

## Delaware Invasive Species Council

### Non-native Plant Species Assessment, 2023

The first Delaware Invasive Species Council (DISC) review of non-native plants to assess their potential for being invasive, was conducted in 2003, and followed protocol developed by NatureServe (a non-profit science and technology organization). A second assessment was done in 2006, following the same protocol. With the 2006 assessment, DISC developed three invasive categories – widespread and invasive; restricted and invasive; and restricted and potentially invasive. In 2019, DISC recognized that a revision of the 2006 list of invasive plants was needed, and that the NatureServe protocol should be modified to make it more relative to the state of Delaware. After modifying the protocol, an assessment was conducted. In contrast to the 2006 DISC list of invasive plants, the 2019 list, as well as all subsequent lists will include only two categories – *Invasive* [species with I-Ranks (see definition below) of High, Medium, or Low)], and *Watch List* (species that are potentially invasive, but more assessment needed; I-Rank of Insignificant).

For the most recent non-native, invasive plant assessment (2023), individuals (“experts”) with experience in identifying and controlling non-native plants were contacted and asked to complete the assessment in an online form. The experts were provided with a list of non-native species considered to have invasive potential in Delaware for their review and were asked to assess those species they were most familiar with. Experts were given three months (September to November) to review and complete the assessment. A total of 15 experts participated in the 2023 assessment.

An I-Rank, or Invasive Rank was determined based on expert responses denoting the level at which a species is invasive in the identified geographic area, in this case, the state of Delaware. These ranks are categorized by High, Medium, Low, and Insignificant (see I-Rank values below). If a species was ranked as High, Medium, or Low, they are deemed invasive to some degree by the experts and will be added to the current iteration of the DISC list of Invasive Plant Species. Species ranked as Insignificant, were added to the DISC Watch List, and will be reevaluated in two years (2025) when the list will again be revised. Additionally, for future revisions to the list, selected species thought to be invasive in Delaware will also be evaluated.

2023 assessment results find that 51 taxa were added to the DISC primary list of non-native species, for a total of 95 taxa. Ten taxa were added to the Watchlist. Four taxa that were previously listed on the Watchlist, have been moved to the primary list. A total of 16 taxa are now currently on the Watchlist.

**I-Rank values ranging from High to Insignificant as follows:**

- High: Species represents a severe threat to native species and ecological communities; 76-100 points.
- Medium: Species represents moderate threat to native species and ecological communities; 51-75 points.
- Low: Species represents a significant but relatively low threat to native species and ecological communities; 26-50 points.
- Insignificant: Species currently represents an insignificant threat to native species and ecological communities; 0-25 points.

## DISC Invasive Plant List

January 2024

Scientific and common names are based on: McAvoy, W.A. 2023. The Flora of Delaware Database. Delaware Division of Fish and Wildlife, Species Conservation and Research Program, Smyrna, Delaware.

Scientific Name	Common Name
<i>Acer palmatum</i>	Japanese maple
<i>Acer platanoides</i>	Norway maple
<i>Acorus calamus</i>	European sweetflag
<i>Ailanthus altissima</i>	tree-of-Heaven
<i>Albizia julibrissin</i>	silktree
<i>Alliaria petiolata</i>	garlic mustard
<i>Alternanthera philoxeroides</i>	alligatorweed
<i>Ampelopsis glandulosa</i>	porcelain-berry
<i>Aralia elata</i>	Japanese angelica tree
<i>Artemisia vulgaris</i>	mugwort
<i>Arthraxon hispidus</i> var. <i>hispidus</i>	joint-head arthraxon
<i>Benthamidia japonica</i>	Kousa dogwood
<i>Berberis thunbergii</i>	Japanese barberry
<i>Broussonetia papyrifera</i>	paper-mulberry
<i>Cabomba caroliniana</i>	Carolina fanwort
<i>Cardamine impatiens</i>	touch-me-not bittercress
<i>Carex kobomugi</i>	Asiatic sand sedge
<i>Celastrus orbiculatus</i>	Asian bittersweet
<i>Cenchrus purpurascens</i>	Chinese fountaingrass
<i>Centaurea stoebe</i> subsp. <i>micranthos</i>	spotted knapweed
<i>Cirsium arvense</i>	Canada thistle
<i>Clematis terniflora</i>	sweet autumn clematis
<i>Commelina communis</i>	Asiatic dayflower
<i>Conium maculatum</i>	poison-hemlock
<i>Convolvulus arvensis</i>	field bindweed
<i>Echinochloa crusgalli</i> var. <i>crusgalli</i>	barnyard grass
<i>Egeria densa</i>	Brazilian waterweed

