

degree of salt tolerance plants will need to survive. Soil salinity is determined by using a conductivity meter to measure the electrical conductivity of a saturated sample of soil (EC_e). Water-holding ability and nutrient-holding ability of the soil influence the effect of soil salts on plants. For a sandy loam soil, the U.S. Salinity Laboratory considers that plants with good salt tolerance can tolerate values of EC_e more than 6 deciSiemens per meter (dS/m, equivalent to millimhos per centimeter) (2,800 ppm), plants with moderate salt tolerance can tolerate values of EC_e between 4.5 and 6 dS/m (2,600-2,800 ppm), and plants with low salt tolerance can only tolerate salts with EC_e 's less than 4.5 dS/m (2,600 ppm) (4,9,10). Since sandy soils hold less water and nutrients, and clay or organic soils hold more water and nutrients, the values for each tolerance range would be lower for sandy soils and higher for organic or clay soils. However, while EC_e is a good indicator of total salt content, it does not indicate the composition of salts in a soil. The relative abundance of an individual salt can still lead to plant injury, even though total soil salinity may be low.



live oak

Salt Tolerance of Landscape Plants

The following table is a guide to selecting landscape plants for Florida's coastal areas or areas with saline irrigation water. Most of the information reflects salt tolerance based on soil salinity, but where specific tolerance to salt spray or winds has been reported, it is so noted. Plants native to Florida are also indicated. In the table, plants are listed by common and scientific names and are divided into categories such as trees and shrubs. Within each category, plants are grouped according to degree of salt tolerance. Most common landscape plants are included in the list, as well as many less-common but highly salt-tolerant plants. This table lists plants adapted to north Florida (Pensacola to Jacksonville and south to Ocala); other publications list the salt tolerance of plants adapted to central and south Florida.

Plants listed with good salt tolerance can be used in exposed coastal areas or in areas with saline irrigation water. Moderate salt tolerance indicates plants which can tolerate some saline conditions but grow best when protected from direct exposure to salt. Plants with low salt tolerance are sensitive to salt and should not be used in coastal areas, or should be well-protected from salt spray and saline irrigation water.