

Alternatives to Invasive Plants Commonly Found in Central Florida Landscapes¹

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Invasive plants are non-native plants that form expanding populations in natural areas and other plant communities with which they were not previously associated (Langeland 2015). Invasive plants can cause ecological impacts, such as displacing native plants and associated wildlife or altering natural water flow and fire patterns.

Some ornamentals listed as invasive by the University of Florida IFAS Assessment of Non-Native Plants in Florida's Natural Areas or by the Florida Exotic Pest Plant Council are still in commercial production and widely found in Florida landscapes. Homeowners might replace invasive plants if non-invasive alternatives are researched, publicized and made readily available. By shifting production and use from invasive ornamentals to native or non-invasive cultivars, the nursery and landscape industry could benefit from potential revenue while fostering greater collaboration with state agencies and environmental groups.

University of Florida research and extension efforts over the last 20 years have focused on identifying non-invasive alternatives by assessing the invasive traits of popular non-native ornamentals, related genera, and their cultivars. In more recent years, University of Florida ornamental plant breeding efforts have focused on producing and trialing new sterile, non-invasive cultivars. Table 1 lists native and non-invasive, non-native ornamentals as alternatives to

invasive plants commonly used in Florida landscapes. Only plants considered to be generally available in the nursery trade are listed. Alternative plants are similar to respective invasive plants as much as possible in terms of size, habit, texture, and flower color. Non-native, non-invasive plants in Table 1 were determined to be non-invasive (with assessments of “not a problem species” or “may be used with caution”) by the IFAS Assessment of Non-Native Plants in Florida's Natural Areas (<http://assessment.ifas.ufl.edu/>), or have not yet been evaluated.

References

- Enloe, S.F. and K.A. Langeland. 2018. “Help protect Florida's natural areas from non-native invasive plants.” Circular1204. Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida. <http://edis.ifas.ufl.edu/ag108>
- Lieurance, Deah, S. Luke Flory, and Doria R. Gordon. 2016. *The UF/IFAS Assessment of Nonnative Plants in Florida's Natural Areas: History, Purpose, and Use*. SS-AGR-371. Gainesville: University of Florida Institute of Food and Agricultural Sciences. <http://edis.ifas.ufl.edu/ag376>

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Table 1. Invasive ornamentals commonly found in central Florida landscapes and commonly available native and non-native, non-invasive substitutes. Scientific names are those used by the UF/IFAS Assessment of Non-native Plants in Florida's Natural Areas (<http://assessment.ifas.ufl.edu/>), the U.S. National Plant Germplasm System (<https://npgsweb.ars-grin.gov/gringlobal/taxon/taxonomy/simple.aspx>), and the Atlas of Florida Plants by the Institute for Systematic Biology (<http://florida.plantatlas.usf.edu/Default.aspx>).

Invasive ornamental ¹		Native substitute	Non-native, non-invasive substitute ²
Scientific name	Common name		
<i>Albizia julibrissin</i>	Mimosa, Silk tree	<i>Ardisia escallonioides</i> , Marlberry (cold tender) <i>Cercis canadensis</i> , Eastern redbud <i>Chionanthus virginicus</i> , Fringe tree <i>Hamelia patens</i> , Firebush <i>Prunus umbellata</i> , Chickasaw plum, flatwoods plum <i>Vachellia farnesiana</i> , Sweet acacia	<i>Aloysia virgata</i> , Sweet almondshrub <i>Callistemon citrinus</i> , Red bottlebrush, crimson bottlebrush <i>Calliandra haematocephala</i> , Powderpuff <i>Handroanthus heptaphyllus</i> (formerly <i>Tabebuia heptaphylla</i>), Pink trumpet tree <i>Jatropha integerrima</i> , Peregrina (cold tender) <i>Lagerstroemia</i> spp., Crapemyrtle <i>Tabebuia impetiginosa</i> , Purple tabebuia, purple trumpet tree
<i>Ardisia crenata</i>	Coral ardisia	<i>Ilex glabra</i> , Gallberry, inkberry <i>Ilex vomitoria</i> (dwarf cultivars), Dwarf yaupon holly <i>Psychotria nervosa</i> , Wild coffee	<i>Ilex cornuta</i> , Chinese holly <i>Osmanthus heterophyllus</i> , False holly
<i>Casuarina equisetifolia</i>	Australian pine, Horsetail casuarina	<i>Juniperus virginiana</i> , Red cedar <i>Pinus</i> spp. (native species), Pine <i>Quercus geminata</i> , Sand live oak <i>Taxodium distichum</i> var. <i>distichum</i> , Bald-cypress <i>Taxodium distichum</i> var. <i>imbricarium</i> , Pond-cypress	<i>Juniperus chinensis</i> 'Torulosa', Torulosa juniper, Chinese juniper <i>Platycladus orientalis</i> , Arborvitae, Oriental arborvitae <i>Podocarpus macrophyllus</i> , Podocarpus, Japanese yew
<i>Cinnamomum camphora</i>	Camphor tree	<i>Ilex cassine</i> , Dahoon holly, dahoon <i>Magnolia grandiflora</i> , Southern magnolia <i>Magnolia virginiana</i> , Sweet bay, swamp bay <i>Persea borbonia</i> , Red bay <i>Quercus virginiana</i> , Live oak <i>Ulmus alata</i> , Winged elm	<i>Ulmus parvifolia</i> , Chinese elm, lacebark elm
<i>Colocasia esculenta</i>	Elephant ear, Wild taro	<i>Canna flaccida</i> , Golden canna <i>Pontederia cordata</i> , Pickerelweed <i>Sagittaria</i> spp. (native species), Arrowhead	<i>Alocasia</i> spp., Elephant ear <i>Alpinia</i> spp., Shell ginger, shell flower <i>Begonia nelumbifolia</i> , Lotus-leaf begonia <i>Caladium</i> × <i>hortulanum</i> , Caladium <i>Canna</i> × <i>generalis</i> , Canna lily <i>Hedychium</i> spp., Butterfly ginger <i>Heliconia</i> spp., Heliconia <i>Philodendron bipinnatifidum</i> , Selloum philodendron <i>Strelitzia reginae</i> , Bird-of-paradise <i>Zingiber zerumbet</i> , Pine cone ginger, pine cone lily
<i>Dioscorea bulbifera</i>	Air-potato	<i>Ipomoea alba</i> , Moonflower <i>Passiflora</i> spp. (native species), Passionvine	<i>Aristolochia maxima</i> , Florida Dutchman's pipe (See <i>Flowering Vines for Florida</i> (http://edis.ifas.ufl.edu/mg097) for additional vines)

