

ENH₂₆

Salt-Tolerant Plants for Florida ¹

R. J. Black ²

Introduction

If you think that the state or Florida offers a wealth of plant material and good growing environment, you're right. But try gardening near or on the Atlantic and the Gulf coasts, and you may have problems. Winds carry salt spray inland, leaving salt deposits on plants. Salt causes water to move out of the plants in a process called exosmosis. Especially on young leaves, this often results in the marginal burning and loss of leaves in non-salt-tolerant plants. Plant damage may also result from driving rains and frequently heavy surf.

Coastal soil composition adds to gardening problems. Sand along the coast generally lacks organic matter or any other nutrient- and moisture-holding material, although this lack can be partly overcome by the addition of organic matter. Also, alkaline soils may lock up vital mineral nutrients needed for plant growth.

Salt tolerance of a plant relates to resistance and ability to grow under conditions of (1) high winds, (2) salt spray, (3) alkaline soils, and (4) infertile, sandy soils. The tolerance of a given plant to salt may be affected if any of the four conditions become extreme.

The tables included here provide a guide to selecting landscape plants for Florida's beach areas or areas with high levels of water salinity. In each table, plants are listed by common and Latin name and are divided into categories such as trees and shrubs. Within each category plants are grouped according to degree of salt tolerance. The range in Florida is indicated by: $\mathbf{N} = \text{North}$, $\mathbf{C} = \text{Central}$, $\mathbf{S} = \text{South}$.

Salt-Tolerant plants are highly resistant to salt drift and can be used in exposed environments.

Moderately Salt-Tolerant plants tolerate some salt spray but grow best when protected by buildings, fences, or plantings of more salt-tolerant species.

Slightly Salt-Tolerant plants have poor tolerance and should be always used well back of exposed areas and be protected by buildings, fences, or plantings of more salt-tolerant species.

Many common plants are listed, although numerous less common plants are not included. Extremely salt-sensitive plants have been excluded. Information is given on the range of growth in Florida and approximate plant height at maturity.

^{1.} This document is ENH-26 (which supersedes OH-26), one of a series of the Department of Environmental Horticulture, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida. Date first printed: December 1985. Reviewed: June 1997, September 2003. Please visit the EDIS website at http://edis.ifas.ufl.edu/

^{2.} R. J. Black, Extension Consumer Horticulturist, Extension Environmental Horticulturist; Department of Environmental Horticulture, Institute of Food and Agricultural Sciences, University of Florida, Gainesville, 32611.

- Table 1. Salt-Tolerant Trees for Florida
- Table 2. Salt-Tolerant Palms for Florida
- Table 3. Salt-Tolerant Shrubs for Florida
- **Table 4** . Salt-Tolerant Ground Covers for Florida
- Table 5 . Salt-Tolerant Vines for Florida

NOTE: Scientific plant names in the tables are correct according to the source *Hortus Third*, *A Concise Dictionary of Plants Cultivated in the United States and Canada*, revised and expanded by the Staff of the Liberty Hyde Bailey Hortorium, New York State University at Cornell University. Macmillian Publishing Co., Inc., 1976.

Table 1. Salt-Tolerant Trees for Florida

Common Name	Scientific Name	Range in Florida	Approximate Height
Salt-Tolerant Plants	•	•	
Black olive	Bucida buceras	S	40 feet
Bontia	Bontia daphnoide	S	30 feet
Frangipani	Plumeria spp.	S	15 feet
Geiger tree	Cordia sebestena	S	30 feet
Japanese pagoda-tree	Sophora japonica	S	60 feet
Live oak	Quercus virginiana	N,C,S	60 feet
Mahogany	Swietenia mahogani	S	40 feet
Ochrosia	Ochrosia elliptica	S	20 feet
Pigeon plum	Coccoloba laurifolia	S	70 feet
Satin leaf	Chrysophyllum oliviforme	S	30 feet
Silver button-bush	Conocarpus erectus	S	60 feet
Tabebuia	Tabebuia argentea	C,S	Variable
Moderately Salt-Tolerant P	lants	•	
Weeping fig	Ficus benjamina	S	50 feet
Chaste-tree	Vitex agnus-castus	N,C,S	20 feet
Dahoon	llex cassine	N,C,S	40 feet
Gumbo-limbo	Bursera simaruba	S	60 feet
Loquat	Eriobotrya japonica	N,C,S	20 feet
Magnolia	Magnolia grandiflora	N,C	75 feet
Mango	Mangifera indica	S	40 feet
Pongam	Pongamia pinnata	S	40 feet
Royal poinciana	Delonix regia	S	40 feet
Rubber plant	Ficus elastica	S	50 feet

Table 1. Salt-Tolerant Trees for Florida

Common Name	Scientific Name	Range in Florida	Approximate Height
Sweet acacia	Acacia farnesiana	N,C,S	10 feet
Slightly Salt-Tolerant Plants			
African tulip tree	Spathodea campanulata	S	50 feet
American holly	llex opaca	N,C	50 feet
Coral tree	Erythrina spp.	C,S	25 feet
Golden-shower	Cassia fistula	S	40 feet
Jerusalem thorn	Parkinsonia aculeata	N,C,S	25 feet
Pencil tree	Euphorbia tirucalli	S	20 feet
Sweet gum	Liquidambar styraciflua	N,C,S	100 feet
Yellow poinciana	Peltophorum pterocarpum	C,S	50 feet

