

# Austin's Invasive Species Management Plan

## Top 24 Priority Invasive Species

- |  |   |
|--|---|
| <input type="radio"/> Herbaceous                 | <input type="radio"/> Woody                         |
| <input type="radio"/> <b>Giant reed</b>          | <input type="radio"/> Tree of heaven                |
| <input type="radio"/> King Ranch Bluestem        | <input type="radio"/> Paper mulberry                |
| <input type="radio"/> Malta star-thistle         | <input type="radio"/> Chinese parasoltree           |
| <input type="radio"/> Bermudagrass               | <input type="radio"/> Glossy privet                 |
| <input type="radio"/> Japanese netvein hollyfern | <input type="radio"/> <b>Chinaberry tree</b>        |
| <input type="radio"/> Golden bamboo              | <input type="radio"/> Heavenly (sacred) bamboo      |
| <input type="radio"/> Bastard cabbage            | <input type="radio"/> Chinese pistache              |
| <input type="radio"/> Johnsongrass               | <input type="radio"/> Scarlet firethorn             |
| <input type="radio"/> <b>Vines</b>               | <input type="radio"/> <b>Salt cedar</b>             |
| <input type="radio"/> Japanese honeysuckle       | <input type="radio"/> <b>Chinese tallow tree</b>    |
| <input type="radio"/> Catclawvine                | <input type="radio"/> <b>Aquatic</b>                |
| <input type="radio"/> <b>Kudzu</b>               | <input type="radio"/> Elephant ears                 |
|  | <input type="radio"/> <b>Common water hyacinth*</b> |
|  | <input type="radio"/> <b>Hydrilla*</b>              |

TDA Noxious Plant List (§19.300) species

\*TPWD Invasive, Prohibited and Exotic Aquatic Plants List

# Top 24 Priority Invasive Species

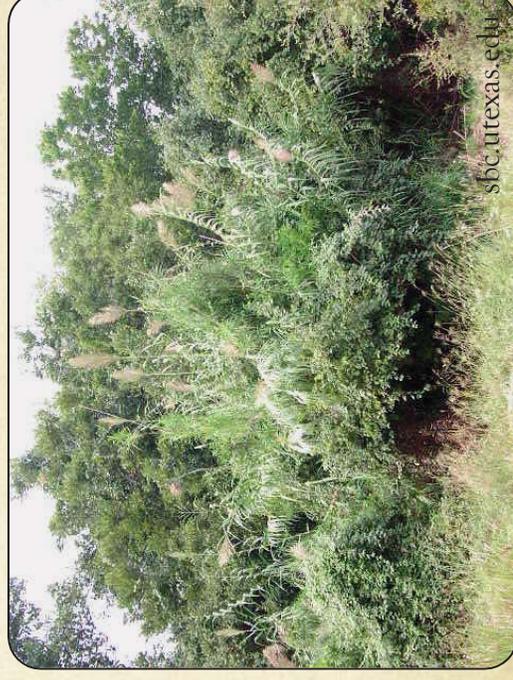
## Herbaceous

COMMON NAME	SCIENTIFIC NAME	USDA Code
Giant reed	<i>Arundo donax</i>	ARDO
King Ranch Bluestem	<i>Bothriochloa ischaemum</i>	BOISS
Malta star-thistle	<i>Centaurea melitensis</i>	CEME2
Bermudagrass	<i>Cynodon dactylon</i>	CYDA
Japanese netvein hollyfern	<i>Cyrtomium falcatum</i>	CYFA2
Golden bamboo	<i>Phyllostachys aurea</i>	PHAU8
Bastard cabbage	<i>Rapistrum rugosum</i>	RARU
Johnsongrass	<i>Sorghum halepense</i>	SOHA

# Giant reed

## *Arundo donax* [ARDO]

- Perennial grass—dies back with freeze
- \*Tall & Robust - to 20 feet (6 m)
- \*Alternate, hairless, droopy leaves
- \*Forms large colonies with rhizomes
- \*Leaves clasp the stem
- \*Flower plumes are 2 feet long & dense



# King Ranch bluestem

## *Bothriochloa ischaemum* var. *songarica* [BOISS]

- Perennial grass
- Grows 2 feet tall
- Forms dense clumps (cespitose)
- \*Stem nodes are purple, with short appressed hairs
- \*Leaf sheaths are rounded
- \*Leaf blades are flat
- \*Stems light green turning yellow
- \*Flowers feel like a soft brush



