



# Tennessee's Native Plant Alternatives to Exotic Invasives

## *A Garden & Landscape Guide*

This brochure lists the exotic plants to avoid and the attractive native alternatives that will work just as well. The list features those invasive plants often considered for home gardens and landscaping, their state ranking as a pest, and their qualities typically considered ornamental or useful. Adjacent to each is one or more suggested native plant alternatives along with their desirable aesthetic or practical characteristics as a suitable replacement, the availability of cultivars, and their wildlife value. With this knowledge homeowners and professionals can make fully informed decisions for a beautiful garden in their backyards and a healthy natural heritage in the shared Tennessee landscape beyond.

### **Discover Tennessee's Natural Beauty**

To learn more about our state's natural beauty, visit these websites:

Tennessee Native Plant Society  
[www.tnps.org](http://www.tnps.org)

Tennessee State Parks  
<http://tn.gov/environment/parks/>

TDEC Resource Management Division  
<http://tn.gov/environment/na/>

Other good sources to explore the natural beauty of Tennessee include municipal parks, nature centers, botanic gardens and arboretums.

### **Native Plant Sources**

Please support local nurseries carrying nursery-propagated native plants—stock supplied through seed, division or tissue culture of existing nursery plants and not collected from the wild. A partial list of state nurseries selling native plants may be found on TN-EPPC's website [www.tneppc.org](http://www.tneppc.org)

Beautiful flowers, interesting foliage, ample fruit, tough constitution, and fast growth are plant qualities that appeal to gardeners and landscapers. When these desirable horticultural characteristics occur in plants that are not native to Tennessee or the eastern U.S., these exotics could escape from maintained landscapes, invade natural areas, and damage native plant communities in the state. Non-native plants that readily spread in natural areas, either vegetatively or via seed, pose a significant threat to the health and welfare of Tennessee's rich biological diversity. These plants are considered exotic invasive pests.

### **The Problem**

Plants introduced to the U.S. from other areas of the world are an important part of gardening and landscaping. Most of these plants are well-behaved and rarely stray beyond the garden wall. Only about one percent of these non-natives readily escape into the wild and become invasive in natural areas. Invasive plants exhibit certain traits.

- Adaptation to local climate
- Rapid growth
- Mature quickly to flower and set seed
- Produce copious amounts of seed
- Effective seed dispersal
- Rampant vegetative spread
- No major pest or disease problems

These traits can give exotic invasive plants undue advantage in wild habitats like forests, wetlands, cedar glades, and grasslands. Exotic species can overwhelm native plants depriving them of nutrients, water, light, and space and may totally displace native species, replacing a diverse ecosystem with a near sterile monoculture and resulting in the reduction of biodiversity, loss of endangered species and their habitats, loss of habitat and food sources for wildlife, and disruption of native plant-animal associations. Exotic invasive plants threaten the health and stability of Tennessee's beautiful natural heritage and across the United States cost an estimated \$35 billion annually in control efforts and crop losses. (Pimentel, et al., 2004)

*Continued inside*



## Tennessee Exotic Pest Plant Council

The exotic invasive plants in this brochure came from a larger list compiled by the Tennessee Exotic Pest Plant Council, a group of scientists and public land managers who monitor plant communities in the state. TN-EPPC ranks each plant according to its degree of invasiveness as follows:

- **Rank 1 Severe Threat**

Spreads easily into native plant communities and displaces native vegetation

- **Rank 2 Significant Threat**

Not presently considered to spread as easily into native plant communities as Rank 1 species

- **Rank 3 Lesser Threat**

Spreads in or near disturbed areas and are not presently considered a threat to native plant communities

- **Alert:** Invasiveness in Tennessee undetermined; known invasive in similar habitats, severe threat in adjacent states, or substantial management difficulty

TN-EPPC's website [www.tneppc.org](http://www.tneppc.org) features the complete list of invasive pest plants in the state, control recommendations for certain species, and detailed native plant landscaping information tailored to East, Middle and West Tennessee. Another good website for invasive plant information and control recommendations is sponsored by Plant Conservation Alliance at [www.nps.gov/plants/alien/fact.htm](http://www.nps.gov/plants/alien/fact.htm).

Some exotic invasives are agricultural pests—forage grasses and noxious weeds. Some were brought in for erosion control—kudzu (*Pueraria montana*) and crown vetch (*Coronilla varia*)—or medicinal/culinary uses—common mullein (*Verbascum thapsus*), coltsfoot (*Tussilago farfara*), mugwort (*Artemisia vulgaris*), spearmint and peppermint (*Mentha spicata*, *M. x piperita*). Some hitched rides on boats or got dumped out of home aquariums—hydrilla, water thyme (*Hydrilla verticillata*), Parrot's feather, water milfoil (*Myriophyllum aquaticum*) and Brazilian water-weed (*Egeria densa*). Many are horticultural. Unfortunately some of the invasive traits listed above can increase a plant's horticultural desirability.

The worldwide search for “new” and exciting landscape plants has played a role in the dramatic shift of plant species' distributions around the globe, and the introduction of potentially invasive species is a real danger. Research indicates that 85% of the non-native invasive woody plants in North America were originally brought in as ornamental or landscape plants. (Reichard, 1999) Gardeners, nursery owners, landscapers, and design professionals should be aware of this potential and understand the consequences.

