opposite shiny, long-pointed leaves

Hint: Leaves are rounder than the Hardy Kiwi (ACAR) with a wavy, gently serrated edge. Native bittersweet will have similar fruit and flower clusters but on the tips of branches, not along the stem. However, there are reports of hybridization between the two.



Climbing Nightshade •••••••••

Solanum dulcamara Growth: Vine Native Range: North America

Joel Floyd, USDA APHIS PPQ, Bugwood.org

Detailed ID Notes:

- Herbaceous climbing vine
- Flowers have curved back petals and a yellow projection from the center
- Leaves are compound with three leaflets; or divided with three lobes

1.	Leaves	Leaves divided into 3 leaflets or deeply lobed. The tip of the leaf will be much larger than the two lower parts.
2.	Flowers	Usually tiny violet or purple 5-petaled flower about 1/4" wide that grow in small clusters opposite to a leaf.
3.	Fruit	Red berries that grow in bunches, each hav- ing an individual stem.



Joel Floyd, USDA APHIS PPQ, Bugwood.org



Steve Dewey, Utah State University, Bugwood.org

Forb Herbaceous

Chinese Lespedeza

Lespedeza cuneata

Detailed ID Notes:

Flowers: July-Sept.

Native Range: China, Korea, Japan and Himalayas

Distribution and Habitat: Open areas, along roads, in fields, prairies, thickets and disturbed areas.

How to ID: Look for thin, alternate leaves that are three parted. These leaves have pronounce bristles on the tips. When in bloom, the creamy white flowers with purple throats develop in clusters of 2-4.





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



Chris Evans, University of Illinois, Bugwood.org

Quick ID: ••••••••••••						
1.	Growth	Appears as an upright, semi-woody forb reaching 1-1.8 meters in height with one or several slender gray-green stems.				
2.	Leaves	Leaves grow on short stems in groups of 3 leaflets which grow alternately on the stem. Leaflets have short bristles on tips and silvery hairs on the underside.				
3.	Flower	White/purple flowers appear where leaves meet the stem and bloom July-October				

Dan Tenaglia, Missouriplants.com, Bugwood.org





James H. Miller & Ted Bodner, Southern Weed Science Society, Bugwood.org

Chris Evans, University of Illinois,

• • Slender Bush Clover

Lespedeza virginica

Quick ID:

1.	Flower	Purple/white flowers occur in dense clusters along the leaf axils.
2.	Leaves	Leaves similar to L. cuneata but with a stem longer than the individual <u>leaf also lacking</u> <u>bristle tip</u>

Hairy Lespedeza • •

Lespedeza hirta

Quick ID:

1.	Leaves	Leaves are broad and round, growing in groups of 3 along the stem
2.	Flower	Flowers in dense, spiky clusters



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Chris Evans, University of Illinois, Bugwood.org



Chris Evans, University of Illinois, Bugwood.org



Bruce Ackley, The Ohio State University, Bugwood.org



Kummerowia stipulacea Quick ID:						
1.	Leaves	Round, distinctly "clover like" leaves in groups of 3.				
2.	Form	Spreads out in branches, often has large, papery stiplues.				

Bruce Ackley, The Ohio State University, Bugwood.org