# Malta star-thistle

## *Centaurea melitensis* [CEMIE2]

- Winter annual
- Grows up to 3.3 feet (1 m) tall
- \*Spiny head
- \*Yellow flowers
- \*Alternate leaves forms wings on stem
- \*Stems are stiff and openly branched
- \*Spine at the bottom of lowest branch



# Bermudagrass

## *Cynodon dactylon* [CYDA]

- \*Perennial, low growing (creeping) grass
- \*Grows up to 16 inches (.4 m) tall
- \*Short flower spikes
- \*Flowers are unique - spikes on stem form angles
- Numerous cultivars



# Japanese netvein hollyfern

## *Cyrtomium falcatum* [CYFA2]

- \*Glossy, leathery leaves
- \*Jagged leaf margins
- \*Terminal leaflet at tip
- \*Reproduces by spores on underside of leaf (true fern)



# Golden bamboo

## *Phyllostachys aurea* [PHAU8]

- Perennial, dense infestations
- Grows up to 40 feet (12 m) tall
- \*Stems are woody w/ green nodes
- \*Stems are yellow-green (“golden”)
- \*Fan shaped leaves



Lady Bird Johnson

**Wildflower center**

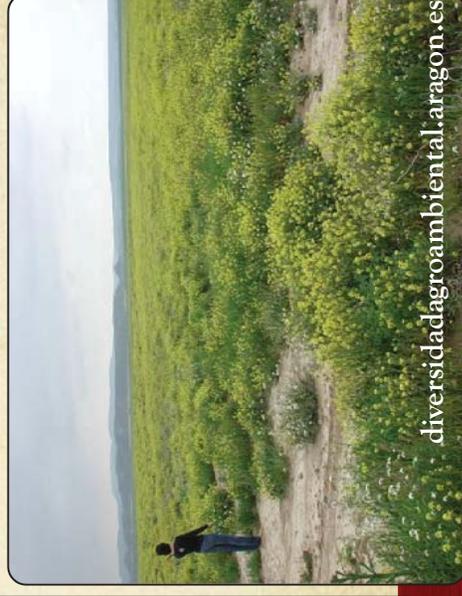
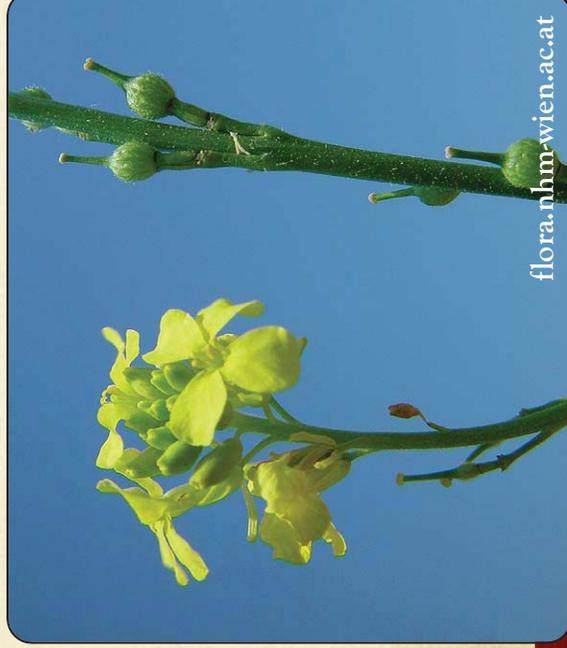
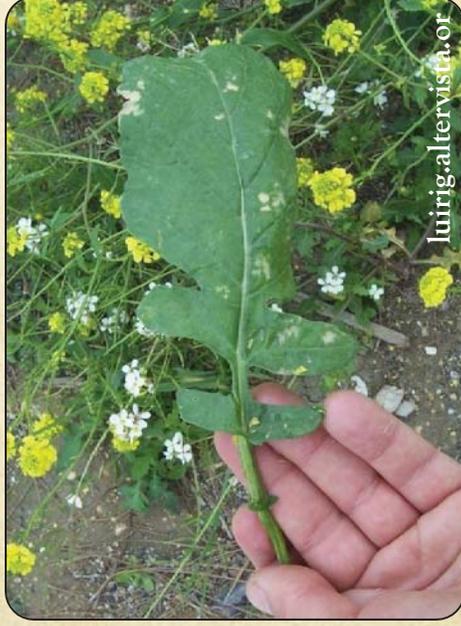
THE UNIVERSITY OF TEXAS AT AUSTIN