<i>Lantana camara</i>	Lantana, Shrub Verbena	<i>Helianthus debilis</i> , Beach sunflower <i>Lantana depressa</i> , Pineland lantana (short lived), rockland shrubverbena <i>Lantana involucrata</i> , Wild sage <i>Salvia coccinea</i> , Tropical sage, red salvia <i>Stachytarpheta jamaicensis</i> , Blue porterweed, Jamaican snakeweed	<i>Argyranthemum frutescens</i> , Marguerite Daisy <i>Cuphea ignea</i> , cigar flower <i>Euryops chrysanthemoides</i> , <i>E. pectinatus</i> and related species (formerly in the genus, <i>Gamolepis</i>), African bush daisy, daisy bush <i>Evolvulus glomeratus</i> subsp. <i>grandiflorus</i> , Blue daze <i>Lantana camara</i> 'UF-1011-2' ^x , Bloomify™ Rose lantana (sterile) <i>Lantana camara</i> 'UF-1013A-2A' ^x , Bloomify™ Red lantana (sterile) <i>Lantana camara</i> 'UF-T3' ^x , UF-T3 lantana (sterile) <i>Lantana camara</i> 'UF-T4' ^x , UF-T4 lantana (sterile) <i>Rosa</i> spp., Rose <i>Salvia greggii</i> , Autumn sage
<i>Ligustrum sinense</i>	Chinese privet	<i>Agarista populifolia</i> , Florida leucothoe <i>Citharexylum spinosum</i> , Fiddlewood, Florida fiddlewood <i>Hamelia patens</i> , Firebush <i>Ilex glabra</i> , Gallberry, inkberry <i>Illicium floridanum</i> , Florida anise <i>Illicium parviflorum</i> , Star anise <i>Itea virginica</i> , Virginia sweetspire <i>Viburnum obovatum</i> , Walter's viburnum	<i>Aloysia virgata</i> , Sweet almondshrub <i>Camellia japonica</i> , Japanese camellia <i>Camellia sasanqua</i> , <i>Sasanqua camellia</i> <i>Feijoa sellowiana</i> , Feijoa, pineapple guava <i>Gardenia jasminoides</i> , Gardenia <i>Ilex</i> × 'Nellie R. Stevens', Nellie R. Stevens holly <i>Ilex cornuta</i> , Chinese holly <i>Leucophyllum frutescens</i> , Texas sage <i>Viburnum odoratissimum</i> , Sweet viburnum <i>Viburnum odoratissimum</i> var. <i>awabuki</i> , Awabuki viburnum <i>Viburnum suspensum</i> , Sandankwa viburnum
<i>Lonicera japonica</i>	Japanese honeysuckle	<i>Gelsemium sempervirens</i> , Carolina jessamine <i>Lonicera sempervirens</i> , Coral honeysuckle, trumpet honeysuckle	<i>Callerya reticulata</i> , Evergreen wisteria <i>Jasminum polyanthum</i> , Pink jasmine <i>Trachelospermum jasminoides</i> , Confederate jasmine (See <i>Flowering Vines for Florida</i> (http://edis.ifas.ufl.edu/mg097) for additional vines)
<i>Nandina domestica</i> (species type or wild type)	Nandina, Heavenly bamboo	<i>Agarista populifolia</i> , Florida leucothoe <i>Itea virginica</i> , Virginia sweetspire	<i>Nandina domestica</i> 'Firepower' ^y , 'Firepower' nandina (non-fruiting) <i>Nandina domestica</i> 'Gulfstream' ^y , 'Gulfstream' nandina (non-invasive) <i>Nandina domestica</i> 'Harbour Dwarf' ^y , 'Harbour Dwarf' nandina (non-invasive)

