Species List by Severity of Threat (from previous page) and by Growth Form

Distribution codes: (Based upon maps of South Carolina Plant Atlas) M=mountains, P=piedmont, CP=coastal plain

Trees

Severe Threat:

Triadica sebifera, Chinese tallow tree (Sapium sebifera in Atlas) ..... PCP

Significant Threat :

Ailanthus altissima, Tree of heaven ..... MPCP
Albizia julibrissin, Mimosa, Silktree ..... MPCP
Melia azedarach, Chinaberry ..... MPCP
Paulownia tomentosa, Princess tree ..... MP

Shrubs

Severe Threat:

Elaeagnus angustifolia, Russian Olive – Not in Atlas
Elaeagnus pungens, Thorny Olive ..... MP
Elaeagnus umbellata, Autumn Olive ..... MP
Ligustrum japonicum, Japanese Privet ..... MPCP
Ligustrum sinensis, Chinese Privet ..... MPCP
Rosa multiflora, Multiflora Rose ..... MPCP

Significant Threat:

Lespedeza bicolor, Two Color Bush Clover ..... MPCP
Mahonia bealei, Leatherleaf Mahonia ..... P
Mahonia nervosa, Cascade Oregon Grape ..... CP
Nandina domestica, Nadina, Sacred Bamboo ..... M

Vines

Severe Threat:

Lonicera japonica, Japanese Honeysuckle ..... MPCP
Pueraria lobata, Kudzu ..... MPCP
Wisteria sinensis, Chinese Wisteria ..... MPCP
Wisteria floribunda, Asian Wisteria ..... P

Significant Threat:

Hedera helix, English Ivy ..... MPCP
Lygodium japonicum, Japanese Climbing Fern ..... MPCP
Vitex rotundifolia, Beach Vitex ..... CP

Grasses, sedges

Severe Threat:

Microstegium vimineum, Japanese stilt grass ..... MPCP
Phragmites australis, Common reed ..... CP

Significant Threat:

Arundo donax, Giant Reed ..... MPCP
Paspalum notatum, Bahia grass ..... MPCP
Phyllostachys aurea Bamboo ..... PCP
Miscanthus sinensis, Chinese Silvergrass ..... MPCP
Schedonorus arundinaceus, Tall Fescue – Not in Atlas (Schedonorus arundinaceus or Festuca arundinaceus)