# Annual bastard cabbage

## *Rapistrum rugosum* [RARU]

- Annual herb
- Grows up to 5 feet (1.5 m) tall
- \*Large leaves are deep green, lobed & wrinkled
- \*Small showy yellow flowers
- \*Round fruits on long stalks
- \*Two segmented seed capsule

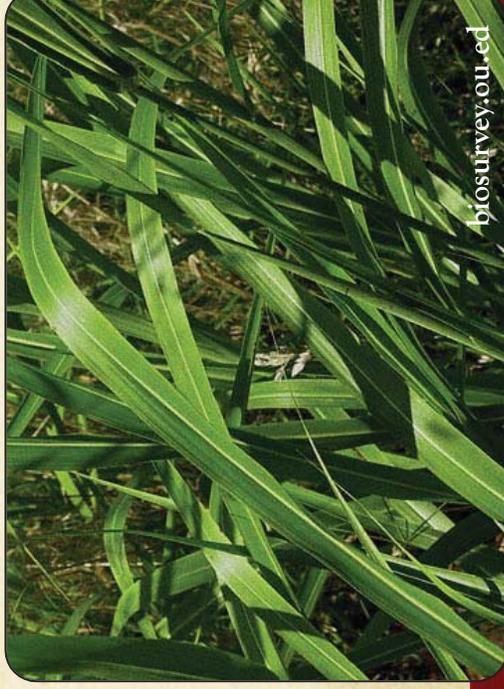


# Johnsongrass

## *Sorghum halepense* [SOHA]



- Perennial grass
- Grows up to 6.5 feet (2 m) tall
- 1 of 10 most noxious weeds
- \*Reddish to purplish-black panicles
- \*Folded leaves at base
- \*Leaves with sawtooth edges
- \*White vein runs down middle of leaf



# Top 24 Priority Invasive Species

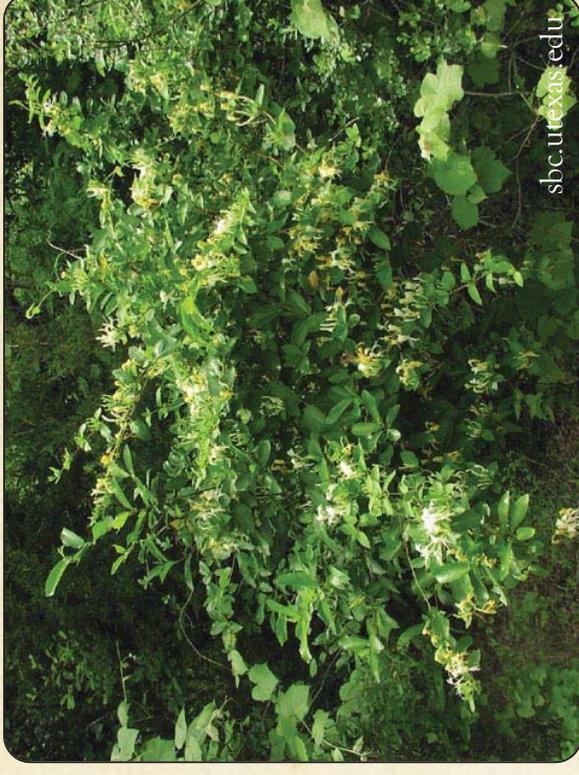
## Vines

COMMON NAME	SCIENTIFIC NAME	USDA Code
Japanese honeysuckle	<i>Lonicera japonica</i>	LOJA
Catclawvine	<i>Macfadyena unguis-cati</i>	MAUN3
Kudzu	<i>Pueraria montana var. lobata</i>	PUMOL

# Japanese honeysuckle

## *Lonicera japonica* [LOJA]

- Woody vine
- \*Sweetly scented white, then yellow tubular flowers
- \*Oval, opposite leaves
- \*Flowers bloom in pairs
- \*Small, red then black fruits