## The Solution

Those who look beyond the few troublesome exotic plants will find an incredible selection of homegrown plants. There is at least one good native plant substitute for each of the horticultural exotic pest plants. Often there is a related native counterpart with similar desirable characteristics. Native plants evolved through geologic time in this geographic location, developing a strong connection to the land, each other and the wildlife. Landscaping with native plants taps into that connection providing a beautiful garden biologically adapted to Tennessee's climate, soils, wildlife, and plant communities. Native plants aren't limited to “wild” or “woodland” gardens and can just as easily adorn a mailbox, blend with traditional garden favorites in perennial borders, or anchor a commercial landscape.

Choosing native plants is just one of the simple steps Tennesseans can take to slow the spread of exotic invasive plants.

- Keep a current list of the exotic pest plants in Tennessee and surrounding states handy as a research reference for future plant purchases. (see: [www.se-eppc.org](http://www.se-eppc.org)—the lists are updated as warranted)
- Share this information with gardening friends and colleagues.
- Do not collect plants from the wild and avoid altering the native composition of your landscape.
- Know your plants; to be safe, if you don't know it, don't grow it.
- Consider removing exotic invasives from your landscape. On the TN-EPPC website, [www.tneppc.org](http://www.tneppc.org), click "Invasive Plants" for information on controlling some of the state's worst pest plants.
- Investigate the diverse, lovely and useful native plants readily available commercially for home gardens and landscapes.
- Consider replacing exotic invasives with plants native to your local region.
- Encourage your local nursery to avoid the worst invasives and carry nursery-propagated native plant alternatives.
- Assist invasive species removal projects in your area.

