

RECOGNITION CARDS

Invasive and Non-native Plants You Should Know



A Creation of the
Florida Invasive Plant
Education Initiative

UF UNIVERSITY of
FLORIDA
IFAS Extension
Center for Aquatic
and Invasive Plants



Invasive and Non-native Plants You Should Know

Produced by Amy Richard and (the late) Vic Ramey
Copyright 2007 University of Florida
Center for Aquatic and Invasive Plants
<http://plants.ifas.ufl.edu>

With additional support from:
Florida Department of Environmental Protection
Bureau of Invasive Plant Management
<http://www.dep.state.fl.us/lands/invaspec/index.htm>



Botanical Consultations:

Kenneth A. Langeland*
David W. Hall
Jeff Schardt

Photography:

Ann Murray
Vic Ramey
Amy Richard
Colette Jacono
Ken Langeland
Steve Ausmus

Cover Illustration:

Mark Poole

Graphic Design and Desktop Production:

Ian Richard
JS Design Studio

*Plant identification text from: *Identification & Biology of Non-Native Plants in Florida's Natural Areas* by K.A. Langeland and K. Craddock Burks, Eds. (1998). University of Florida, IFAS, SP 257

<http://plants.ifas.ufl.edu>

By using these recognition cards, you are about to become familiar with a number of non-native plant species that are currently targeted for control in public waters and conservation lands of Florida, by the Florida Department of Environmental Protection.

They are being controlled or “managed” because:

> they have already altered native plant communities by displacing native species (demonstrating ecological and/or economic harm).

OR

> they are increasing in abundance and frequency in natural areas throughout the state.

UF/IFAS is evaluating these and other plants for their potential invasiveness in various regions of the state. For the latest evaluations, see the UF/IFAS Assessment of the Status of Non-Native Plants in Florida’s Natural Areas.

<http://plants.ifas.ufl.edu/assessment>

P = **Prohibited*** Some of the plants in this guide are officially prohibited by federal or state law.

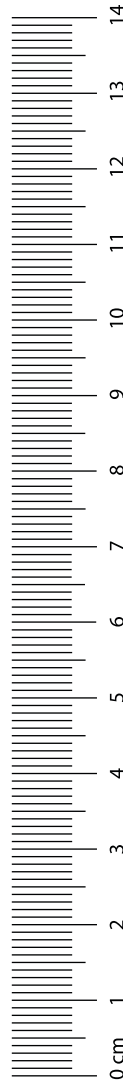
Learn more: <http://plants.ifas.ufl.edu/guide/invplant.html>

native plant – a plant species that occurs naturally in a geographic region or area (indigenous plant); it has not been introduced by humans, intentionally or unintentionally.

invasive plant – a non-native plant species that develops self-sustaining populations outside of cultivation and causes environmental or economic harm.

non-native plant – a plant species that is present in a region outside its original, historic range due to intentional or unintentional introduction; not necessarily invasive. Also referred to as non-indigenous or exotic.

*Class I Prohibited Aquatic Plants (Rule 62C-52.004, F.A.C) or Class II Prohibited Aquatic Plants (s. 581.031, 581.131, and 581.145, F.S.)



IFAS Extension
*Center for Aquatic
and Invasive Plants*

\$35 for full set. Regional sets available.

Call for pricing: 352.392.1799

CAIP-education@ufl.edu

COOPERATIVE EXTENSION SERVICE, UNIVERSITY OF FLORIDA, INSTITUTE OF FOOD AND AGRICULTURAL SCIENCES, Larry R. Arrington, Director, in cooperation with the United States Department of Agriculture, publishes this information to further the purpose of the May 8 and June 30, 1914 Acts of Congress; and is authorized to provide research, educational information and other services only to individuals and institutions that function with non-discrimination with respect to race, creed, color, religion, age, disability, sex, sexual orientation, marital status, national origin, political opinions or affiliations. Information on copies for purchase is available from IFAS-Extension Bookstore, University of Florida, PO Box 110011, Gainesville, FL 32611-0011 or visit our Web site at: ifasbooks.ufl.edu. June 2007.