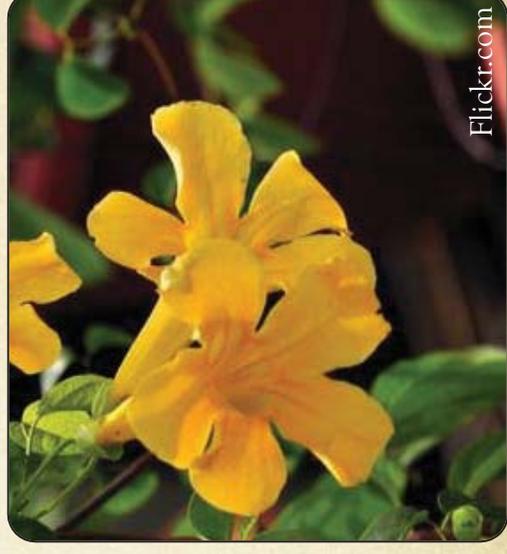
# Catclawvine

## *Macfadyena unguis-cati* [MAUN3]

- Stems to 6 cm in diameter
- \*Opposite, compound leaves
- \*3-forked tendrils are hooked & “clawlike”
- \*Flowers are yellow & trumpet shaped, with orange line inside throat
- \*Fruit is linear, flat capsule

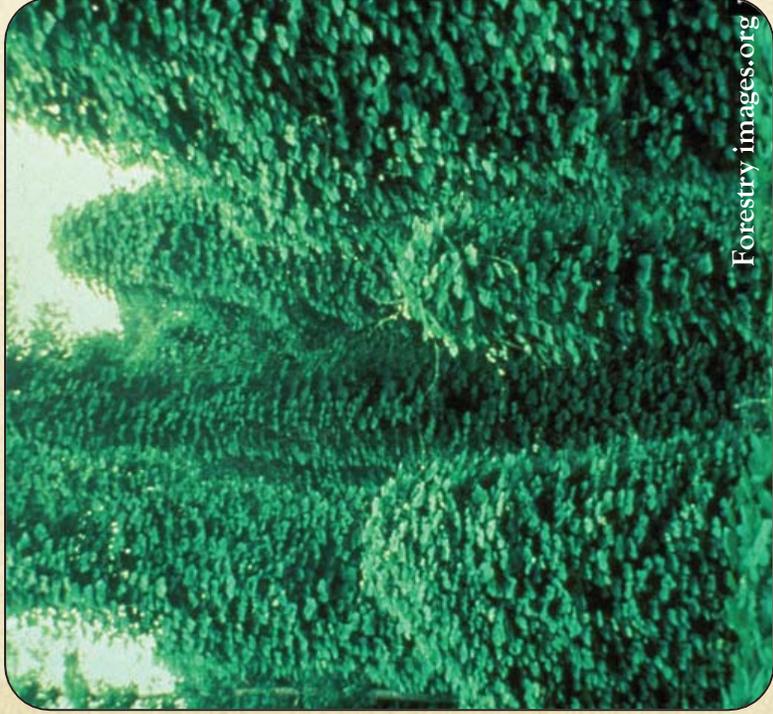


Phytovactor.fi



# Kudzu

## *Pueraria montana var. lobata* [PUMOL]



- Deciduous twining rope vine
- \*The alternate leaves are compound
- \*Hairy stems
- \*Fragrant purple flowers
- Grape like fragrance
- \*"Pea" pod fruits in fall



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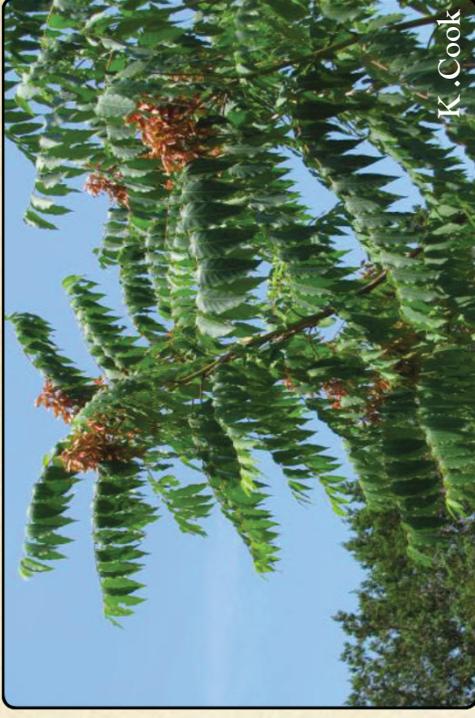
## Woody

