

# Invasive Exotic Pest Plants in Tennessee – 2009

Updated in December 2009 with the help of 21 field biologists and land managers and using listing criteria developed from a variety of existing protocols (TNC/NPS, MA, CA, CT, VI).

## Tennessee Exotic Pest Plant Council Criteria for Evaluating Plant Species for Invasiveness in Tennessee

Criteria that must be met for plants to fall into the following categories: Severe Threat, Significant Threat, Lesser Threat, Alert.

Invasiveness Category	Criteria that must be met for each invasive category
Base criteria	1-4
Severe threat	5 or 6
Significant threat	7 and 8 or 9
Lesser threat	10 and 11
Alert	12 or 13 or 14

### BASE CRITERIA:

- 1) The plant species, sub-species or variety is established outside of cultivation and is non-native to some portion of the region of North America within which it occurs.
- 2) The species has the potential for rapid growth, high seed or propagule production and dispersal, and establishment in natural communities of North America or in managed areas where it is not desired or the species persists in free living infestations (outside of cultivation) within Tennessee.
- 3) The species occurs in the state of Tennessee.
- 4) The species is known to out-compete other species in native plant communities within the state of Tennessee.

### SEVERE THREAT:

- 5) The species meets criteria 1-2 and is listed as a noxious weed in Tennessee or by the federal government, – OR – 6) The species meets criteria 1-4 and occurs in at least 30 counties (ca. 30% of Tennessee counties), presents substantial management difficulties (for example, *Lespedeza cuneata* at a high density and narrow distribution poses less of a threat to native populations and is easier to manage than *Lespedeza cuneata* at lower density dispersed over large areas and growing among off-target native species potentially affected by herbicide use, while *Microstegium vimineum* occurs in dense populations, creates substantial seed banks that are unmanageable over the short-term, and requires long-term efforts).

### SIGNIFICANT THREAT:

- 7) The species meets criteria 1-4 and meets either 8 or 9 below, – AND – 8) The species occurs within at least 30 counties in Tennessee and management does not present substantial difficulties, – OR – 9) The species occurs in 10 to 29 counties within Tennessee and presents substantial management difficulties.

### LESSER THREAT:

- 10) The species meets criteria 1 through 4, – AND – 11) The species occurs in 10 to 29 counties within Tennessee and does not present substantial management difficulties.

### ALERT:

- 12) The species meets criteria 1 through 2 and shows invasiveness in similar habitats to those found in Tennessee, – OR – 13) 1 through 3 and shows invasiveness in similar habitats to those found in Tennessee, – OR – 14) The species meets criteria 1-4, occurs in fewer than 10 counties, and is considered a severe threat in adjacent states or poses substantial management difficulties.



Chinese privet (*Ligustrum sinense*)

RON MCCONATHY

**Severe Threat:** Exotic plant species that possess characteristics of invasive species and spread easily into native plant communities and displace native vegetation.

Species ITIS Nomenclature	Common Name	Habit
<i>Ailanthus altissima</i> (P. Mill.) Swingle	tree of Heaven	tree
<i>Albizia julibrissin</i> Durazz.	mimosa	tree
<i>Alternanthera sessilis</i> (L.) R. Br. ex DC.	sessile joyweed	forb/herb
<i>Bromus tectorum</i> L.	cheat grass, downy brome	grass
<i>Celastrus orbiculatus</i> Thunb., <i>Celastrus orbiculata</i> Thunb.	Asian bittersweet	woody vine
<i>Dioscorea oppositifolia</i> L., <i>D. batatas</i> Dcne., <i>Dioscorea polystachya</i> Turcz.	Chinese yam	deciduous vine
<i>Elaeagnus umbellata</i> var. <i>parviflora</i> (Royle) Schneid.	autumn olive	shrub
<i>Hydrilla verticillata</i> (L.f.) Royle	Hydrilla, water thyme	aquatic
<i>Hypericum perforatum</i> L.	goatweed, St. John's-wort	shrub, subshrub
<i>Imperata cylindrica</i> (L.) Beauv. (all varieties and cultivars)	cogongrass, Japanese bloodgrass	grass
<i>Kummerowia stipulacea</i> (Maxim.) Makino, <i>Lespedeza stipulacea</i> Maxim.	Korean clover	forb
<i>Lespedeza bicolor</i> Turcz.	bicolor lespedeza, shrubby bushclover	shrub, subshrub
<i>Lespedeza cuneata</i> (Dum.-Cours.) G. Don	sericea lespedeza	forb
<i>Ligustrum sinense</i> Lour.	Chinese privet	shrub
<i>Ligustrum vulgare</i> L.	common privet	shrub
<i>Lonicera japonica</i> Thunb.	Japanese honeysuckle	vine
<i>Lythrum salicaria</i> L. [all varieties and cultivars]	purple loosestrife	wetland forb
<i>Microstegium vimineum</i> (Trin.) A. Camus, <i>Eulalia viminea</i> (Trin.) Kuntze	Nepalgrass, Japanese grass	grass
<i>Paulownia tomentosa</i> (Thunb.) Sieb. & Zucc. ex Steud.	princess tree	tree
<i>Polygonum cuspidatum</i> Seib. & Zucc., <i>Fallopia japonica</i> (Houttt.) Dcne.	Japanese knotweed, Mexican bamboo, fleecflower	subshrub
<i>Pueraria montana</i> var. <i>lobata</i> (Willd.) Maesen & S. Almeida, <i>Pueraria lobata</i> (Willd.) Ohwi	Kudzu	vine
<i>Rosa multiflora</i> Thunb. ex Murr.	multiflora rose	shrub
<i>Rottboellia cochinchinensis</i> (Lour.) W.D. Clayton	Itchgrass	grass
<i>Salvinia molesta</i> Mitchell	aquarium water-moss	aquatic
<i>Solanum viarum</i> Dunal	tropical soda apple	subshrub
<i>Sorghum halepense</i> (L.) Pers.	Johnson grass	grass