## Exotic Pest Plant

## Native Plant Alternative(s)

	SCIENTIFIC NAME	COMMON NAME (ORIGIN)	SCIENTIFIC NAME	COMMON NAME	CULTIVAR	WILDLIFE VALUE
<b>TREES</b>						
1	<i>Ailanthus altissima</i>	<b>Tree-of-heaven</b> (China): fast growth, compound foliage, showy seed clusters, poor soil	<i>Juglans nigra</i> <i>Rhus</i> spp.  <i>Ptelea trifoliata</i> <i>Fraxinus americana</i> & <i>F. quadrangulata</i>	<b>Black Walnut</b> : compound foliage, nuts, poor soil <b>Sumac</b> : fast growth, compound foliage, fall color, showy fruit clusters, poor soil <b>Hoptree, Wafer Ash</b> : compound foliage, seed clusters <b>White Ash &amp; Blue Ash</b> : compound foliage, seed clusters, fall color, seedless white ash cultivar 'Autumn Purple'	yes yes yes yes	mammals, birds, butterflies/moths bees, birds, butterflies birds, butterflies birds, butterflies
1	<i>Albizia julibrissin</i>	<b>Mimosa</b> (Asia, Mid East): fast growth, compound foliage, fragrant pink flower clusters, umbrella shape	<i>Robinia hispida</i>  <i>Cercis canadensis</i> <i>Cornus florida</i>  <i>Chionanthus virginicus</i>	<b>Rose-acacia Locust</b> : compound foliage, shrubby habit, pink flower clusters, poor soil <b>Redbud</b> : fast growth, showy pink flowers, umbrella shape <b>'Appalachian Spring' - Flowering Dogwood</b> : showy flowers, fruit, fall color, form, anthracnose resistant <b>Fringe Tree</b> : showy fragrant flowers, fruit (female)	yes yes yes	bees, butterflies bees, butterflies birds, bees, butterflies birds
2	<i>Broussonetia papyrifera</i>	<b>Paper Mulberry</b> (Asia): poor soil, bark, fast growth, fruit (female)	<i>Morus rubra</i> <i>Ostrya virginiana</i> <i>Nyssa sylvatica</i> <i>Sassafras albidum</i>	<b>Red Mulberry</b> : edible fruit (female) <b>Hophornbeam</b> : bark, strong branching, seed clusters <b>Blackgum</b> : fall color, fruit (female) <b>Sassafras</b> : poor soil, fall color, fruit (female)		birds, butterflies birds birds birds
A	<i>Firmiana simplex</i>	<b>Chinese Parasoltree</b> (Asia): large maplelike leaves, smooth bark, long flower panicles	<i>Acer pensylvanicum</i>  <i>Catalpa speciosa</i>	<b>Striped Maple</b> : large maplelike leaves, smooth striped bark, flower/seed panicles <b>Cigar Tree, Northern Catalpa</b> : showy flowers, seedpods, fast growth, adaptable sites	yes	bees butterflies
A	<i>Koeleruteria paniculata</i>	<b>Golden Raintree</b> (Asia): showy flower clusters, compound leaves, soil adaptable	<i>Cladrastis kentukea</i> <i>Robinia pseudoacacia</i>	<b>Yellowwood</b> : compound leaves, showy fragrant flower clusters <b>Black Locust</b> : fast growth, compound foliage, showy fragrant flower clusters, poor soil	yes yes	bees bees, butterflies
2	<i>Melia azedarach</i>	<b>Chinaberry</b> (China): compound foliage, hard fruit	<i>Aralia spinosa</i>	<b>Devils Walkingstick</b> : compound foliage, showy flowers & fruit		bees, birds, butterflies
1	<i>Paulownia tomentosa</i>	<b>Princess Tree</b> (China): showy flowers, fast growth	<i>Aesculus pavia</i> <i>Magnolia virginiana</i>	<b>Red Buckeye</b> : showy flowers <b>Sweetbay Magnolia</b> : showy fragrant flowers, fast growth	yes yes	hummingbirds, mammals
2	<i>Populus alba</i>	<b>White Poplar</b> (Eurasia): lobed leaves with white undersides	<i>Tilia americana</i> var. <i>heterophylla</i> <i>Liquidambar styraciflua</i> <i>Platanus occidentalis</i>	<b>White Basswood</b> : white leaf undersides <b>Sweetgum</b> : lobed leaves, fall color <b>Sycamore</b> : lobed leaves, showy exfoliating bark	yes yes	bees, butterflies birds, butterflies birds, mammals
A	<i>Pyrus calleryana</i>	<b>Bradford Pear, Callery Pear</b> (China): white flowers, fall color, upright form	<i>Amelanchier arborea</i> & <i>A. laevis</i>  <i>Crataegus</i> spp. <i>Prunus mexicana</i> <i>Prunus angustifolia</i> <i>Viburnum rufidulum</i> <i>Cercis canadensis</i>	<b>Downy &amp; Allegheny Serviceberry</b> : white flowers, edible fruit, fall color, cultivar 'Snowcloud' has upright form <b>Hawthorn</b> : white flowers, fruit <b>Mexican Plum</b> : white fragrant flowers, fruit <b>Chickasaw Plum</b> : shrub, white flowers, fruit <b>Rusty Blackhaw</b> : white flowers, fruit, fall color <b>'Royal White' - Redbud</b> : white flowers, seedpods, fall color	yes yes yes	bees, birds, butterflies, mammals bees, birds, butterflies bees, birds, mammals bees, birds, mammals bees, butterflies
A	<i>Triadica sebifera</i> ( <i>Sapium sebiferum</i> )	<b>Chinese Tallowtree</b> : summer flowers, fall color, white fruit	<i>Oxydendrum arboreum</i>	<b>Sourwood</b> : summer flowers, fall color, seedpods		bees, birds
<b>SHRUBS</b>						
