

Salt Tolerant Plants

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If you think that the Florida Keys offers a wealth of plant material and good growing environment, you're right. But try landscaping near or on the Atlantic and the Gulf coasts or next to your canal, and you may have problems. Hurricane and dry season frontal storm 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 plants that are not salt tolerant. Plant damage may also result from driving rains and frequently heavy surf.

Coastal soil composition adds to landscaping 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, the coral rock soils are alkaline and 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.

To check your plants' salt tolerance level, go to the EDIS Web site, <http://edis.ifas.ufl.edu>, and search for Dr. Black's publication, "Salt Tolerance of Landscape Plants for South Florida." This publication reviews the salt tolerance of trees, palms, shrubs, ground covers, and vines dividing plants into: 1) **Good salt-tolerant** plants are highly resistant to salt drift and can be used in exposed environments; 2) **Moderately Salt-Tolerant** plants tolerate some salt spray but grow best when protected by buildings, fences, or plantings of more salt-tolerant species. 3) **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.

To reduce salt spray damage use the following options into your landscape design recommended by the University of Virginia Extension Service publication, “Trees and Shrubs that Tolerate Saline Soils and Salt Spray Drift.”

- Carefully designing planting areas to reduce exposure of trees and shrubs to aerial salt spray. Establish windbreaks to prevent “wind tunnels” that can carry aerial salts farther and at higher wind speeds. Use salt-tolerant shrubs or herbaceous borders (especially denser evergreens) as windbreaks to help intercept aerial salt drift before it reaches sensitive plants.
- Grouping tree and shrub species to shield them from wind and drift, with the most tolerant species in higher exposure areas to shield moderately tolerant species.
- If feasible, rinse salt spray off trees and shrubs after storms and high winds.
- Avoid planting species that are slightly salt tolerant in areas that will receive a direct hit from the salt laden winds.

As one might expect there are plants that can hold up to the salt, so do your homework and select your landscape wisely for the next wind that blows.