**Significant Threat:** Exotic plant species that possess characteristics of invasive species but are not presently considered as such in native plant communities as those species listed as **Rank 1**.

Species ITIS Nomenclature
<i>Alliaria petiolata</i> (Bieb.) Cavara & Grande, <i>Alliaria officinalis</i> Andr. ex Bieb
<i>Allium vineale</i> L.
<i>Alternanthera philoxeroides</i> (Mart.) Griseb., <i>Achyranthes philoxeroides</i> (Mart.) Standl.
<i>Arthraxon hispidus</i> (Thunb.) Makino, <i>Arthraxon hispidus</i> var. <i>cryptatherus</i> (Hack.) Honda
<i>Arundo donax</i> L., <i>Arundo donax</i> var. <i>versicolor</i> (P. Mill.) Stokes
<i>Berberis thunbergii</i> DC
<i>Broussonetia papyrifera</i> (L.) L'Her. ex Vent.
<i>Carduus nutans</i> L.
<i>Centaurea biebersteinii</i> DC, <i>Centaurea stoebe</i> L. ssp. <i>micranthos</i> (Gugler) Hayek
<i>Cirsium vulgare</i> (Savi) Ten., <i>Carduus vulgaris</i> Savi
<i>Elaeagnus pungens</i> Thunb.
<i>Eragrostis curvula</i> (Schrud.) Nees
<i>Glechoma hederacea</i> L.
<i>Iris pseudacorus</i> L.
<i>Lolium arundinaceum</i> (Schreb.) S.J. Darbyshire, <i>Festuca arundinacea</i> Schreb., <i>Schedonorus phoenix</i> (Scop.) Holub
<i>Lonicera maackii</i> (Rupr.) Herder.
<i>Lysimachia nummularia</i> L.
<i>Maclura pomifera</i> (Raf.) Schneid.
<i>Melia azedarach</i> L.
<i>Mentha x piperita</i> L.
<i>Miscanthus sinensis</i> Anderss., <i>Miscanthus sinensis</i> var. <i>gracillimus</i> A.S. Hitchc., <i>M. sinensis</i> var. <i>variegatus</i> Beal, <i>M. sinensis</i> var. <i>zebrinus</i> Beal
<i>Murdannia keisak</i> (Hassk.) Hand.-Maz., <i>Aneilema keisak</i> Hassk.
<i>Myriophyllum aquaticum</i> (Vell.) Verdc., <i>Myriophyllum brasiliense</i> Camb.
<i>Myriophyllum spicatum</i> L.
<i>Polygonum caespitosum</i> var. <i>longisetum</i> (deBruyn) A.N. Steward, <i>Persicaria longiseta</i> (de Bruyn) Moldenke
<i>Polygonum persicaria</i> L.
<i>Populus alba</i> L.
<i>Potamogeton crispus</i> L.
<i>Rorippa nasturtium-aquaticum</i> (L.) Hayek, <i>Nasturtium officinale</i> Ait. f.
<i>Setaria faberi</i> R.A.W. Herrm.
<i>Setaria italica</i> (L.) P. Beauv.
<i>Setaria viridis</i> (L.) P. Beauv.
<i>Spiraea japonica</i> L.f.
<i>Tussilago farfara</i> L.
<i>Verbascum thapsus</i> L.
<i>Vinca major</i> L.
<i>Vinca minor</i> L.