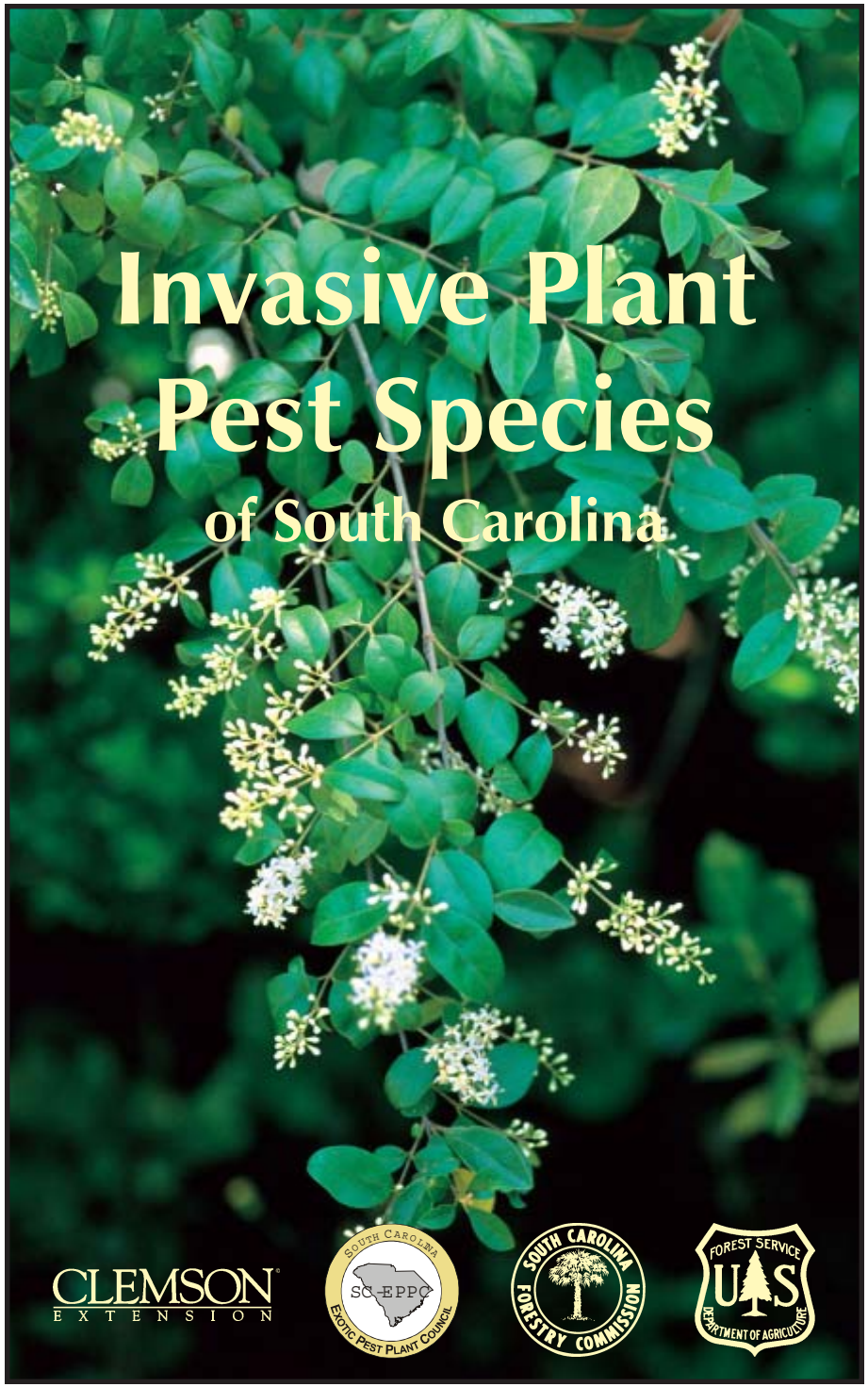
Herbs

Severe Threat:

Murdannia keisak, Wart Removing Herb ..... MPCP

Significant Threat:

Carduus nutans, Nodding Thistle, Marsh Thistle ..... MP
Cirsium vulgare, Bull Thistle ..... MP
Reynoutria japonica, Japanese Knotweed – Not in Atlas
Solanum viarum, Tropical Soda Apple – Not in Atlas



Ted Bodner, Southern Weed Science Society

Invasive Plant Pest Species of South Carolina

Invasive, or exotic pest plant species are a growing problem in South Carolina. Nonnative plant invasions can be seen in natural areas, croplands, rangelands, pastures, forests, wetlands and waterways, wilderness areas, parks and refuges, and highway rights-of-way. Not all non-native plants are invasive. In fact, a large number of our agricultural crops and ornamental plants are non-native (exotic) in origin. Exotic plants are only a problem when they escape cultivation, spread rapidly and aggressively compete with native species. Invasive plant populations can grow, adapt, multiply, and spread to unmanageable levels, often overwhelming entire landscapes. Invasives significantly reduce plant biodiversity and can be a severe threat to stability and sustainability of ecosystems.

Management of invasive, nonnative plant species is difficult and complex. It is estimated that 100 million acres in the United States are already impacted by invasive plant species. Preventing further spread of invasive plants and recapturing impacted sites is a monumental task that depends on public awareness, support, and participation. This brochure shows and describes our top ten invasive plants as determined by the South Carolina Exotic Pest Plant Council (SCEPPC). Additional invasive species that are a potential threat are listed on the back panel.