Table 2. Salt-Tolerant Palms for Florida

Common Name	Scientific Name	Range in Florida	Appoximate Height
Salt-Tolerant Plants			
Bottle palm (LY) 1	Hyophorbe spp.	S	15 feet
Brittle thatch palm	Thrinax morrisil	S	15 feet
Cabbage palm	Sabal palmetto	N,C,S	60 feet
Coconut (LY)	Cocos nucifera	S	80 feet
Hurricane palm (LY)	Dictyosperma album	S	40 feet
Saw palmetto	Serenoa repens	N,C,S	10 feet
Silver palm	Coccothrinax argentata	S	20 feet
Washingtonia palm	Washingtonia spp.	N,C,S	80 feet
Moderately Salt-Tolerant Plants			
Acrocomia	Gastrococos crispa	C,S	40 feet

Table 2. Salt-Tolerant Palms for Florida

Common Name	Scientific Name	Range in Florida	Appoximate Height
African oil palm	Elaeis guineensis	S	60 feet
Areca palm	Chrysalidocarpus lutescens	S	30 feet
Canary island date palm (LY)	Phoenix canariensis	N,C,S	30 feet
Christmas palm (LY)	Veitchia merrillii	S	20 feet
Date palm (LY)	Phoenix dactylifera	C,S	50 feet
European fan	Chamaerops humilis	N,C,S	10 feet
Fiji island fan palm (LY)	Pritchardia pacifica	S	30 feet
Gingerbread palm	Hyphaene thebaica	S	25 feet
Lady palm	Rhapis excelsa	N,C,S	15 feet
Paurotis	Acoelorrhaphe wrightii	S	40 feet
Pindo palm	Butia capitata	N,C,S	30 feet
Queen palm	Arecastrum romanzoffianum	C,S	40 feet
Royal palm	Roystonea elata	S	80 feet
Windmill palm (LY)	Trachycarpus fortunei	N,C,S	20 feet

Table 3. Salt-Tolerant Shrubs for Florida

Common Name	Scientific Name	Range in Florida	Approximate Height
Salt-Tolerant Plants			
Adam's-needle	Yucca smalliana	N,C,S	4 feet
African milk brush	Synadenium grantii	S	8 feet
Bay cedar	Suriana maritima	S	20 feet
Crown-of-thorns	Euphorbia milii	C,S	3 feet
Inkberry	Scaevola plumieri	S	6 feet

Table 3. Salt-Tolerant Shrubs for Florida

Common Name	Scientific Name	Range in Florida	Approximate Height
Marlberry	Ardisia escallonoides	S	20 feet
Milkstripe euphorbia	Euphorbia lactea	S	15 feet
Natal plum	Carissa grandiflora	C,S	10 feet
Oleander	Nerium oleander	N,C,S	20 feet
Pittosporum	Pittosporum tobira	N,C,S	15 feet
Sea grape	Coccoloba uvifera	S	25 feet
Southern wax myrtle	Myrica cerifera	N,C,S	25 feet
Yaupon	llex vomitoria	N,C	25 feet
Moderately Salt-Tolerant Pla	nts		<u>'</u>
Barbados flower-fence	Caesalpinia pulcherrima	S	15 feet
Bottle brush	Callistemon rigidus	N,C,S	15 feet
Devil's-backbone	Pedilanthus tithymaloides	C,S	6 feet
Blue sage	Eranthemum pulchellum	C,S	5 feet
Fatsia	Fatsia japonica	N,C,S	4 - 7 feet
Fire-thorn	Pyracantha coccinea	N,C	20 feet
Giant milkweed	Calotropis gigantea	S	15 feet
Grape hollies	<i>Mahonia</i> spp.	N,C	6 - 12 feet
Hedge cactus	Cereus peruvianus	N,C,S	25 feet
Holly malpighia	Malpighia coccigera	S	3 feet
Indian hawthorn	Rhaphiolepis indica	N	5 feet
Ixora	Ixora coccinea	C,S	15 feet
Jade plant	Crassula argentea	S	4 feet
Lucky nut	Thevetia peruviana	C,S	10 - 15 feet
Night cestrum	Cestrum nocturnum	C,S	12 feet