2	<i>Berberis thunbergii</i>	<b>Japanese Barberry</b> : foliage color, winter fruit, dense habit	<i>Physocarpus opulifolius</i>  <i>Fothergilla gardenii</i> <i>Ilex verticillata</i> <i>Viburnum obovatum</i>	<b>'Diablo' - Ninebark</b> : showy flowers, fruit, exfoliating bark, maroon-tinged foliage <b>Dwarf Witch Alder</b> : showy fragrant flowers, fall color, compact <b>'Red Sprite' - Winterberry</b> : winter fruit, compact habit <b>'Densa' - Small-leaf Arrowwood</b> : evergreen, spring flowers, dense habit	yes yes yes yes	bees, birds, butterflies birds, mammals bees, birds bees, birds
A	<i>Buddleja davidii</i>	<b>Butterfly Bush</b> (Asia): summer flower spikes, attracts butterflies	<i>Cephalanthus occidentalis</i> <i>Ceanothus americanus</i> <i>Aesculus parviflora</i> <i>Clethra alnifolia</i> <i>Amorpha fruticosa</i>	<b>Buttonbush</b> : summer flower clusters <b>New Jersey Tea</b> : late spring flower clusters, seedpods <b>Bottlebrush Buckeye</b> : summer flower spikes <b>Summersweet</b> : fragrant summer white/pink flower, bark <b>Indigo Bush</b> : summer purple flower spikes, poor soil	yes yes yes yes	bees, butterflies bees, butterflies bees, butterflies bees, butterflies bees, birds, butterflies
A	<i>Elaeagnus angustifolia</i>	<b>Russian Olive</b> (Eurasia): silvery leaves, yellow fruit, poor soil, fragrant flowers	<i>Croton alabamensis</i> <i>Lindera benzoin</i>	<b>Alabama Croton</b> : silvery fragrant leaves, poor soil, fall color <b>Spicebush</b> : red fruit, fall color, early spring flowers, aromatic twigs	yes	bees, birds, butterflies
1	<i>Elaeagnus umbellata</i>	<b>Autumn Olive/Thorny Olive</b> (Asia): silvery leaves, red fruit, poor soil, fragrant flowers	<i>Hypericum frondosum</i> & <i>H. prolificum</i>	<b>Golden &amp; Shrubby St. John's-wort</b> : showy yellow flowers, exfoliating bark, site adaptable	yes	birds
2	<i>E. pungens</i>					
3	<i>Euonymus alata</i>	<b>Burning Bush</b> (Asia): fall color, fruit	<i>Euonymus americanus</i> <i>Itea virginica</i> <i>Vaccinium corymbosum</i> <i>Rhus aromatica</i> <i>Rhus copallinum(a)</i> var. <i>latifolia</i>	<b>Hearts-a-bustin'</b> : fruit, fall color, shade-loving <b>Virginia Sweetspire</b> : showy fragrant flowers, fall color <b>Highbush Blueberry</b> : showy flowers, edible fruit, fall color <b>Fragrant Sumac</b> : summer red fruit, fall color, dry/poor soil <b>'Morton' - Prairie Flame Shining or Winged Sumac</b> : showy flowers, fall color, compact habit, glossy leaves, fruitless, dry/poor soil	yes yes yes yes yes	bees, birds bees bees, birds bees, birds bees
3	<i>Hibiscus syriacus</i>	<b>Rose-of-sharon</b> (China): large mallow flowers	<i>Hibiscus moscheutos</i> & <i>H. laevis</i>	<b>Swamp &amp; Halberd-leaved Rose-mallow</b> : large summer flowers, tall/wide herb	yes	butterflies
A	<i>Ilex crenata</i>	<b>Japanese Holly</b> : evergreen, dense form, small leaves, black fruit	<i>Ilex vomitoria</i> <i>Hypericum densiflorum</i>	<b>Yaupon Holly</b> : evergreen, small leaves, dwarf cultivars, red fruit <b>Dense St. John's-wort</b> : small leaves, dense form, yellow flowers	yes yes	bees, birds bees, birds
A	<i>Ligustrum japonicum</i>	<b>Japanese Privet</b> : evergreen, hedges, black fruit, fragrant flowers, shiny leaves	<i>Ilex glabra</i> <i>Kalmia latifolia</i>	<b>Inkberry</b> : evergreen, shiny leaves, hedges, black fruit <b>Mountain Laurel</b> : evergreen, shiny leaves, showy flowers	yes yes	bees, birds bees, butterflies
1	<i>Ligustrum sinense</i>	<b>Chinese Privet</b> : evergreen, hedges, black fruit, fragrant flowers	<i>Osmanthus americanus</i>	<b>Devilwood</b> : evergreen, shiny foliage, fragrant flowers, dark blue winter fruit		birds, butterflies
1	<i>Ligustrum vulgare</i>	<b>Common Privet</b> (Europe): hedges, black fruit, fragrant flowers, shiny leaves	<i>Viburnum bracteatum</i> <i>Morella (Myrica) cerifera</i> <i>Viburnum nudum</i>	<b>'Emerald Luster' - Limerock Arrowwood</b> : showy flowers, blue-black fruit <b>Southern Waxmyrtle</b> : evergreen, shiny leaves, fragrant, waxy gray fruit <b>Possumhaw Viburnum</b> : shiny leaves, showy flowers, black fruit	yes yes yes	bees, birds, butterflies bees, birds bees, birds, butterflies
A	<i>Ligustrum obtusifolium</i>	<b>Border Privet</b> (Japan): hedges				
A	<i>Lonicera fragrantissima</i> <i>Lonicera maackii</i>	<b>January Jasmine</b> (China): white/yellow <b>Amur Bush Honeysuckle</b> (Asia): tough constitution	<i>Hamamelis virginiana</i> <i>Hamamelis vernalis</i> <i>Diervilla sessilifolia</i>	<b>Witch Hazel</b> : yellow fragrant flowers in fall <b>Ozark Witch Hazel</b> : orange fragrant flowers early spring <b>Southern Bush Honeysuckle</b> : tough constitution, yellow flowers		birds birds bees, butterflies
A	<i>Lonicera morrowii</i>	<b>Morrow's Bush Honeysuckle</b> (Japan): <b>Twinsisters</b> (Russia): white/pink flowers, red fruit	<i>Photinia pyrifolia</i> ( <i>Aronia arbutifolia</i> ) & <i>P. (A.) melanocarpa</i>	<b>Red &amp; Black Chokeberry</b> : fragrant flowers, red or black winter fruit, fall color	yes	bees, birds
A	<i>Lonicera tatarica</i>					yes