UF/IFAS Publication Number SP 431
1.800.226.1764

<http://plants.ifas.ufl.edu>

Plants by Scientific Name

<i>Abrus precatorius</i>	rosary pea
<i>Acacia auriculiformis</i>	earleaf acacia
<i>Albizia julibrissin</i>	mimosa tree
<i>Albizia lebbek</i>	woman's tongue
<i>Aleurites fordii</i>	tongue oil tree
<i>Alternanthera philoxeroides</i>	alligator weed
<i>Ardisia crenata</i>	coral ardisia
<i>Ardisia elliptica</i>	shoebutton ardisia
<i>Asparagus densiflorus</i>	asparagus fern
<i>Bauhinia variegata</i>	orchid tree
<i>Bischofia javanica</i>	bishopwood
<i>Broussonetia papyrifera</i>	paper mulberry
<i>Calophyllum antillanum</i>	Santa Maria
<i>Casuarina equisetifolia</i>	Australian pine
<i>Cinnamomum camphora</i>	camphor tree
<i>Colocasia esculenta</i>	wild taro
<i>Colubrina asiatica</i>	lather leaf
<i>Cupaniopsis anacardioides</i>	carrotwood
<i>Cyperus prolifer</i>	dwarf papyrus
<i>Dioscorea alata</i>	winged yam
<i>Dioscorea bulbifera</i>	air-potato
<i>Eichhornia crassipes</i>	water hyacinth
<i>Elaeagnus pungens</i>	silverthorn
<i>Eugenia uniflora</i>	Surinam cherry
<i>Ficus microcarpa</i>	laurel fig
<i>Hydrilla verticillata</i>	hydrilla
<i>Hygrophila polysperma</i>	East Indian hygrophila
<i>Hymenachne amplexicaulis</i>	West Indian marsh grass

Plants by Scientific Name

<i>Imperata cylindrica</i>	cogon grass
<i>Ipomoea aquatica</i>	water spinach
<i>Jasminum dichotomum</i>	Gold Coast jasmine
<i>Jasminum fluminense</i>	Brazilian jasmine
<i>Lantana camara</i>	lantana
<i>Leucaena leucocephala</i>	lead tree
<i>Ligustrum lucidum</i>	glossy privet
<i>Ligustrum sinense</i>	Chinese privet
<i>Limnophila sessiliflora</i>	limnophila
<i>Lonicera japonica</i>	Japanese honeysuckle
<i>Lygodium japonicum</i>	Japanese climbing fern
<i>Lygodium microphyllum</i>	Old World climbing fern
<i>Macfadyena unguis-cati</i>	cat's claw vine
<i>Manilkara zapota</i>	sapodilla
<i>Melaleuca quinquenervia</i>	melaleuca
<i>Melia azedarach</i>	Chinaberry
<i>Mimosa pigra</i>	catclaw mimosa
<i>Myriophyllum spicatum</i>	Eurasian water-milfoil
<i>Nandina domestica</i>	nandina
<i>Nephrolepis cordifolia</i>	tuberous sword fern, Boston fern
<i>Neyraudia reynaudiana</i>	silk reed
<i>Nymphoides cristata/N. indica</i>	crested floating-heart
<i>Paederia cruddasiana</i>	sewer vine
<i>Paederia foetida</i>	skunk vine
<i>Panicum repens</i>	torpedo grass
<i>Pistia stratiotes</i>	water-lettuce
<i>Psidium cattleianum</i>	strawberry guava