<b>Scientific Name</b>	<b>Common Name</b>
<i>Elaeagnus umbellata</i>	autumn olive
<i>Eragrostis curvula</i>	weeping lovegrass
<i>Euonymus alatus</i>	winged euonymus
<i>Euonymus fortunei</i>	winter creeper
<i>Ficaria verna</i> subsp. <i>verna</i>	lesser celandine
<i>Glechoma hederacea</i>	ground ivy
<i>Hedera helix</i> var. <i>helix</i>	English ivy
<i>Hedera hibernica</i>	Atlantic ivy
<i>Hermerocallis fulva</i>	orange day-lily
<i>Humulus scandens</i>	Japanese hops
<i>Hydrilla verticillata</i>	hydrilla
<i>Ilex crenata</i>	Japanese holly
<i>Iris pseudacorus</i>	yellow flag
<i>Koelreuteria paniculata</i>	golden rain tree
<i>Lespedeza cuneata</i>	Chinese bushclover
<i>Leucojum aestivum</i>	summer snowflake
<i>Ligustrum obtusifolium</i> var. <i>obtusifolium</i>	border privet
<i>Ligustrum sinense</i>	Chinese privet
<i>Ligustrum vulgare</i>	common privet
<i>Lonicera japonica</i>	Japanese honeysuckle
<i>Lonicera maackii</i>	Amur honeysuckle
<i>Lonicera morrowii</i>	Morrow's honeysuckle
<i>Ludwigia grandiflora</i>	erect water primrose seedbox
<i>Ludwigia peploides</i> var. <i>glabrescens</i>	creeping water primrose seedbox
<i>Lysimachia nummularia</i>	creeping Jenny
<i>Lythrum salicaria</i>	purple loosestrife
<i>Microstegium vimineum</i>	Japanese stilt-grass
<i>Miscanthus sinensis</i>	Chinese silvergrass
<i>Morus alba</i>	white mulberry
<i>Murdannia keisak</i>	marsh dewflower
<i>Myriophyllum aquaticum</i>	parrot's-feather water-milfoil
<i>Myriophyllum spicatum</i>	Eurasian water-milfoil
<i>Narcissus pseudonarcissus</i>	daffodil

<b>Scientific Name</b>	<b>Common Name</b>
<i>Oplismenus undulatifolius</i>	wavyleaf basketgrass
<i>Pachysandra terminalis</i>	Japanese pachysandra
<i>Paulownia tomentosa</i>	princess-tree
<i>Perilla frutescens</i>	perilla
<i>Persicaria longiseta</i>	longbristle smartweed
<i>Persicaria perfoliata</i>	mile-a-minute-vine
<i>Phalaris arundinacea</i>	reed canary-grass
<i>Phellodendron amurense</i>	Amur cork tree
<i>Phragmites australis</i>	European reed
<i>Phyllostachys aurea</i>	golden bamboo
<i>Pinus thunbergii</i>	Japanese black pine
<i>Prunus avium</i>	sweet cherry
<i>Prunus subhirtella</i>	weeping Higan cherry
<i>Pueraria montana</i> var. <i>lobata</i>	kudzu
<i>Pyrus calleryana</i>	Bradford pear
<i>Quercus acutissima</i>	sawtooth oak
<i>Reynoutria japonica</i> var. <i>japonica</i>	Japanese knotweed
<i>Rhamnus davurica</i>	lance-leaf buckthorn
<i>Rhodotypos scandens</i>	black jetbead
<i>Robinia pseudoacacia</i>	white flowered locust
<i>Rosa multiflora</i>	multiflora rose
<i>Rubus parvifolius</i>	three-leaf blackberry
<i>Rubus phoenicolasius</i>	wineberry
<i>Schoenoplectiella mucronata</i>	alien bulrush
<i>Stellaria media</i>	common chickweed
<i>Triplidium ravennae</i>	Ravenna grass
<i>Typha angustifolia</i>	narrowleaf cattail
<i>Urtica dioica</i> subsp. <i>dioica</i>	stinging nettle
<i>Viburnum dilatatum</i>	linden viburnum
<i>Viburnum plicatum</i>	doublefile viburnum
<i>Viburnum setigerum</i>	tea viburnum
<i>Viburnum sieboldii</i>	Siebold's viburnum
<i>Vinca minor</i>	common periwinkle

Scientific Name	Common Name
<i>Vitex rotundifolia</i>	beach vitex
<i>Wisteria sinensis</i>	Chinese wisteria

#### DISC Invasive Plant Watch List

Scientific Name	Common Name
<i>Abies firma</i>	Momi fir
<i>Akebia quinata</i>	five-leaf akebia
<i>Buddleja davidii</i>	butterfly-bush
<i>Corydalis incisa</i>	purple corydalis
<i>Deutzia crenata</i> var. <i>crenata</i>	Deutzia
<i>Fatoua villosa</i>	mulberry weed
<i>Galanthus nivalis</i>	snowdrop
<i>Lespedeza thunbergii</i>	Thunberg's bushclover
<i>Lilium lancifolium</i>	tiger lily
<i>Lotus corniculatus</i>	birds-foot trefoil
<i>Mahonia bealei</i>	Chinese mahonia
<i>Malus toringo</i>	Toringo crabapple
<i>Pistia stratiotes</i>	water-lettuce
<i>Pourthiaea villosa</i>	Asian photinia
<i>Spiraea japonica</i>	Japanese spiraea
<i>Trapa natans</i>	water chestnut