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Japanese honeysuckle (*Lonicera japonica*)

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Common Name	Habit
garlic-mustard	forb
field Garlic	forb/herb
alligatorweed	forb/herb
hairy jointgrass	grass
giant reed, elephant grass	grass
Japanese barberry	shrub
paper mulberry	tree
musk thistle, nodding thistle	forb
spotted knapweed	forb/herb
bull thistle	forb
thorny-olive	shrub
weeping love grass	grass
gill-over-the-ground, ground ivy	deciduous vine
pale-yellow iris	wetland forb
tall fescue	grass
Amur bush honeysuckle	shrub
moneywort, creeping Jenny	forb/herb
Osage Orange	tree
Chinaberry	tree
peppermint	forb/herb
zebra grass, Chinese silver grass	grass
Asian spiderwort	forb/herb
parrot feather, Brazilian water-milfoil	aquatic
Eurasian water-milfoil	aquatic
bunchy knotweed, oriental ladythumb, bristly lady's-thumb	forb/herb
lady's thumb	forb/herb
white poplar	tree
curly pondweed	aquatic
watercress	aquatic
nodding foxtail-grass	grass
foxtail-millet	grass
green millet, giant green foxtail	grass
Japanese spiraea	shrub
coltsfoot	forb/herb
common mullein	forb/herb
Greater periwinkle	vine
common periwinkle	vine

**Lesser Threat:** Exotic plant species that spread in or near disturbed areas, and are not presently considered a threat to native plant communities.

Species ITIS Nomenclature	Common Name	Habit
<i>Bromus secalinus</i> L.	rye brome	grass
<i>Bromus sterilis</i> L.	poverty brome	grass
<i>Buglossoides arvensis</i> (L.) I.M. Johnston, <i>Lithospermum arvense</i> L.	corn gromwell	forb/herb
<i>Bupleurum rotundifolium</i> L.	hound's-ear, hare's-ear	forb/herb
<i>Cardiospermum halicacabum</i> L.	balloonvine, love-in-a-puff	deciduous vine
<i>Centaurea cyanus</i> L.	bachelor's button, cornflower	forb/herb
<i>Cichorium intybus</i> L.	chicory	forb
<i>Clematis terniflora</i> DC, <i>Clematis maximowicziana</i> Franch. & Savigny, <i>Clematis paniculata</i> Thunb.	leatherleaf clematis, sweet autumn clematis	vine
<i>Conium maculatum</i> L.	poison hemlock	forb
<i>Dipsacus fullonum</i> L.	Fuller's teasle, common teasle	forb/herb
<i>Egeria densa</i> Planch., <i>Elodea densa</i> (Planch) Casburg	Brazilian elodea, Brazilian water-weed	aquatic
<i>Euonymus alatus</i> (Thunb.) Siebold, <i>Euonymus alata</i> (Thunb.) Sieb.	burning bush	shrub
<i>Euonymus fortunei</i> (Turcz.) Hand.-Mazz., <i>Euonymus hederaceus</i> Champ. & Benth.	winter creeper	woody vine
<i>Hedera helix</i> L.	English ivy	woody vine
<i>Hibiscus syriacus</i> L.	Rose of Sharon	shrub, tree
<i>Mentha spicata</i> L.	spearmint	wetland forb
<i>Muscari neglectum</i> Guss. ex Ten., <i>Muscari atlanticum</i> Boiss. & Reut.	grape hyacinth	forb/herb
<i>Ornithogalum umbellatum</i> L.	Star of Bethlehem	forb/herb
<i>Pastinaca sativa</i> L.	wild parsnip	forb/herb
<i>Ranunculus bulbosus</i> L.	St. Anthony's turnip	forb/herb
<i>Rubus phoenicolasius</i> Maxim.	wineberry	subshrub
<i>Tragopogon dubius</i> Scop.	yellow goat's-beard	forb
<i>Wisteria floribunda</i> (Willd.) DC, <i>Rehsonia floribunda</i> (Willd.) Stritch	Japanese wisteria	vine



Greater periwinkle (*Vinca major*)

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**Alert:** Exotic plant species that are known to be invasive in similar habitats to those found in Tennessee, are listed as a severe threat in adjacent states, or pose substantial management difficulties where they occur but for which more information is needed to determine their invasiveness in the state of Tennessee.



