Florida's Most Invasive Species

Florida's Exotic Pest Plant Council (EPPC) was formed in 1984 by environmental professionals to gather information on the impact of imported plants that escape into the wild and reproduce at the expense of Florida's natural plants and ecosystems. The Council is concerned with:

• the need to maintain biodiversity and the impacts that exotic pest plants have on diversity in impacted systems.

• the impact of exotic plants on the integrity of native plant community composition and function.

 habitat losses due to exotic plant infestations.

• the impacts of exotic plants on endangered species primarily due to habitat loss and alteration.

• the need to prevent habitat loss and alteration by comprehensive management for exotic pest plants.

• the socio-economic impacts of exotic pest plants (e.g., increased wildfire intensity and frequency in *Melaleuca*).

 changes in the seriousness of pest plants and identification of the worst problems.

• informing and educating resource managers about which species deserve to be monitored, and helping managers set priorities for management.

The EPPC defines an "exotic" as an alien organism, or one brought from the part of the world where it was native, either purposefully or accidentally; it then escaped into the wild in Florida where it reproduces either sexually or asexually.

They define "native" as a species that occurred in Florida at the time of European contact or the 1500s.

"Invasive" species are divided into three categories. Category I includes species that are widespread in Florida and have an established potential to invade and disrupt native plant communities. The EPPC, as of August, 1993, has included 33 species in Category I:

Abrus precatorius (rosary pea)

Acacia auriculiformis (earleaf acacia)

Ardisia elliptica (= A. humilis) (shoebutton ardisia)

Casuarina equisetifolia (= C. litorea) (Australian pine)

Casuarina glauca (suckering Australian pine) Cinnamomum camphora (camphor-tree) Colubrina asiatica (lather leaf) Cupaniopsis anacardioides (carrotwood) Dioscorea bulbifera (air potato)

Ficus microcarpa (= F. nitida; = F. retusa var. nitida) (laurel fig)

Jasminum dichotomum (Gold Coast jasmine) Lantana camara (lantana)



Japanese honeysuckle

Lonicera japonica (Japanese honeysuckle) Lygodium microphyllum (Old World climbing fern)

Melaleuca quinquenervia (melaleuca)

Melia azedarach (Chinaberry)

Mimosa pigra (catclaw mimosa)

Neyraudia reynaudiana (Burma reed; cane grass)

Paederia foetida (skunk vine)

Panicum repens (torpedo grass)

Pueraria montana (= P. lobata) (kudzu)

Rhodomyrtus tomentosus (downy myrtle)

Sapium sebiferum (popcorn tree; Chinese tallow tree)

Scaevola taccada var. sericea (= S. frutescens; = S. sericea) (scaevola; half-flower)

Schefflera actinophylla (= Brassaia actinophylla) (schefflera)

Schinus terebinthifolius (Brazilian pepper) Solanum viarum (tropical soda apple)

and these aquatic species: Eichornia crassipes (water hyacinth) Hydrilla verticillata (hydrilla) Ipomoea aquatica (water spinach) Pistia stratiotes (water lettuce)

Category II species are those that are localized but have a rapidly expanding population, or that have shown a potential to invade and disrupt native vegetation in other areas, or in other countries with climates similar to Florida. Category II includes 64 species: Adenanthera pavonina (red sandalwood) Agave sisalana (sisal hemp) Albizia lebback (woman's tongue) Antigonon leptopus (coral vine) Asparagus densiflorus (asparagus fern) Asystasia gangetica (Ganges primrose) Bauhinia variegata (orchid tree) Bischofia javanica (bischofia) Callisia fragrans (inch plant, spironema) Caloohyllum calaba (= C. incohyllum of au-

Calophyllum calaba (= C. inophyllum of au-thors) (mast wood; Alexandrian laurel) Casuarina cunninghamiana (Australian pine) Cereus undatus (night-blooming cereus) Cestrum diurnum (day jasmine) Cryptostegia grandiflora (Palay rubber vine) Dalbergia sissoo (Indian dalbergia, sissoo) Dichrostachys cinerea ("aroma" in Cuba) Enterolobium contortislilquum (ear-pod tree) Epipremnum pinnatum cv. Aureum (pothos) Eugenia uniflora (Surinam cherry) Ficus altissima (banyan tree) Ficus benjamina (weeping fig) Ficus elastica (India rubber tree) Flacourtia indica (governor's plum) Flueggea virosa (flueggea) Hibiscus tiliaceus (mahoe) Hyptage benghalensis (hyptage) Imperata brasiliensis (cogon grass) Imperata cylindrica (cogon grass) Jasminum fluminense (jasmine) Jasminum sambac (Arabian jasmine) Leucaena leucocephala (lead tree) Ligustrum sinense (privet) Lygodium japonicum (Japanese climbing fern) Macfadyena unguis-cati (cat's claw) Manilkara zapota (sapodilla) Melinis minutiflora (molasses grass) Merremia tuberosa (wood rose) Murraya paniculata (orange-jasmine) Nephrolepis multiflora (Asian sword fern) Ochrosia parviflora (= O. elliptica) (kopsia) Oeceoclades maculata (ground orchid) Oryza rufipogon (red rice) Paspalum notatum (bahia grass) Pennisetum purpureum (Napier grass) Pittosporum pentandrum (pittosporum) Pouteria campechiana (canistel) Psidium gujava (guava) Psidium littorale (= P. cattleianum) (strawberry

guava)