Plants by Scientific Name

<i>Psidium guajava</i>	guava
<i>Pueraria montana</i>	kudzu
<i>Rhodomyrtus tomentosa</i>	downy rose-myrtle
<i>Ricinus communis</i>	castor bean
<i>Ruellia tweediana</i>	Mexican petunia
<i>Salvinia minima</i>	water fern
<i>Salvinia molesta</i>	giant salvinia
<i>Sansevieria hyacinthoides</i>	bowstring hemp
<i>Sapium sebiferum</i>	Chinese tallow
<i>Scaevola sericea</i>	half-flower
<i>Schefflera actinophylla</i>	schefflera
<i>Schinus terebinthifolius</i>	Brazilian pepper
<i>Senna pendula</i>	Christmas senna
<i>Sesbania punicea</i>	Spanish gold
<i>Solanum tampicense</i>	wetland night shade
<i>Solanum viarum</i>	tropical soda apple
<i>Syngonium podophyllum</i>	nephtytis, American evergreen
<i>Syzygium cumini</i>	java plum
<i>Thespesia populnea</i>	seaside mahoe
<i>Tradescantia fluminensis</i>	small-leaf spiderwort
<i>Tradescantia spathacea</i>	oyster plant
<i>Urena lobata</i>	Caesar's weed
<i>Urochloa mutica</i>	pará grass
<i>Wedelia trilobata</i>	wedelia
<i>Wisteria sinensis</i>	Chinese wisteria

Plants by Common Name

air-potato	<i>Dioscorea bulbifera</i>
alligator weed	<i>Alternanthera philoxeroides</i>
asparagus fern	<i>Asparagus densiflorus</i>
Australian pine	<i>Casuarina equisetifolia</i>
bishopwood	<i>Bischofia javanica</i>
bowstring hemp	<i>Sansevieria hyacinthoides</i>
Brazilian jasmine	<i>Jasminum fluminense</i>
Brazilian pepper	<i>Schinus terebinthifolius</i>
Caesar's weed	<i>Urena lobata</i>
camphor tree	<i>Cinnamomum camphora</i>
carrotwood	<i>Cupaniopsis anacardioides</i>
castor bean	<i>Ricinus communis</i>
cat's claw vine	<i>Macfadyena unguis-cati</i>
catclaw mimosa	<i>Mimosa pigra</i>
Chinaberry	<i>Melia azedarach</i>
Chinese privet	<i>Ligustrum sinense</i>
Chinese tallow	<i>Sapium sebiferum</i>
Chinese wisteria	<i>Wisteria sinensis</i>
Christmas senna	<i>Senna pendula</i>
cogon grass	<i>Imperata cylindrica</i>
coral ardisia	<i>Ardisia crenata</i>
crested floating-heart	<i>Nymphoides cristata</i>
downy rose-myrtle	<i>Rhodomyrtus tomentosa</i>
dwarf papyrus	<i>Cyperus prolifer</i>
earleaf acacia	<i>Acacia auriculiformis</i>
East Indian hygrophila	<i>Hygrophila polysperma</i>
Eurasian water-milfoil	<i>Myriophyllum spicatum</i>
giant salvinia	<i>Salvinia molesta</i>