COMMON NAME	SCIENTIFIC NAME	USDA Code
Tree of heaven	<i>Ailanthus altissima</i>	AIAL
Paper mulberry	<i>Broussonetia papyrifera</i>	BRPA4
Chinese parasoltree	<i>Firmiana simplex</i>	FISI2
Glossy privet	<i>Ligustrum lucidum</i>	LILU2
Chinaberry tree	<i>Melia azedarach</i>	MEAZ
Heavenly (sacred) bamboo	<i>Nandina domestica</i>	NADO
Chinese pistache	<i>Pistacia chinensis</i>	PICH4
Scarlet firethorn	<i>Pyracantha coccinea</i>	PYCO2
Salt cedar	<i>Tamarix ramosissima</i>	TARA
Chinese tallow tree	<i>Triadica sebifera</i>	TRSE6

# Tree of heaven

## *Ailanthus altissima* [AIAL]

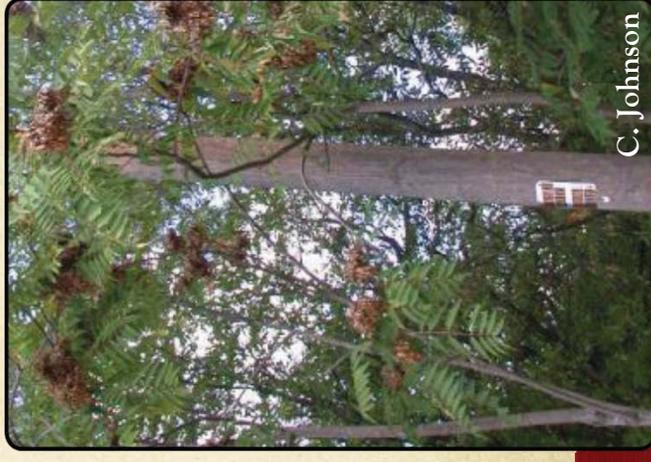
- Deciduous tree
- Grows up to 80 feet (24 m) +
- \* Large compound leaves, 1-4 feet long
- \* 11-25 alternate leaflets
- \* Glandular teeth near leaflet base
- \* Small yellow-green flowers in spring
- Numerous papery samaras
- \* Gray bark and smooth stems



K. Cook



P. Muska



C. Johnson

# Paper mulberry

## *Broussonetia papyrifera* [BRPA4]

- Deciduous large shrub or tree
- Grows up to 50 feet (15 m) tall
- \*Rough and fuzzy leaves, velvety underneath
- \*Fruit and seeds from July to August



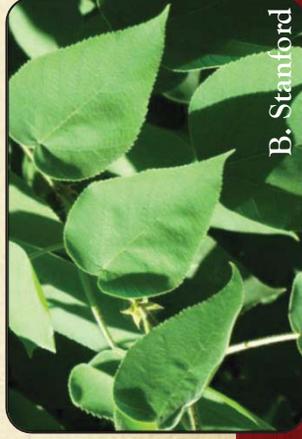
M. Collee



B. Stanford



C. Johnson



B. Stanford

# Chinese parasol tree

## *Firmiana simplex* [FISI2]

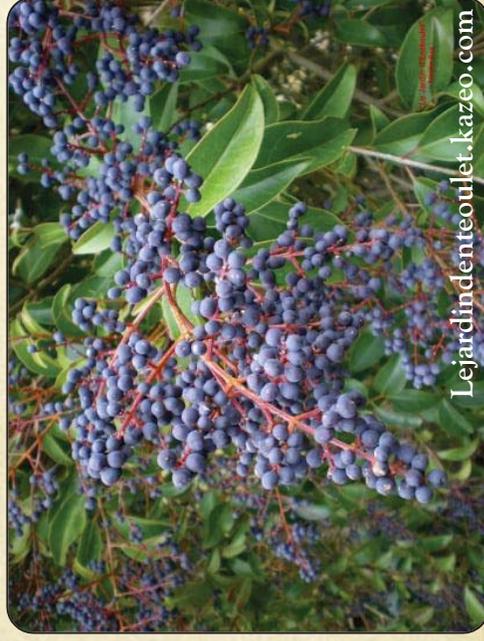
- Deciduous tree – to 50 feet tall
- Green - gray striped bark with warts
- Large 3-5-lobed leaves
- Darker green leaves w/ lighter green palmate veins
- Unique fruit – 4-5 “finger” follicles



# Glossy privet

## *Ligustrum lucidum* [LILLU2]

- Evergreen shrub
- Grows up to 15 feet (4.6 m) tall
- \*Opposite, leathery leaves
- \*Tiny white flower plumes
- \*Dark blue-black berries in fall



# Chinaberry tree

## *Melia azadirach* [MEAZ]

- Deciduous tree
- Grows up to 50 feet tall
- \*Leaves are 2x pinnately compound
- \*Lavender flower clusters - fragrant
- \*Milky (not clear!) yellow berries
- \*3-8 seeds in fruit



