

Salt Tolerant Plants (Univ of Minnesota Sustainable Urban Landscape Series)

<http://www.sustland.umn.edu/maint/nutrition.html>

Salt has been used as a de-icer on sidewalks, roadways, highways, and driveways for many years. The salt used is usually sodium chloride (NaCl), a combination of elements that are not beneficial to plants. De-Plants located along de-iced hardscapes often suffer a certain amount of salt damage due to spray from passing vehicles, snow removal, and leaching. According to Professor Carl Rosen of the Department of Horticultural Science, salt leaches into the plant's root zone where it blocks the plant's physiological mechanism to absorb water. The result is a condition called "physiological drought" in which water molecules are held tightly to salt ions. Symptoms of physiological drought include stunting, stem and bud dieback, leaf burn, discolored foliage, and premature leaf drop.

Homeowners can prevent these conditions by using less salt and targeting areas of high-risk such as slopes and hills, and sharp curves. Salt should also be mixed with an abrasive material such as sand and users should wait to apply salt until after snowfall and snow removal. There are also alternatives to salt that are less damaging to plants: calcium chloride, magnesium chloride, etc. For a complete list of de-icing alternatives, see Delahaut and Hasselkus' online article, [Salt Injury to Landscape Plants](#), from the University of Wisconsin Extension Service. Once warm weather has set in, salt levels in the soil can be reduced significantly by watering the areas well to leach salts from the root zone.

When planting herbaceous plant materials along walkway or driveway where salt is used to de-ice in winter, it is important to select plants with high tolerances to salt.

Herbaceous Plants with High Salt-Tolerance

Scientific name	Common name
<i>Aquilegia micrantha</i>	Cliff columbine
<i>Calamagrostis acutifolia</i> 'Karl Foerster'	Karl Foerster reed grass
<i>Dianthus pulminarius</i> 'Allwood'	Helen Allwood pinks
<i>Dianthus</i> x 'Little Boy Blue'	Little Boy Blue pinks
<i>Dianthus gratianopolitanus</i>	Spotti pinks
<i>Lotus corniculatus</i>	Bird's foot trefoil
<i>Machaeranthera xylorrhiza</i>	Common woody aster
<i>Schizachyrium scoparium</i>	Little bluestem
<i>Waldsteinia fragarioides</i>	Barren strawberry

Herbaceous Plants with Moderate Salt-Tolerance

Scientific name	Common name
<i>Artemisia schmidtiana</i> 'Silver Mound'	Silver mound estuca a
<i>Festuca</i> 'Elijah Blue'	Elijah Blue estuca grass
<i>Hosta</i> spp.	Hosta
<i>Hemerocallis</i> 'Stella d'Oro'	Stella d'oro daylily
<i>Hemerocallis fulva</i>	Tawny daylily
<i>Helleborus orientalis</i>	Lenten rose
<i>Heuchera micrantha</i> 'Palace Purple'	Palace Purple coral bells
<i>Oenothera caespitosa</i>	Evening primrose
<i>Sedum spectabile</i> 'Autumn Joy'	Sedum 'Autumn Joy'
<i>Sphaeralcea coccinea</i>	Prairie mallow
<i>Yucca glauca</i>	Soapweed