What can you do to help?

- Many invasive plants are still sold commercially. If you see them at ornamental nurseries or elsewhere, **do not** purchase or plant them in your yard.
- Inform others of the problems created by invasive species.
- Replace established invasive plants with alternative **native species.** More detailed information on alternatives can be obtained from the South Carolina Native Plant Society home page: www.scnps.org/
- Other good sources of information include the Clemson Cooperative Extension Service (www.clemson.edu/public) and The Bugwood Network (www.bugwood.org).
- For eradication guidelines and assistance in locating contractors to conduct this work contact the Clemson Cooperative Extension Service or The Department of Plant Industry. (http://dpi.clemson.edu/PI_index.htm)
- Become an active member of the South Carolina Exotic Pest Plant Council. Mail a check marked “SCEPPC Dues” and made payable to SCEPPC to: Larry Nelson, SCEPPC, 272 Lehotsky Hall, Dept. of Forestry and Natural Resources, Clemson University, Clemson, SC 29634-0317, or go to www.se-eepc.org, select *South Carolina*, then *Membership Form*.

All photos in this brochure courtesy of Forestry Images.org

Common Reed

Phragmites australis

- Origin is not clear. Species is found in Asia, Europe and North America.

James R. Allison, GA Dept. of Natural Resources

- Clonal grass species with woody hollow culms that can grow up to 6 feet in height.
- Largely a weed of natural areas and presents a significant threat to biological diversity along Atlantic coastal areas.

Bernd Blossey, Cornell University

Wart-Removing Herb

Murdannia keisak (Hassk.) Hand.-Maz.

- Originally associated with rice production in east Asia and likely was imported with rice to be used as seed in Louisiana and South Carolina. Earliest records of existence are from the 1920’s.

Milo Pyne, USDA-NRCS Plants Database

- Found in all coastal states from Delaware to Louisiana.
- Dispersal is by seed and from vegetative structures. Waterfowl favor seed as a food source and are a suspected vector.
- Has an aggressive ability to establish and take over wetlands and marshes at the exclusion of native plants.

South Carolina Exotic Pest Plant Council Non-Native Invasive Plant Species List - March, 2004

Definitions

Severe threat: Exotic invasive plant species which are known to pose a severe threat to the composition, structure, or function of natural areas in the state of South Carolina.

Significant threat: Exotic invasive plant species which are not presently considered to spread as easily into native plant communities as the above. (OVER)

Wisteria (Chinese and Japanese)

Wisteria sinensis (Sims) DC and *W. floribunda* (Wild) DC.

- Introduced from Asia in the early 1800's — traditional southern porch vine.
- Deciduous high climbing, twining, or trailing leguminous woody vine up to 70 feet long.

Ted Bodner, Southern Weed Science Society

James H. Miller, USDA Forest Service

- Distinguishing features include showy, fragrant, lavender to violet pea-like flowers in spring, alternate, odd pinnately compound leaves and large, velvety leguminous pods.
- Spreads by rooting at nodes and water-dispersal of seeds.

Ted Bodner, Southern Weed Science Society

- Forms dense growth capable of killing trees and excluding other plant species.

Japanese Stiltgrass

Microstegium vimineum (Trin.) A Camus

Chuck Bargeron, University of Georgia

- Native to Asia and first identified near Knoxville, TN in 1919.
- Sprawling annual grass growing to 3 feet in height.
- Prominent features – alternate, flat, two to four inch leaves and thin, spikelike flowers.

Ted Bodner, Southern Weed Science Society

- Prolific seeds remain viable for up to 3 years. Spreads by water and hitchhiking on animals and people.
- Will overtake and dominate sites on floodplains, streamsides, forest edges, roadsides, ditchbanks, trails, damp fields, swamps and lawns.