S. VanLoh



K. Clary



# Heavenly (sacred) bamboo

## *Nandina domestica* [NADO]

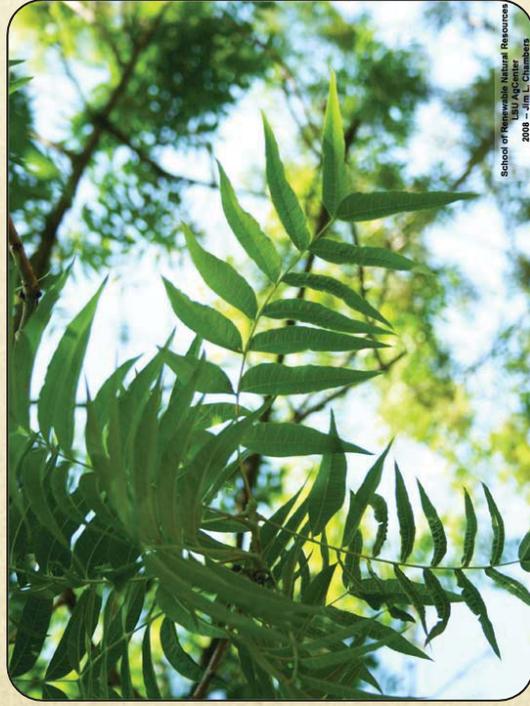
- Evergreen shrub
- Grows up to 8 feet (2.5 m) tall
- \*Bipinnately compound leaves
- \*Pink to white or cream flowers
- \*Bright red berries
- \*Bright yellow wood
- Resembles bamboo



# Chinese pistache

## *Pistacia chinensis* [PICH4]

- Leaves green in summer, red in fall
- Grows up to 40 feet (12 m) tall
- \*Leaves 1x pinnately compound with 10 paired leaflets
- \*Paired leaflets at tip of leaf
- \*Red seed pods turn blue in fall



Source of Name: <http://www.aggcenter.org>  
2008 - Jim L. Chambers



[houzz.com](http://houzz.com)

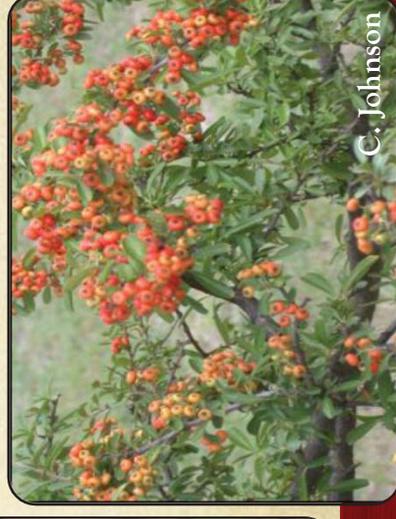
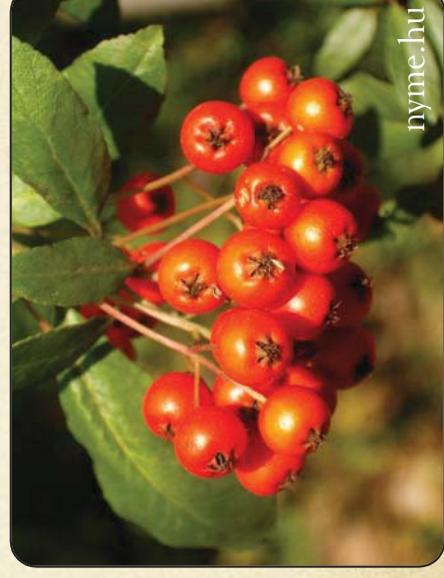


[home.comcast.net](http://home.comcast.net)