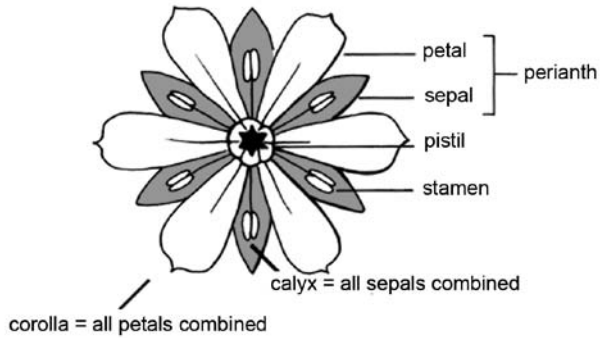
Plants by Common Name

glossy privet	<i>Ligustrum lucidum</i>
Gold Coast jasmine	<i>Jasminum dichotomum</i>
guava	<i>Psidium guajava</i>
half-flower	<i>Scaevola sericea</i>
hydrilla	<i>Hydrilla verticillata</i>
Japanese climbing fern	<i>Lygodium japonicum</i>
Japanese honeysuckle	<i>Lonicera japonica</i>
java plum	<i>Syzygium cumini</i>
kudzu	<i>Pueraria montana</i>
lantana	<i>Lantana camara</i>
lather leaf	<i>Colubrina asiatica</i>
laurel fig	<i>Ficus microcarpa</i>
lead tree	<i>Leucaena leucocephala</i>
limnophila	<i>Limnophila sessiliflora</i>
melaleuca	<i>Melaleuca quinquenervia</i>
Mexican petunia	<i>Ruellia tweediana</i>
mimosa tree	<i>Albizia julibrissin</i>
nandina	<i>Nandina domestica</i>
nephthytis, American evergreen	<i>Syngonium podophyllum</i>
Old World climbing fern	<i>Lygodium microphyllum</i>
orchid tree	<i>Bauhinia variegata</i>
oyster plant	<i>Tradescantia spathacea</i>
paper mulberry	<i>Broussonetia papyrifera</i>
pará grass	<i>Urochloa mutica</i>
rosary pea	<i>Abrus precatorius</i>
Santa Maria	<i>Calophyllum antillanum</i>
sapodilla	<i>Manilkara zapota</i>
schefflera	<i>Schefflera actinophylla</i>

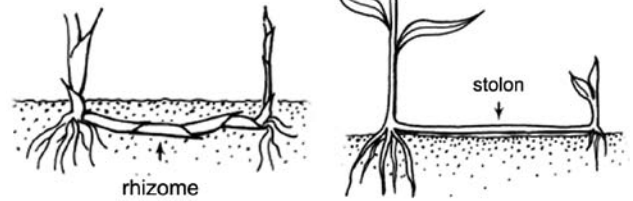
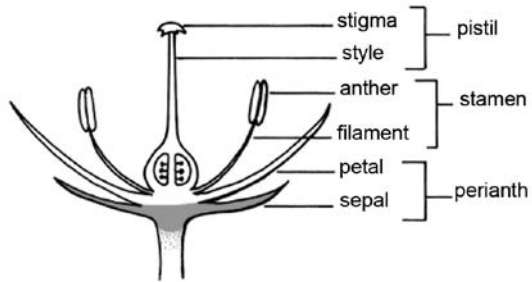
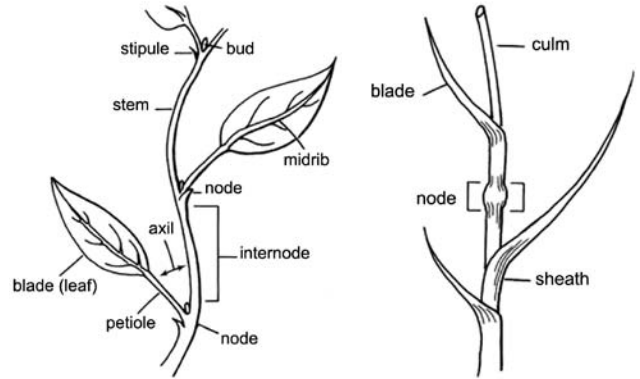
Plants by Common Name

seaside mahoe	<i>Thespesia populnea</i>
sewer vine	<i>Paederia cruddasiana</i>
shoebuttton ardisia	<i>Ardisia elliptica</i>
silk reed	<i>Neyraudia reynaudiana</i>
silverthorn	<i>Elaeagnus pungens</i>
skunk vine	<i>Paederia foetida</i>
Spanish gold	<i>Sesbania punicea</i>
strawberry guava	<i>Psidium cattleianum</i>
Surinam cherry	<i>Eugenia uniflora</i>
tongue oil tree	<i>Aleurites fordii</i>
torpedo grass	<i>Panicum repens</i>
tropical soda apple	<i>Solanum viarum</i>
tuberous sword fern, Boston fern	<i>Nephrolepis cordifolia</i>
water fern	<i>Salvinia minima</i>
water hyacinth	<i>Eichhornia crassipes</i>
water spinach	<i>Ipomoea aquatica</i>
water-lettuce	<i>Pistia stratiotes</i>
wedelia	<i>Wedelia trilobata</i>
West Indian marsh grass	<i>Hymenachne amplexicaulis</i>
wetland night shade	<i>Solanum tampicense</i>
white-flowered wandering jew	<i>Tradescantia fluminensis</i>
wild taro	<i>Colocasia esculenta</i>
winged yam	<i>Dioscorea alata</i>
woman's tongue	<i>Albizia lebbbeck</i>