Table 3. Salt-Tolerant Shrubs for Florida

Common Name	Scientific Name	Range in Florida	Approximate Height
Pseuderanthemum	Pseuderanthemum atropurpureum	C,S	4 feet
Rattle box	Sesbania punicea	N,C,S	8 feet
Ribbon bush	Homalocladium platycladum	C,S	4 feet
Satsuki azalea	Rhododendron indicum	N,C,S	6 feet
Scarlet bush	Hamelia patens	S	12 feet
Vitex	Vitex trifolia 'Variegata'	C,S	12 feet
Slightly Salt-Tolerant Plants	•	,	
Aralia	Polyscias spp.	S	6 - 15 feet
Butterfly bush	Buddleia officinalis	N,C,S	20 feet
Chinese hat plant	Holmskioldia sanguinea	C,S	Variable
Copper leaf	Acalypha wilkesiana	C,S	15 feet
Coral plant	Jatropha spp.	S	10 - 15 feet
Crape jasmine	Tabernaemontana divaricata	C,S	10 feet
Crape myrtle	Lagerstroemia indica	N,C,S	20 feet
Croton	Codiaeum variegatum	C,S	10 feet
Cuphea	Cuphea hyssopifolia	C,S	1 - 2 feet
Hibiscus	Hibiscus rosa-sinensis	C,S	15 feet
Japanese privet	Ligustrum japonicum	N,C,S	15 feet
Pineapple guava	Acca sellowiana	N,C,S	18 feet
Plumbago	Plumbago auriculata	C,S	Variable
Poinsettia	Euphorbia pulcherrima	N,C,S	12 feet
Princess flower	Tibouchina urvilleana	C,S	15 feet
Rice-paper plant	Tetrapanax papyriferus	N,C,S	10 feet
Sanchezia	Sanchezia speciosa	C,S	6 feet

Table 3. Salt-Tolerant Shrubs for Florida

Common Name	Scientific Name	Range in Florida	Approximate Height
Snow bush	Breynia nivosa	C,S	10 feet
Thryallis	Galphimia glauca	C,S	6 - 8 feet
Wintergreen barberry	Berberis julianae	N	6 feet
Yellow-elder	Tecoma stans	C,S	15 feet

Table 4. Salt-Tolerant Ground Covers for Florida

Common Name	Scientific Name	Range in Florida	Approximate Height
Salt-Tolerant Plants	•		
Confederate jasmine	Trachelospermum jasminoides	N,C,S	Variable
Coontie	Zamia integrifolia	N,C	24 inches
Creeping fig	Ficus pumila	N,C,S	12 inches
Dichondra	Dichondra carolinensis	N,C,S	2 inches
English ivy	Hedera helix	N,C,S	4-6 inches
Fig-marigold	Glottiphyllum depressum	S	6 inches
Hottentot fig	Carpobrotus edulis	C,S	6 inches
Lily turf	Ophiopogon japonicus	N,C,S	18 inches
Lirope	Lirope spicata	N,C,S	18 inches
Purslane	Portulaca spp.	N,C,S	6 inches
Running strawberry bush	Euonymus fortunei	S	10 inches
Virginia creeper	Parthenocissus quinquefolia	N,C,S	Variable
Weeping lantana	Lantana montevidensis	C,S	18 - 24 inches
Moderately Salt-Tolerant Pl	ants	,	•
Kalanchoe	Kalanchoe spp.	S	24 inches
Blood leaf	Alternanthera spp.	C,S	12 inches

Table 4. Salt-Tolerant Ground Covers for Florida

Common Name	Scientific Name	Range in Florida	Approximate Height	
Mexican flame vine	Senecio confusus	C,S	24 inches	
Purple queen	Setcreasea pallida	N,C,S	24 inches	
Wandering jew	Zebrina pendula	N,C,S	6 inches	
Slightly Salt-Tolerant Plants	Slightly Salt-Tolerant Plants			
Coleus	Coleus blumei	N,C,S	12 - 18 inches	
Partridge berry	Mitchella repens	N,C,S	Variable	
Transvaal daisy	Gerbera jamesonii	N,C,S	18 inches	

Table 5. Salt-Tolerant Vines for Florida

Common Name	Scientific Name	Range in Florida	Approximate Height		
Salt-Tolerant Plants	• • • • • • • • • • • • • • • • • • • •				
Algerian ivy	Hedera canariensis	N,C,S	Variable		
Bougainvillea	Bougainvillea spp.	C,S	Variable		
Cape honeysuckle	Tecomaria capensis	C,S	Variable		
Night blooming cereus	Hylocereus undatus	S	Variable		
Rubber vine	Cryptostegia grandiflora	S	Variable		
Moderately Salt-Tolerant Pl	ants	_!			
Creeping fig	Ficus pumila	N,C,S	Variable		
Pink allamanda	Mandevilla splendens	C,S	Variable		
Wax plant	Hoya carnosa	S	Variable		
Woolly congea	Congea tomentosa	S	Variable		
Slightly Salt-Tolerant Plants					
Allamanda	Allamanda spp.	C,S	Variable		
Chalice vine	Solandra guttata	C,S	Variable		

Table 5. Salt-Tolerant Vines for Florida

Common Name	Scientific Name	Range in Florida	Approximate Height
Downy jasmine	Jasminum multiflorum	C,S	Variable
Painted trumpet	Clytostoma callistegioides	N,C,S	Variable
Queens wreath	Petrea volubilis	S	Variable
Rangoon creeper	Quisqualis indica	S	Variable
Star jasmine	Jasminum nitidum	C,S	Variable