<i>Ruellia simplex</i>	Mexican petunia	<i>Silphium asteriscus</i> , Starry rosinweed <i>Sisyrinchium angustifolium</i> , Blue-eyed grass <i>Stachytarpheta jamaicensis</i> , Blue porterweed, Jamaican snakeweed <i>Stokesia laevis</i> , Stokes' aster, stokesia	<i>Eranthemum pulchellum</i> , Blue sage <i>Iris ser. Hexagonae</i> , Louisiana iris (especially those with purple flowers) <i>Plectranthus</i> spp., Plectranthus <i>Plumbago auriculata</i> , Plumbago, cape leadwort <i>Ruellia simplex</i> (formerly <i>brittoniana</i>), 'Purple Showers' ^y , 'Purple Showers' Mexican petunia (sterile, non-invasive by seed dispersal) <i>Ruellia simplex</i> 'R10-102' ^y , Mayan Purple Mexican petunia (sterile, non-invasive by seed dispersal) <i>Ruellia simplex</i> 'R10-108' ^y , Mayan White Mexican petunia (sterile, non-invasive by seed dispersal) <i>Ruellia simplex</i> 'R12-2-1' ^y , Mayan Compact Purple Mexican petunia (sterile, non-invasive by seed dispersal) <i>Ruellia simplex</i> 'R10-105-Q54' ^y , Mayan Pink Mexican petunia (sterile, non-invasive by seed dispersal) <i>Salvia</i> × 'Indigo Spires', Indigo spires salvia <i>Salvia farinacea</i> , Mealycup sage <i>Salvia leucantha</i> , Mexican sage <i>Stachytarpheta mutabilis</i> , Purple porterweed, snakeweed <i>Vernonia gigantea</i> , Giant ironweed
<i>Schinus terebinthifolius</i>	Brazilian pepper	<i>Citharexylum spinosum</i> , Fiddlewood <i>Hamelia patens</i> , Firebush <i>Hydrangea quercifolia</i> , Oakleaf hydrangea <i>Ilex cassine</i> , Dahoon holly, dahoon <i>Ilex vomitoria</i> , Yaupon holly <i>Viburnum obovatum</i> , Walter's viburnum	<i>Citrus</i> spp., Citrus <i>Cocculus laurifolius</i> , Laurel-leaf snailseed, cocculus <i>Ilex cornuta</i> , Chinese holly <i>Viburnum odoratissimum</i> , Sweet viburnum <i>Viburnum odoratissimum</i> var. <i>awabuki</i> , Awabuki viburnum <i>Viburnum suspensum</i> , Sandankwa viburnum
<i>Sphagneticola trilobata</i>	Wedelia	<i>Gaillardia pulchella</i> , Firewheel, Indian blanket-flower <i>Helianthus debilis</i> , Dune sunflower, beach sunflower <i>Mimosa strigillosa</i> , Powderpuff <i>Phyla nodiflora</i> , Turkey tangle, Frogfruit	<i>Arachis glabrata</i> , Rhizoma perennial peanut <i>Euryops chrysanthemoides</i> , <i>E. pectinatus</i> and related species (formerly in the genus, <i>Gamolepis</i>), African bush daisy, daisy bush <i>Ipomoea purpurea</i> , morning glory <i>Ipomoea batatas</i> , Ornamental sweetpotato
<i>Triadica sebifera</i>	Chinese tallow tree, Popcorn tree	<i>Acer rubrum</i> , Red maple <i>Betula nigra</i> , River birch	<i>Lagerstroemia</i> spp., Crapemyrtle <i>Vitex agnus-castus</i> , Chastetree, vitex

^zAs listed by the University of Florida/IFAS Status Assessment, <http://assessment.ifas.ufl.edu/>.

^yNon-invasive cultivar derived from the invasive species as determined by the University of Florida/IFAS Intraspecific Taxon Protocol (Lieurance, Deah, S. Luke Flory and Doria R. Gordon. 2013, rev. 2016. <http://edis.ifas.ufl.edu/ag376>).