## Exotic Pest Plant

## Native Plant Alternative(s)

SCIENTIFIC NAME	COMMON NAME (ORIGIN)	SCIENTIFIC NAME	COMMON NAME	CULTIVAR	WILDLIFE VALUE
<b>SHRUBS continued</b>					
<b>A</b> <i>Lonicera x bella</i>	<b>Bell's Bush Honeysuckle:</b> (hybrid of <i>Lonicera morrowii</i> & <i>Lonicera tatarica</i> )	<i>Ilex verticillata</i> <i>Callicarpa americana</i> <i>Viburnum acerifolium</i> <i>Rhododendron calendulaceum</i> & <i>R. arborescens</i>	<b>Winterberry:</b> red winter fruit <b>American Beautyberry:</b> pink flowers, bright purple fruit <b>Mapleleaf Viburnum:</b> white flowers, fruit, fall color <b>Flame &amp; Sweet Azaleas:</b> showy fragrant flowers, fall color	yes yes yes yes	bees, birds bees, birds bees, birds, butterflies butterflies
<b>A</b> <i>Mahonia bealei</i>	<b>Leatherleaf Mahonia</b> (China): evergreen, blue fruit, form, shade	<i>Cornus amomum</i> <i>Callicarpa americana</i> <i>Ilex opaca</i>	<b>Silky Dogwood:</b> showy flowers, blue fruit, fall color <b>American Beautyberry:</b> bright purple fruit <b>American Holly:</b> tree, evergreen, red fruit (female)	yes yes	bees, birds bees, birds bees, birds, butterflies
<b>A</b> <i>Nandina domestica</i>	<b>Sacred Bamboo, Heavenly Bamboo</b> (Asia): evergreen, colorful foliage, fruit, tough constitution	<i>Leucothoe axillaris</i> & <i>L. fontanesiana</i> <i>Xanthorhiza simplicissima</i> <i>Agarista populifolia</i>	<b>Coastal Leucothoe &amp; Doghobble:</b> showy flowers, evergreen, colorful foliage <b>Yellowroot:</b> foliage texture, spring flowers, fall color <b>'Leprechaun' - Florida Hobblebush:</b> evergreen, colorful foliage, fragrant flowers, compact habit	yes yes	birds bees, butterflies
<b>1</b> <i>Rosa multiflora</i>	<b>Multiflora Rose</b> (Asia): showy flowers, hips, living fence	<i>Rosa palustris</i> <i>Rosa setigera</i> <i>Rosa carolina</i>	<b>Swamp Rose:</b> showy flowers, hips, living fence <b>Prairie Rose:</b> showy flowers, hips, spreader <b>Carolina Rose:</b> showy flowers, hips, smaller shrub	yes	bees, birds bees, birds bees, birds
<b>3</b> <i>Rubus phoenicolasius</i>	<b>Wineberry</b> (Asia): edible fruit	<i>Rubus</i> spp. <i>Rubus odoratus</i>	<b>Blackberries:</b> showy flowers, edible fruit <b>Purple Flowering Raspberry:</b> showy flowers	yes	bees, birds bees, birds
<b>2</b> <i>Spiraea japonica</i>	<b>Japanese Spiraea:</b> showy flowers, foliage, mounded form	<i>Physocarpus opulifolius</i> <i>Viburnum dentatum</i> <i>Spiraea tomentosa</i> <i>Neviusia alabamensis</i> <i>Rhododendron canescens</i> & <i>R. periclymenoides</i>	<b>Ninebark:</b> showy flowers, foliage, exfoliating bark <b>Arrowwood:</b> showy flowers, fruit, fall color <b>Steeplebush, Hardhack:</b> showy pink flowers <b>Alabama Snowwreath:</b> showy white flowers, mounded form <b>Piedmont &amp; Pinxter Azaleas:</b> showy fragrant flowers, fall color	yes yes yes yes	bees, birds, butterflies bees, birds, butterflies butterflies bees, butterflies
<b>VINES</b>					
<b>A</b> <i>Ampelopsis brevipedunculata</i>	<b>Amur Peppervine, Porcelainberry</b> (Asia): blue fruit	<i>Passiflora lutea</i> <i>Menispermum canadense</i> <i>Parthenocissus quinquefolia</i> <i>Vitis</i> spp. <i>Ampelopsis cordata</i>	<b>Yellow Passion-flower:</b> flowers, blue fruit <b>Mooneed:</b> blue-black fruit <b>Virginia Creeper:</b> blue-black fruit, fall color <b>Grape:</b> edible blue-black fruit, fragrant flowers <b>Heartleaf Peppervine:</b> blue fruit	yes yes	birds, butterflies birds, butterflies birds birds, mammals birds
<b>3</b> <i>Cardiospermum halicacabum</i>	<b>Love-in-a-puff, Balloonvine</b> (Central/S. America): compound foliage, puffy seedpod, unique seed	<i>Campsis radicans</i> <i>Staphylea trifolia</i> <i>Aristolochia</i> spp. <i>Clematis viorna</i>	<b>Trumpet Creeper:</b> compound foliage, showy flowers <b>Bladdernut:</b> shrub, puffy seedpods, showy flowers, bark <b>Pipevine:</b> unique flower <b>Leatherflower:</b> showy purple flowers, fluffy seedheads	yes	hummingbirds butterflies butterflies hummingbirds
