

# Salt tolerance

Maintain beautiful green turf even in high-saline soils and where effluent water is used with our salt-tolerant program varieties. These salt-tolerant varieties are well suited for use near seashores, in desert climates, and regions of the country where water quality continues to be an issue.



## Featured varieties

Tall Fescues:

- Tar Heel II
- Silverado II
- Endeavor

## What qualifies Scotts Turf-Seed varieties as salt tolerant?

The interest in salinity-tolerant turfgrasses grows as the availability of potable water for irrigating decreases. Therefore, Pure-Seed Testing, Inc. conducted turf survival tests in greenhouse saltwater baths, to determine which varieties tolerate high levels of salinity. Different ppm levels of salt were used for the various species of turfgrass, depending on the inherent tolerance to salt of the turfgrass species being tested. Any variety that had 50% or greater survival rate over the length of the study was deemed qualified to receive the Scotts Turf-Seed salt tolerant icon.

## Research & breeding work

Pure-Seed Testing, Inc. identifies plants with salinity tolerance for use in breeding projects and to find existing varieties that have natural high salt tolerance. Using a synthetic ocean salt (Instant Ocean from Aquarium Systems), a salt bath was created, containing six different salts as well as minor elements. Plants were placed in saltwater baths in each of four replications for a specified period of time. Percent survival was calculated, based on the number of plants maintaining green colour versus number of dead plants subjected to a salt bath.

### i. Fine Fescue

Variety	ppm NaCl	Survival
Seabreeze GT	10000	94.9%
Florentine GT	10000	60.0%

### ii. Tall Fescue

Variety	ppm NaCl	Survival
Tar Heel	25000	85.0%
Pure Gold	25000	66.0%



### iii. Kentucky Bluegrass

Variety	ppm NaCl	Survival
Moonlight SLT	10000	65.0%
North Star	10000	57.5%
Moonbeam	10000	50.0%

### iv. Perennial Ryegrass

Variety	ppm NaCl	Survival
Brightstar	17000	84.0%
Salinas	22000	61.7%
Gray Star	22000	57.7%
Silver Dollar	22000	56.9%

### v. Seashore Paspalum

Variety	ppm NaCl
SeaSpray	Up to 17000 for germination