Beale's barberry (*Mahonia bealei*)



Chinese wisteria (*Wisteria sinensis*)

Species ITIS Nomenclature	Common Name	Habit
<i>Achyranthes japonica</i> var. <i>hachijoensis</i> Honda	Japanese chaff flower	forb
<i>Acroptilon repens</i> (L.) DC., <i>Centaurea repens</i> L.	Russian knapweed	forb/herb
<i>Agrostis stolonifera</i> L.	creeping bentgrass	grass
<i>Bromus japonicus</i> Thunb. ex Murr., <i>Bromus arvensis</i> L.	Japanese brome grass	grass
<i>Buddleja davidii</i> Franch.	butterfly bush	shrub subshrub
<i>Carduus acanthoides</i> L.	plumeless thistle	forb/herb
<i>Cirsium arvense</i> (L.) Scop., <i>Carduus arvensis</i> (L.) Robson	Canada thistle	forb/herb
<i>Coronilla varia</i> L., <i>Securigera varia</i> (L.) Lassen	crown vetch	vine
<i>Daucus carota</i> L.	wild carrot, Queen Anne's-lace	forb
<i>Dioscorea bulbifera</i> L.	air-potato	deciduous vine
<i>Eichhornia crassipes</i> (Mart.) Solms	floating water hyacinth	aquatic
<i>Elaeagnus angustifolia</i> L.	Russian olive	tree
<i>Firmiana simplex</i> (L.) W. Wight	Chinese parasol tree	tree/shrub
<i>Gaillardia pulchella</i> Foug.	firewheel	forb
<i>Helianthus ciliaris</i> DC.	Texas blueweed	forb/herb
<i>Hesperis matronalis</i> L.	dame's rocket	forb/herb
<i>Ilex crenata</i> Thunb.	Japanese holly	shrub/small tree
<i>Koelreuteria paniculata</i> Laxm.	goldenrain tree	tree
<i>Kummerowia striata</i> (Thunb.) Schindl., <i>Lespedeza striata</i> (Thunb.) Hook. & Arn.	Japanese clover	forb/herb
<i>Lepidium campestre</i> (L.) Ait. F.	field pepperweed	forb/herb
<i>Leucanthemum vulgare</i> Lam., <i>Chrysanthemum leucanthemum</i> L., <i>Chrysanthemum vulgare</i> Lam.	ox-eye daisy	forb/herb
<i>Ligustrum japonicum</i> Thunb.	Japanese privet	shrub
<i>Ligustrum obtusifolium</i> Sieb. & Zucc.	border privet	shrub
<i>Lonicera fragrantissima</i> Lindl. & Paxton	January jasmine	shrub
<i>Lonicera morrowii</i> Gray	Morrow's bush honeysuckle	shrub
<i>Lonicera tatarica</i> L.	Tartarian honeysuckle, twinsisters	shrub
<i>Lonicera x bella</i> Zabel	Bell's bush honeysuckle	shrub
<i>Lotus corniculatus</i> L.	birdfoot trefoil	forb/herb
<i>Ludwigia uruguayensis</i> (Camb.) Hara, <i>Ludwigia grandiflora</i> (M. Micheli) Greuter & Burdet	Uruguay waterprimrose	forb/herb to subshrub
<i>Lygodium japonicum</i> (Thunb. ex Murr.) Sw.	Japanese climbing fern	forb/herb/vine
<i>Mahonia bealei</i> (Fortune) Carr., <i>Berberis bealei</i> Fortune	Oregon grape	shrub
<i>Melilotus alba</i> Medikus	white sweet clover	forb/herb
<i>Melilotus officinalis</i> (L.) Lam., <i>Melilotus albus</i> var. <i>annuus</i> Coe; <i>Melilotus albus</i> Medik.	yellow sweet clover	forb/herb
<i>Myosotis scorpioides</i> L.	true forget-me-not	forb/herb
<i>Najas minor</i> All.	water nymph	aquatic
<i>Nandina domestica</i> Thunb.	Nandina, sacred-bamboo	shrub
<i>Phalaris canariensis</i> L.	canary grass	grass
<i>Phragmites australis</i> (Cav.) Trin. ex Steud.	common reed	grass, aquatic
<i>Polygonum perfoliatum</i> L.	mile-a-minute	forb/herb
<i>Pyrus calleryana</i> Dcne.	Bradford pear, callery pear	tree
<i>Rubus bifrons</i> Vest ex Tratt	Himalayan berry	subshrub
<i>Salsola tragus</i> L., <i>S. kali</i> spp. <i>tragus</i> (L.) Celak.	prickly Russian thistle	forb
<i>Senna obtusifolia</i> (L.) H.S. Irwin & Barneby, <i>Cassia obtusifolia</i> L.	sicklepod senna	forb/herb
<i>Setaria pumila</i> (Poir.) Roem. & Schult.	yellow foxtail, smooth millet	grass
<i>Sonchus arvensis</i> L.	perennial sowthistle, sowthistle	forb/herb
<i>Trapa natans</i> L.	water chestnut	aquatic
<i>Triadica sebifera</i> (L.) Small, <i>Sapium sebiferum</i> (L.) Roxb., <i>Triadica sebiferum</i> (L.) Roxb.	Chinese tallowtree	tree
<i>Tribulus terrestris</i> L.	puncturevine	forb/herb
<i>Wisteria sinensis</i> (Sims) DC, <i>Rehsonia sinensis</i> (Sims) Stritch	Chinese wisteria	vine

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