<b>1</b> <i>Celastrus orbiculatus</i>	<b>Asian Bittersweet:</b> showy fruit capsules	<i>Celastrus scandens</i> <i>Cocculus carolinus</i>	<b>American Bittersweet:</b> showy fruit capsules, poor soil <b>Carolina Snailseed:</b> quantity of red fruit, short vine		birds birds, mammals
<b>3</b> <i>Clematis terniflora</i>	<b>Sweet Autumn Clematis</b> (Japan): showy flowers, fragrant	<i>Clematis virginiana</i>	<b>Virgin's Bower:</b> showy flowers, fragrant		bees
<b>3</b> <i>Euonymus fortunei</i>	<b>Wintercreeper</b> (China): evergreen, maroon color, climber, sun/shade, dry soil, groundcover	<i>Bignonia capreolata</i> <i>Antennaria plantaginifolia</i> <i>Pityopsis (Heterotheca, Chrysopsis) graminifolia</i> <i>Polystichum acrostichoides</i> <i>Chrysogonum virginianum</i>	<b>Crossvine:</b> semi-evergreen, winter color, climber, showy flowers, sun/shade, dry soil <b>Pussytoes:</b> poor soil, dry soil, evergreen herb <b>Narrowleaf Silkgrass:</b> poor soil, dry soil, groundcover, silvery leaves, yellow flowers, herb, sun <b>Christmas Fern:</b> evergreen fern, dry soil, shade <b>'Eco-Lacquered Spider' - Green-and-gold:</b> evergreen groundcover, yellow flowers	yes	bees, hummingbirds butterflies bees, butterflies
<b>3</b> <i>Hedera helix</i>	<b>English Ivy</b> (Europe): evergreen, shiny leaves, shade, dry soil, groundcover, climber	<i>Decumaria barbara</i> <i>Berchemia scandens</i> <i>Bignonia capreolata</i> <i>Gaultheria procumbens</i> <i>Pachysandra procumbens</i> <i>Asarum canadense</i>	<b>Climbing Hydrangea, Woodvamp:</b> vine, shiny leaves, tardily deciduous, fragrant flower clusters, light shade <b>Supplejack:</b> shiny leaves, blue-black fruit, dry soil <b>Crossvine:</b> semi-evergreen, winter color, shiny leaves, flowers <b>Wintergreen, Eastern Teaberry:</b> evergreen groundcover, flowers, red fruit, shiny leaves, shade, acid soil <b>Allegheny Spurge:</b> herb groundcover, yearlong foliage mottles in winter, fragrant flowers <b>Wild Ginger:</b> herb groundcover, shade, moist soil	yes yes	bees birds bees, hummingbirds bees, birds, mammals
<b>1</b> <i>Lonicera japonica</i>	<b>Japanese Honeysuckle:</b> White fragrant flowers, twining, black fruit	<i>Lonicera sempervirens</i> <i>Lonicera flava</i> <i>Gelsemium sempervirens</i>	<b>Coral or Trumpet Honeysuckle:</b> prolific red flowers, well-behaved, twining, red fruit <b>Yellow Honeysuckle:</b> yellow flowers, orange fruit <b>Carolina or Yellow Jessamine (Jasmine):</b> semi-evergreen, fragrant flowers, well-behaved, twining, glossy leaves	yes yes	hummingbirds, birds, butterflies hummingbirds, birds
<b>A</b> <i>Lygodium japonicum</i>	<b>Japanese Climbing Fern:</b> lacy compound foliage, twining vine	<i>Clematis glaucophylla</i> <i>Adiantum pedatum</i>	<b>Blue-leaved Leather-flower:</b> compound foliage, twining vine, showy red flowers <b>Maidenhair Fern:</b> lacy foliage, unusual form		bees
<b>2</b> <i>Vinca minor</i> & <i>V. major</i>	<b>Common Periwinkle</b> (Eurasia): & <b>Greater Periwinkle</b> evergreen groundcover, blue flowers, glossy foliage, shade	<i>Phlox stolonifera</i> & <i>P. divaricata</i> <i>Carex flaccosperma</i> , <i>C. plantaginea</i> , & <i>C. platyphylla</i> <i>Mitchella repens</i> <i>Packera aurea (Senecio aureus)</i> <i>Dryopteris marginalis</i>	<b>Creeping &amp; Wild Blue Phlox:</b> semi-evergreen herbs, groundcover, purple & blue flowers <b>Blue Wood, Seersucker, &amp; Silver Sedges:</b> herb groundcover, yearlong foliage <b>Partridgeberry:</b> evergreen groundcover, white flowers, red fruit, acid-loving, glossy foliage <b>Golden Ragwort:</b> dark evergreen foliage, groundcover, yellow fragrant flowers <b>Marginal Woodfern:</b> evergreen fern	yes yes	butterflies birds bees, butterflies
<b>3</b> <i>Wisteria floribunda</i> <i>Wisteria sinensis</i>	<b>Japanese Wisteria:</b> showy flowers, fragrant <b>Chinese Wisteria:</b> similar to above	<i>Wisteria frutescens</i> &/or ( <i>W. macrostachya</i> )	<b>American Wisteria &amp; Kentucky W.:</b> showy flowers, fragrant, blooms in first couple of years, not as aggressive	yes	butterflies