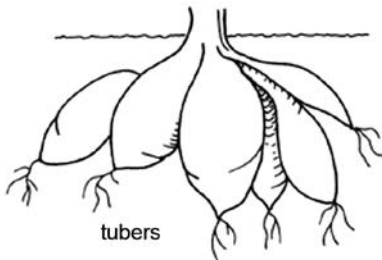
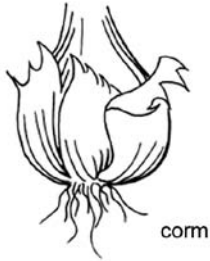
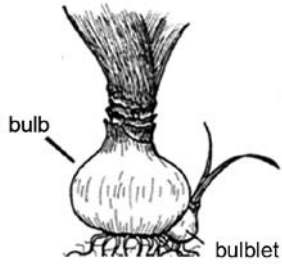
Flower Parts



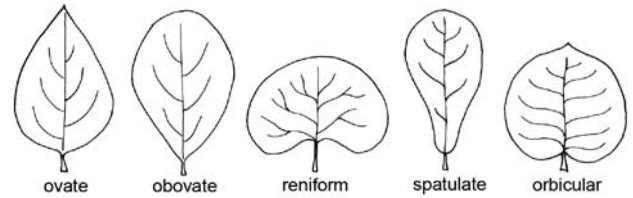
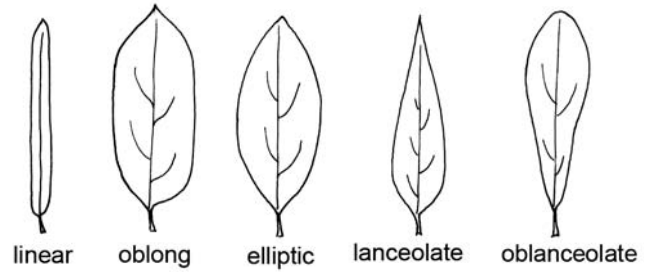
Stems