# Scarlet firethorn

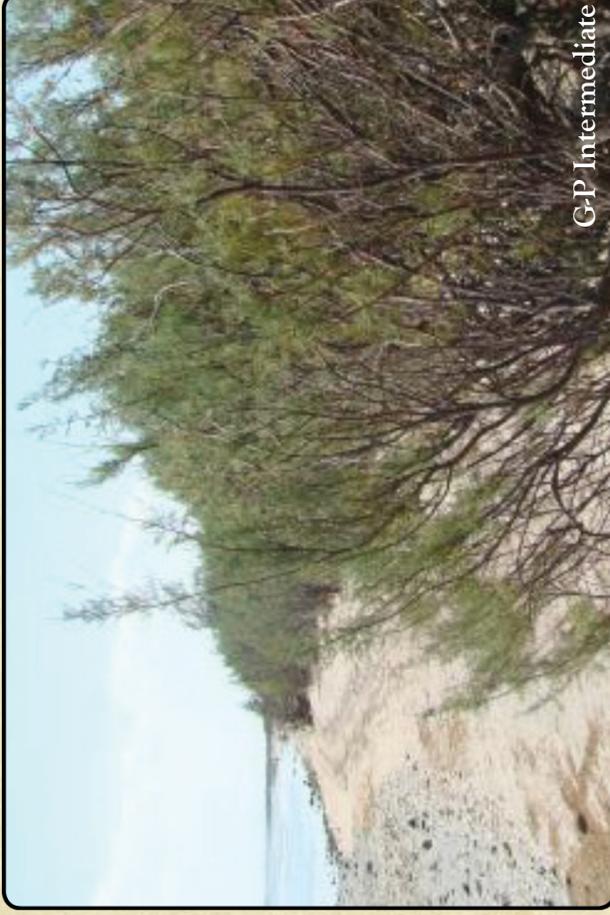
## *Pyracantha coccinea* [PYCO2]

- Evergreen shrub
- Grows up to 10 feet (6 m) tall
- \*Dark glossy leaves & sharp thorns
- \*Bright colored yellow to red berries in fall
- \*White spring flower clusters, 2 inches long



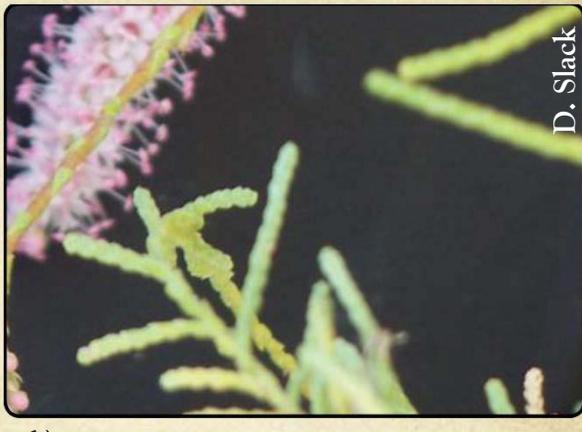
# Salt cedar

## *Tamarix ramosissima* [TARA]

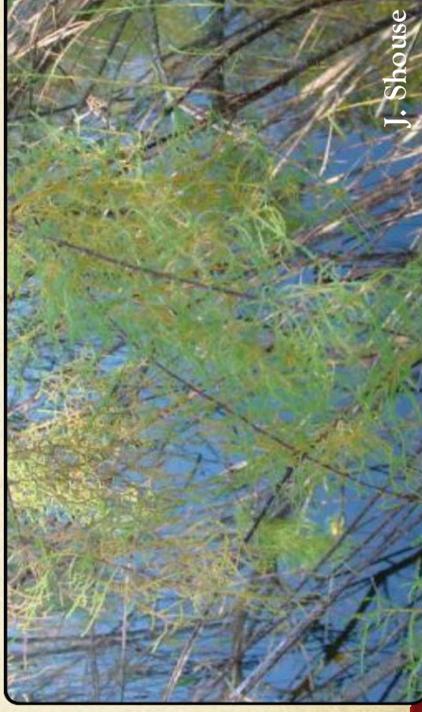


G-P Intermediate

- Deciduous shrub or small tree
- Grows up to 20 feet (6 m) tall
- \*Alternate scale-like leaves
- \*Pale pink to white flowers
- \*Flowers small spike-like racemes
- Fruit is a capsule