Chinese Tallow Tree

Triadica sebifera (L.) Small

- Introduced to South Carolina from China in the late 1700's.
- Deciduous tree that grows to 60 feet in height
- Distinctive features include heart-shaped leaves that turn yellow to red in the fall and fruit that resembles popcorn.
- Fruit and seed are borne in terminal three-lobed clusters that split, revealing white wax coated seeds.

Ted Bodner, Southern Weed Science Society

James H. Miller, USDA Forest Service

- Seeds are dispersed by birds and water.
- Vigorous regeneration along streams, flood plains and uplands is a hindrance to the establishment of natural plant species and to forest regeneration.

Autumn Olive

Elaeagnus umbellata Thunb.

James H. Miller, USDA Forest Service

- Introduced from China and Japan in 1830 – Widely planted for wildlife habitat improvement.
- Deciduous bushy shrub that grows to 20 feet in height.
- Distinctive features are bright green leaves with silver undersides and production of many red berries in the fall.
- Prefers drier sites and is shade tolerant.
- Scattered trees in forest openings eventually form dense stands that grow at the expense of other species.

James R. Allison, GA Dept. of Natural Resources

Chinese Privet

Ligustrum sinense Lour.

- Introduced from China in the early to mid-1800's.
- Semi-evergreen, thicket forming shrub growing to 30 feet in height.
- Distinguishing features are the leaves that grow opposite in two rows at right angles to the stem, white flowers that grow in panicles, and small abundant fruit that range from green in summer to almost black in the fall.

Ted Bodner, Southern Weed Science Society

Ted Bodner, Southern Weed Science Society

- Spreads by abundant bird and animal dispersal and root sprouts
- Privet is shade tolerant and forms dense thickets particularly in bottomlands and along fencerows and rights-of-way.
- Very few plants are found growing beneath thick stands of privet.

Multiflora Rose

Rosa multiflora Thumb.ex Murr.

James H. Miller, USDA Forest Service

- Introduced from Asia and planted as an ornamental, as living fences for livestock containment and for wildlife habitat.
- Deciduous climbing, arching and or trailing shrubs that grow to 10 feet in height.
- Distinguishing features are the clustered white flowers with yellow anthers, pinnately compound leaves, sharp thorns and red rose hips in the fall.

James H. Miller, USDA Forest Service

- Spreads by rooting stems, sprouts and seed dispersal by animals.
- Forms small-to-large infestations that often climb trees. Thickets exclude other desirable plant species and hinder site management.

Japanese Honeysuckle

Lonicera japonica Thunb.

- Introduced from Japan in the 1800's and planted as an ornamental and as deer browse.
- Our most commonly occurring invasive plant.
- Semi-evergreen to evergreen woody vine that is high climbing and trailing to 80 feet.

Chuck Bargeron, University of Georgia

Chuck Bargeron, University of Georgia

- Distinguishing features include sweet, fragrant flowers, brown hairy stem that is fissured and sloughing with age, and green or black sphere-shaped berries.
- Spreads by rooting at vine nodes and animal dispersal of seed.
- Overwhelming thickets replace native species on forest margins and rights-of-way, but is also shade tolerant and can be a problem in understories.

Kudzu

Pueraria montana (Lour.) Merr. var. *lobata* (Willd.) Maesen & S. M. Almeida

James H. Miller, USDA Forest Service

- Introduced from China and Japan in the early 1900's.

David J. Moorhead, University of Georgia

- Deciduous woody leguminous vine 30 to 100 feet long.
- Distinguishing features include three-leaflet leaves, yellow-green stems with erect golden hairs, lavender pea-like flowers, flattened and hairy seed pods.
- Colonizes by vines rooting at nodes and by wind-, animal-, and water-dispersed seeds. Seed viability is generally low.

Ted Bodner, Southern Weed Science Society

- Rapid and dense growth completely overwhelms all other plant species including large trees. Must have direct sunlight for rapid growth.