Rhoeo spathacea (= R. discolor) (oyster plant) Sansevieria hyacinthoides (= S. trifasciata) (bowstring hemp)

Solanum torvum (turkey berry) Syngonium podophyllum (arrowhead vine) Syzygium cumini (jambolan; Java plum) Syzygium jambos (rose apple) Tectaria incisa (incised halberd fern)



permission

Wedelia

Terminalia catappa (tropical almond) *Thespesia populnea* (seaside mahoe) *Triphasia trifoliata* (lime berry) *Wedelia trilobata* (wedelia)

and these aquatic species: Alternanthera philoxeroides (alligator weed) Colocasia esculenta (taro) Hygrophila polysperma (green hygro) Myriophyllum spicatum (Eurasian water-milfoil)

Category III species are those that are widespread and can form dense, monotypic populations, but primarily on disturbed sites such as roadsides, agricultural lands, and canal embankments:

Achyranthes indica (Devil's horsewhip)

Brachiaria mutica (Pará grass)

Cassia coluteoides (= Senna pendula) (climbing cassia)

Catharanthus roseus (Madagascar periwinkle) Cynodon dactylon (Bermuda grass) Dactyloctenium aegyptium (crowfoot grass) Eremochloa ophiuroides (centipede grass) Eucalyptus camaldulensis (Murray red gum) Furcraea cabuya (Central American sisal) Hyparrhenia rufa (jaraguá)

Indigofera spicata (creeping indigo)

Kalanchoe pinnata (life plant)

Mucuna pruriens (cow itch)

Nephrolepis hirsutula cv. superba (petticoat fern)

Panicum maximum (Guinea grass) Rhynchelytrum repens (Natal grass) Ricinus communis (castor bean) Rottboellia cochinchinensis (= R. exaltata) (itch

grass) Russelia equisetiformis (firecracker plant) Selaginella willdenovii (peacock fern) Sesbania emerus (= S. exaltata) (bequilla) Solanum diphyllum (solanum) Solanum tampicense (Tampico soda apple) Spathodea campanulata (African tulip tree)

Spermacoce verticillata (sensu Herndon, not sensu Wunderlin) (spermacoce)

Sporobolus jacquemontii (smut grass) Stenotaphrum secundatum (St. Augustine grass)

Urena lobata (Caesar's weed) Zebrina pendula (zebrina)

The EPPC wants reports of occurrences of exotic plant species outside of cultivated specimens. If you observe exotic plant species that appear to be spreading into natural areas, please relay that information to Bob Doren, EPPC Chairman, Everglades National Park Research Center, 305/ 242–7800.





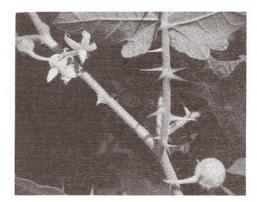
The Palmetto is printed on recycled paper with soy ink.

The Plant from Hell by Nancy C. Coile

The earliest record in Florida of tropical soda apple (*Solanum viarum* Dunal), another pest plant, is from Glades County in 1988. David Hall (KBN Engineering) believes that *Solanum viarum* may have been in Florida since 1981 or 1982, but in the short time since its arrival it may have infested over 150,000 acres. It has become the dominant vegetation in vast areas of the pastures in Glades, Hendry, and Highlands counties.

Soda apple is native to Argentina and Brazil. The plant is prickly, as are many other *Solanum* spp. Its appellation — the plant from hell refers to its presence near Devils Garden in Hendry County, or perhaps to the similarity of its common name, soda apple, to its name "Sodom apple" in British-speaking areas (Sodom is the biblical city noted for its wickedness).

Solanum viarum is an herbaceous perennial that may reach six feet (2 m) in height. The stems have hooked prickles, while the leaf blades and petioles have 3 /₄-inch (2 cm) long, rigid prickles. The flowers are white



in terminal clusters. Immature fruits are pale green with dark green veining, looking like a small striped watermelon. Mature fruits are yellowish, leathery-skinned, and about $1^{1}/_{2}$ inches (4 cm) across. Seeds are numerous, flat, bitter, and mucilaginous.

The Florida Department of Agriculture has issued a notice that this plant will be listed as a noxious weed, because it displaces native plants as well as forage plants, which will make it illegal to buy, sell, or move the plant.

Nancy Coile, Ph.D., is a botanist with Florida's Department of Agriculture and Consumer Services, Division of Plant Industry.