D. Slack



J. Shouse

# Chinese tallow tree

## *Triadica sebifera* [TRSE6]

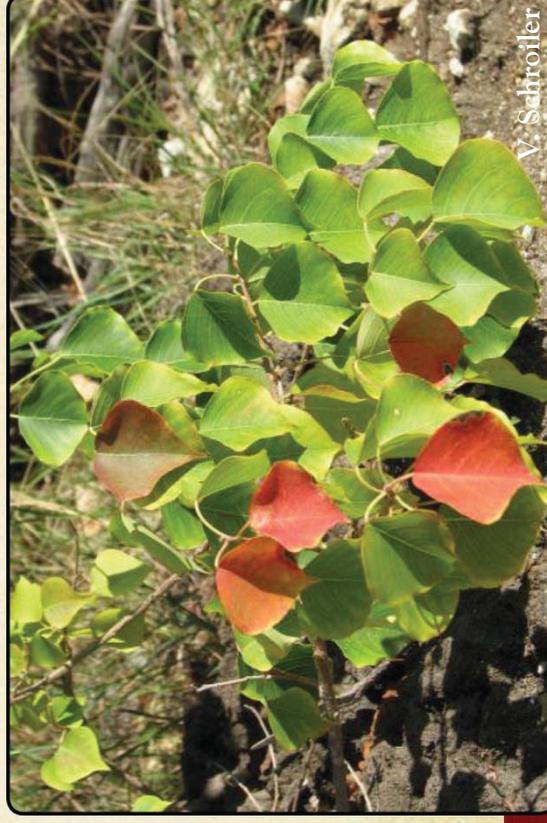
- Deciduous tree
- Grows up to 60 feet (18 m) tall
- \*Alternating nearly heart-shaped leaves
- \*Leaves have orange to red fall color change
- \*Flowers are 8 inch dangling spikes with yellow-green sepals & no petals
- \*Fruits are 3-lobed clusters that split to form “popcorn-like” seeds



D. Waitt



P. Singleton



V. Schrotter

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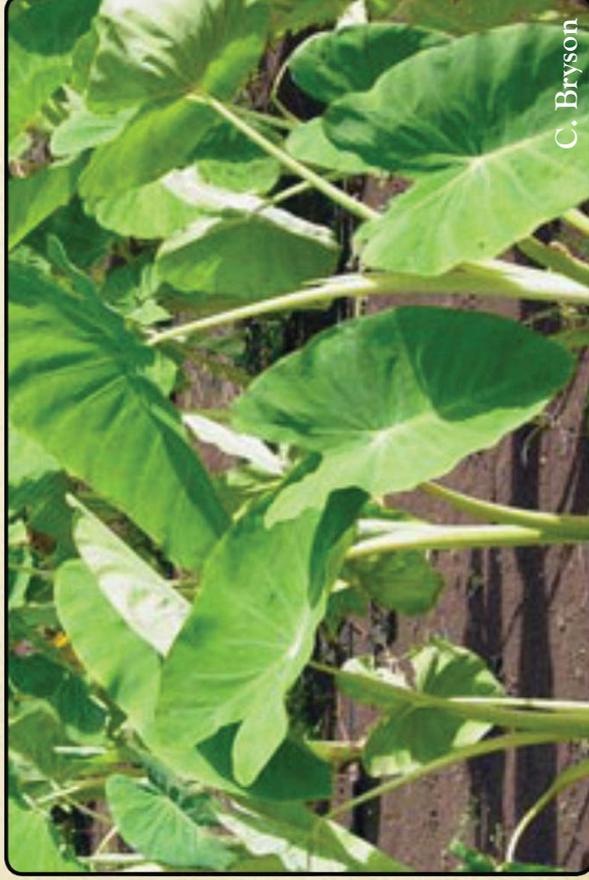
## Aquatic

COMMON NAME	SCIENTIFIC NAME	USDA Code
Elephant ear	<i>Colocasia esculenta</i>	COES
Common water hyacinth	<i>Eichhornia crassipes</i>	EICR
Hydrilla	<i>Hydrilla verticillata</i>	HYVE3

# Elephant ear

## *Colocasia esculenta* [COES]

- Perennial 4 feet (1.5 m) tall
- Dark green to purple ornamental leaves
- \*Leaves shaped like fat arrowhead or elephant's ear
- \*Tiny flowers on fleshy stalk



# Common water hyacinth

## *Eichhornia crassipes* [EICR]

- Floating aquatic
- Grows up to 3 feet (1 m) tall
- Dark and feathery roots
- \*Bulbous spongy leafstalk (petiole)
- \*Thick shiny bright green leaves, 1-6 inches wide
- \*Flowers grow in groups of 8-15 forming up to a 16 inch spike
- \*6-petaled flowers are lavender with a central yellow oval-shaped spot



N. Hirsch



C. Jones



M. Murphrey

# Hydrilla

## *Hydrilla verticillata* [HYVE3]

- Submerged aquatic – aquarium plant
- \*Male flowers brown; female flowers white
- \*Toothed leaf margins & reddish veins
- \*Plant top resembles bottlebrush



D. Ringer



Jon Rodgers



J. Ringer