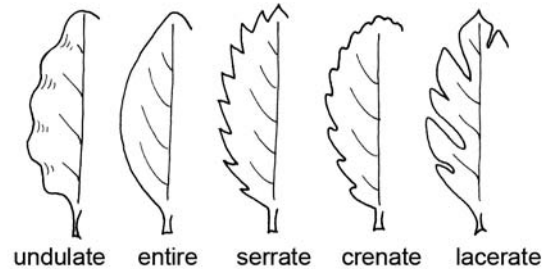
Roots



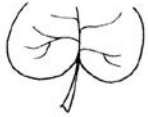
Leaf Shapes



Leaf Margins



Leaf Bases



cordate



rounded



squared



sagittate



cuneate



attenuate

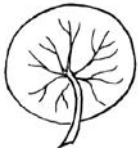
Leaf Attachments



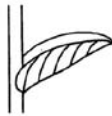
petiolate



sessile



peltate

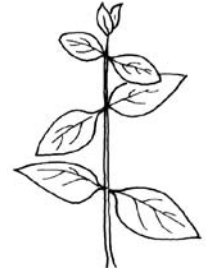


clasping

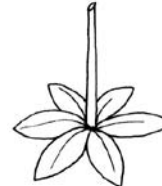
Leaf Arrangements



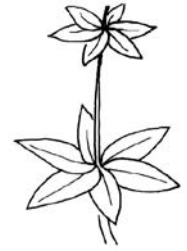
alternate



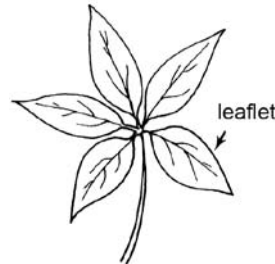
opposite



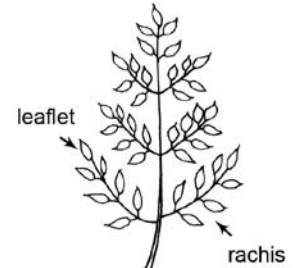
rosette



whorled



palmately compound



bipinnately compound

Habit



ascending



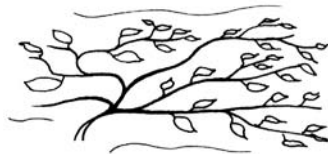
erect



sprawling



climbing



creeping

Glossary of Plant and Flower Parts

alternate (leaf arrangement) – adj. leaves occurring one at a node; one after another, not opposing.

axil – n. the angle found between any two organs or structures, as between the stem and a leaf.

axillary – adj. in an axil, growing in an axil, as buds.

bi-sexual – adj. an individual flower with both male and female parts.

blades – n. the leaf of a plant, especially grass; the flat or expanded portion of a leaf; lamina.

bract – n. a modified leaf, growing at the base or on the stalk of a flower; usually differs from other leaves in shape or color.

branchlet – n. a small usually terminal branch.

compound – adj. composed of two or more similar and united parts (as a leaf with 2 or more leaflets).

cordate (leaf base) – adj. with an indentation and rounded lobes at the base; the overall outline is usually ovate or heart-shaped.

deciduous – adj. that which falls down; losing foliage with change of seasons.

dioecious – adj. male and female flowers on separate plants.

drupe – n. a fleshy or pulpy fruit with the inner portion of the pericarp hard or stony and enclosing the seed.

elliptic (leaf shape) – adj. having the form of an oval or ellipsis; widest in the middle, similar to the outline of a football.

emersed – adj. rooted in shallow water and having most of the vegetative growth above the water.

entire (leaf margin) – adj. having a margin devoid of any indentations, teeth, or lobes.

glaucous – adj. bluish green; covered with a pale green bloom.

Glossary of Plant and Flower Parts

gland – n. a depression that secretes a substance (from a plant surface).

globose – adj. rounded; almost spherical; globular.

herb – n. any seed plant whose stem withers away to the ground after each season's growth; a seed plant with a green, non-woody stem. Example: lyre-leaf sage.

herbaceous (plants) – adj. soft, grassy, non-woody plants that according to season (autumn) lose their above-ground growth but leave intact roots and produce new growth in the new season (spring).

inflorescence – n. the characteristic cluster of flowers (of a plant).

leaf axil – n. the angle found between the leaf and the stem.

leaflet – n. individual blades found in a compound leaf.

legume – n. bearing seeds along the ventral suture; a leguminous plant.

linear (leaf shape) – adj. long and slender with parallel or nearly parallel sides.

marginal – adj. on the boundary line; on the edge (of a leaf).

node – n. a small bulge on the stem of a grass, at the base of a sheath

opposite (leaf arrangement) – adj. leaves or bracts on opposite sides of the stem/twig; occurring two at a node, directly across from one another.

ovate (leaf shape) – adj. egg-shaped and with the broader end towards the base.

ovoid – adj. egg-shaped.