**KEY** **1** **Severe Threat:** Spreads easily into native plant communities and displaces native vegetation

**2** **Significant Threat:** Not presently considered to spread as easily into native plant communities as Rank 1 species

**3** **Lesser Threat:** Spread in or near disturbed areas and are not presently considered a threat to native plant communities

**A** **Alert:** Invasiveness in Tennessee undetermined; known invasive in similar habitats, severe threat in adjacent states, or substantial management difficulty

# Exotic Pest Plant

# Native Plant Alternative(s)

SCIENTIFIC NAME	COMMON NAME (ORIGIN)	SCIENTIFIC NAME	COMMON NAME	CULTIVAR	WILDLIFE VALUE
<b>HERBS</b>					
3 Bupleurum rotundifolium	Hare's Ear (Eurasia): short annual, foliage	Triodanis perfoliata	Venus' Looking-glass: short annual, foliage, showy flowers		
3 Centaurea cyanus	Bachelor's Button, Cornflower (Mediterranean): Showy blue flowers, annual	Collinsia verna Campanulastrum americanum (Campanula americana) Phacelia bipinnatifida Stokesia laevis Eurybia hemispherica (Aster paludosus ssp. hemisphericus)	Blue-eyed Mary: showy blue/white spring flowers, annual Tall Bellflower: showy blue summer flowers, biennial Purple Phacelia: showy purple spring flowers, biennial Stokes' Aster: showy blue flowers, evergreen foliage Southern Prairie Aster: blue flowers, dry soil	yes	bees bees, butterflies bees bees butterflies
3 Cichorium intybus	Chicory (Eurasia): blue flowers, poor alkaline soil	Sisyrinchium angustifolium Symphotrichum (Aster) patens	Blue-eyed Grass: blue flowers, poor alkaline soil Late Purple Aster: blue flowers, poor dry soil	yes	bees, butterflies
A Cosmos bipinnatus & C. sulphureus	Cosmos (Mexico): colorful flowers, feathery foliage, annuals, poor soil	Heliopsis helianthoides Bidens aristosa	Smooth Oxeye: yellow summer flowers, poor soil Tickseed Sunflower: yellow summer/fall flowers, annual, feathery foliage	yes	bees, butterflies bees, butterflies
A Daucus carota	Queen Anne's Lace (Europe): showy flowers, butterflies	Angelica venenosa Thaspium spp. Zizia aptera & Z. aurea	Hairy Angelica: showy white flowers Meadow Parsnip: showy yellow flowers Heartleaf & Golden Alexanders: showy yellow flowers		bees, butterflies bees, butterflies bees, butterflies
3 Dipsacus fullonum	Fuller's Teasel (Europe): unusual flower head	Eryngium yuccifolium	Button Snakeroot, Rattlesnake-master: unusual flower heads, unusual form		bees, butterflies
A Eichhornia crassipes	Water Hyacinth (S. America): pond plant, showy purple flower	Pontederia cordata	Pickerelweed: pond plant, showy purple flowers		bees
A Eschscholzia californica	California Poppy: showy yellow - orange flowers	Oenothera fruticosa Asclepias tuberosa	Sundrops: bright yellow, poppy-like flowers Butterfly-weed: orange flowers, drought/heat tolerant	yes yes	bees bees, butterflies
A Gaillardia pulchella	Firewheel (Central US): annual, red/yellow ray flowers	Coreopsis tinctoria Helenium flexuosum	Plains Coreopsis: annual, red/yellow ray flowers Purple-headed Sneezeweed: perennial, yellow ray flowers	yes	bees, butterflies bees, butterflies
A Hesperis matronalis	Dame's Rocket (Europe): showy flowers	Phlox spp.	Phlox: showy flowers	yes	bees, butterflies
2 Iris pseudacorus	Yellow Iris (Eurasia): showy flowers, damp soil	Iris virginica Iris fulva Iris versicolor Hymenocallis caroliniana (H. occidentalis)	Southern Blue Flag, Virginia Iris: blue flowers, damp soil Red Iris: copper flowers, damp - wet soil Harlequin Blue Flag: blue flowers, damp soil Spiderlily: showy white flowers, moist to damp soil		bees bees bees
1 Lespedeza bicolor	Shrubby Bushclover (Asia): showy flowers, shrublike habit	Baptisia spp. Thermopsis villosa Amsonia tabernaemontana	Wild Indigo: showy flowers, shrublike habit Carolina Bushpea: showy flowers, shrublike habit Bluestar: showy flowers, shrublike habit	yes	bees, butterflies bees, butterflies bees, butterflies
A Leucanthemum vulgare (Chrysanthemum leucanthemum)	Oxeye Daisy (Eurasia): white daisy flowers	Erigeron pulchellus Boltonia asteroides Symphyotrichum (Aster) ericoides	Robin's Plantain: white daisy flowers, spring Boltonia: white daisy flowers, late summer White Heath Aster: white daisy flowers, dry soil, fall	yes yes	bees, butterflies bees, butterflies bees, butterflies
2 Lysimachia nummularia	Creeping Jenny (Europe): groundcover, sun or shade	Chrysogonum virginianum var. australe Phlox bifida Sedum tematum Tiarella cordifolia	Green-and-gold: evergreen herb, yellow flowers, groundcover, part sun Glade Phlox: groundcover sun, pale blue flowers Woodland Stonecrop: evergreen groundcover, white flowers Creeping Foamflower: evergreen groundcover, showy flowers	yes yes	butterflies butterflies
1 Lythrum salicaria	Purple Loosestrife (Eurasia): showy flowers, wet soil, long bloom	Liatris spp. Lobelia spp. Eupatorium spp. Chelone spp. Physostegia virginiana Conoclinium coelestinum Asclepias incarnata Asclepias purpurascens Lysimachia ciliata	Blazing Star, Gayfeather: showy purple flowers, various species bloom over long period summer-fall Lobelia, Cardinal Flower: showy blue or red flowers, moist-wet soil Joe-Pye-weed: showy purple flowers, moist-wet soil Turtlehead: showy white or pink flowers, wet soil Obedient Plant: showy pink flowers, moist soil Mistflower: showy blue flowers, moist-wet soil Swamp Milkweed: showy pink flowers, moist-wet soil Purple Milkweed: rose-purple flowers, moist-dry soil Fringed Loosestrife: showy yellow flowers, moist-wet soil	yes yes yes yes yes yes	bees, butterflies bees, butterflies bees, butterflies butterflies bees bees, butterflies bees, butterflies bees, butterflies bees, butterflies bees
3 Muscari neglectum (M. atlanticum)	Grape Hyacinth (Europe): blue flowers, spring bulb	Camassia scilloides Mertensia virginica Iris cristata	Wild Hyacinth: blue flowers, spring bulb Virginia Bluebells: showy blue spring flowers Crested Iris: showy blue spring flowers	yes	bees, butterflies bees bees
A Myosotis scorpioides	Forget-me-not (Eurasia): small annual, blue flowers	Collinsia verna Polemonium reptans	Blue-eyed Mary: small annual, blue/white flowers Jacobs Ladder: small perennial, blue flowers	yes	bees bees
3 Ornithogalum umbellatum	Star-of-Bethlehem (Europe): white spring flowers, bulb	Claytonia virginica Thalictrum thalictroides	Spring Beauty: white spring flowers, bulb Rue Anemone: white spring flowers, long bloom	yes	bees bees
1 Polygonum cuspidatum	Japanese Knotweed, Fleeceflower, Mexican Bamboo: tall, white summer flower panicles, shrublike	Aruncus dioicus Veronicastrum virginicum Ageratina altissima Cimicifuga racemosa Clethra alnifolia Itea virginica	Goat's-beard: tall, white summer flower panicles Culver's Root: tall, white summer flower spires White Snakeroot: tall, white fall flowers Black Snakeroot: tall white summer flower spires Summersweet: shrub, fragrant white summer flowers Virginia Sweetspire: shrub, white summer flowers, fall color	yes yes yes yes yes	bees bees, butterflies bees, butterflies bees, butterflies bees, butterflies bees