Glossary of Plant and Flower Parts

panicle – n. (a tuft of plants) a branched racemose inflorescence often applied more widely to any branched inflorescence.

perennial – adj. a plant that grows for 3 or more years and usually flowers each year.

perfect (flower) – adj. with both male and female parts; bisexual.

petiole – adj. the slender stalk or stem of a leaf (small foot); also called a leaf stalk.

pinna – n. a leaflet or a primary division of a compound leaf (L. pinna, feather). Pinnae (or pinnas) – plural of pinna.

raceme – n. an inflorescence with many flowers arranged along an axis.

sepal – n. a lobe or segment of a flower's calyx; part of the outer floral leaves, usually green.

sessile (leaf attachment) – adj. sitting directly on a main stem or branch without the support of a leaf stalk.

sprawling (leaf habit) – adj. spread out in different directions.

trailing – adj. plants laying flat on the ground, on the surface, or on other vegetation.

twice compound – adj. leaflets that are again divided into leaflets.

twining – adj. winding around an object or another plant.

woody (plants) – adj. have woody stems and grow continuously throughout the year, many years in a row, without losing their above-ground growth with change of seasons.

Bibliography

1. Brown, KP; Keeler, W. "The History of Tung Oil." Wildland Weeds. Winter 2005, v. 9, no. 1. pp. 4-6.
2. Burks, KC. 2002. *Nymphoides cristata*: A Recent Adventive Expanding as a Pest Plant in Florida. Castanea; v. 67, no. 2. pp. 206-211.
3. Dressler, RL; Hall, DW; et al. 1988. Identification Manual for Wetland Plant Species of Florida. IFAS Publication, University of Florida, Gainesville, 267pp.
4. FNA Editorial Staff. 1993. Flora of North America North of Mexico, Volume 2, *Pteridophytes and Gymnosperms*. Oxford University Press, New York, Oxford. 475pp.
5. FNA Editorial Staff. 2002. Flora of North America North of Mexico, Volume 23, *Magnoliophyta: Commelinidae (in part): Cyperaceae*. Oxford University Press, New York, Oxford. 608pp.
6. FNA Editorial Staff. 2002. Flora of North America North of Mexico, Volume 26, *Magnoliophyta: Liliidae: Liliales and Orchidales*. Oxford University Press, New York, Oxford. 726pp.
7. Hall, DW. 1993. Illustrated Plants of Florida and the Coastal Plain. Maupin House, Gainesville, Florida. 431pp.
8. Hammer, R. 1999. Prohibited Plant Species. Department of Environmental Resources Management, Miami-Dade, Florida. 33pp.
9. Hammerton, JL. 2002. Invasive Alien Plants to Look Out For. Bahamas Journal of Science. 11: 2-22.
10. Langeland, KA and K. Craddock Burks. 1998. Identification and Biology of Non-Native Plants in Florida's Natural Areas, IFAS Publication SP 257. University of Florida, Gainesville. 165pp.
11. Tarver, DP, et al. 1978. Aquatic and Wetland Plants of Florida. Bureau of Aquatic Plant Management, Florida Department of Natural Resources, Tallahassee. 127pp.
12. Tobe, JD, Burks, KC, Cantrell, RW, Garland, MA, et al. 1998. Florida Wetland Plants – An Identification Manual. Florida Department of Environmental Protection, Tallahassee, FL. University of Florida, IFAS, Gainesville. 598pp.
13. Wunderlin, RP. 1998. Guide to the Vascular Plants of Florida. University Press of Florida, Gainesville. 816pp.
14. Nelson, Gil. 1996. The Shrubs and Woody Vines of Florida: A Reference and Field Guide. Pineapple Press, Sarasota, Florida. 391 pp.

FLEPPC = Florida Exotic Pest Plant Council

FLEPPC Category I

Invasive exotics that are altering native plant communities by displacing native species, changing community structures or ecological functions, or hybridizing with natives. This definition does not rely on the economic severity or geographic range of the problem, but on the documented ecological damage caused.

FLEPPC Category II

Invasive exotics that have increased in abundance or frequency but have not yet altered Florida plant communities to the extent shown by Category I species. These species may become ranked Category I, if ecological damage is demonstrated.

Watch for the 2007 Exotic Plant List
<http://www.fleppc.org>