**KEY**

**1 Severe Threat:** Spreads easily into native plant communities and displaces native vegetation

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## Exotic Pest Plant

## Native Plant Alternative(s)

SCIENTIFIC NAME	COMMON NAME (ORIGIN)	SCIENTIFIC NAME	COMMON NAME	CULTIVAR	WILDLIFE VALUE
<b>GRASSES</b>					
2 <i>Arundo donax</i>	Giant Reed, Reed Grass (India): tall bamboo grass	<i>Arundinaria gigantea</i> <i>Saccharum (Erianthus) giganteum</i> <i>Andropogon gerardii</i> <i>Sorghastrum nutans</i>	River Cane: tall bamboo grass Sugarcane Plumegrass: tall grass, fluffy seedheads Big Bluestem: tall grass, colorful foliage Indian Grass: tall grass, colorful flowers	yes	butterflies birds birds
1 <i>Imperata cylindrica</i>	Cogon Grass, Japanese Bloodgrass: short ornamental grass, red foliage	<i>Panicum virgatum</i> <i>Bouteloua curtipendula</i>	'Rotstrahlbusch', 'Hanse Herms', 'Shenandoah', 'Squaw', 'Rehbraun' - Red Switch Grass: red fall foliage, short grass Sideoats Grama: red flowers, seed stalks, short grass	yes	
2 <i>Miscanthus sinensis</i> including var. <i>gracillimus</i> , var. <i>variegatus</i> , var. <i>zebrinus</i>	Zebra or Eulalia Grass, Chinese Silvergrass (Asia): ornamental grass	<i>Saccharum (Erianthus) giganteum</i> <i>Schizachyrium scoparium</i> <i>Sorghastrum nutans</i> <i>Panicum virgatum</i> <i>Andropogon glomeratus</i> <i>Andropogon ternarius</i> <i>Muhlenbergia capillaris</i>	Sugarcane Plumegrass: fluffy seedheads, tall, wet - dry soil Little Bluestem: colorful foliage, seedheads, short grass Indian Grass: colorful flowers, regular soil moisture Switchgrass: colorful foliage, upright habit, seedheads Bushy Bluestem: fluffy seedheads, wet - moist soil Splitbeard Bluestem: unique seedheads, dry soil, short grass Pink Muhly Grass: colorful flowers, wiry foliage, short grass	yes yes yes	birds, butterflies birds birds birds birds birds

### Medicinal & Culinary Invasive Plants

- 2 *Glechoma hederacea*, Ground Ivy or Creeping Charlie, is often grown as a medicinal plant. Many native plants are well known for their medicinal qualities and may serve in place of nonnative species.
- 3 *Mentha spicata*, Spearmint, and 2 *Mentha x piperita*, Peppermint, are used as culinary herbs. If you choose to grow these species, please keep them carefully contained in pots and dispose of cuttings or discarded plants responsibly to prevent their spread.

#### TN-EPPC Co-sponsors

- Agriculture Development Fund, Tennessee Department of Agriculture



This project made possible by the sale of agriculture specialty license plates (the "Ag Tag"). Funds received from "Ag Tag" sales are returned to the agricultural community in the form of grants for youth programs, market development projects, and other agricultural activities.

[www.picktnproducts.org](http://www.picktnproducts.org)

- Perennial Plant Society of Middle Tennessee
- Tennessee Native Plant Society

#### Nomenclature

- ITIS, Integrated Taxonomic Information System

#### Citations

- Pimentel, D., R. Zuniga, and D. Morrison. "Update on the Environmental and Economic Costs Associated with Alien-Invasive Species in the United States." *Ecological Economics* 52 (2004): 273-288.
- Reichard, Sarah H. "A Method for Evaluating Plant Invasiveness." *Public Garden* 14, no. 2 (1999): 18-21.

## Native Plant Culture References

All plants listed are native to Tennessee or the southeast and grow well in Tennessee. Many of the native plants listed as substitutes for one exotic invasive may also be successful alternatives for others. A few of the suggested natives, particularly vines, may display aggressive tendencies in a managed garden. Before choosing any native plant, it is wise to become familiar with its growth habit and preferred growing conditions. To find photographs, full descriptions, and culture recommendations for the plants suggested here, please consult one of these or other native plant gardening texts.

Allan M. Armitage

*Armitage's Native Plants for North American Gardens*, 2006

William Cullina

*Growing & Propagating Wildflowers*, 2000

*Native Trees, Shrubs & Vines*, 2002

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Leonard Foote & Samuel Jones

*Gardening with Native Wildflowers*, 1990

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*Gardening with the Native Plants of Tennessee: The Spirit of Place*, 2002

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*Southeastern Wildflowers*, 1999

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*Landscaping with Native Trees*, 1995

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*Gardening with Native Plants of the South*, 1994

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*Landscaping with Wildflowers*, 1992