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This fast-growing, heat-tolerant species is believed to be native to the West Indies and Mexico. In the Southeast U.S., St. Augustinegrass is often maintained in fertile, well-drained soils throughout the coastal regions along the Atlantic Ocean and the Gulf of Mexico. The severely limited lowtemperature hardiness of St. Augustinegrass limits its use as turf in Tennessee. Presently, a few St. Augustinegrass lawns are maintained in or near Chattanooga and Memphis. Several of these lawns are located in partial shade, on southfacing slopes or near landscape structures that provide protection from the cold. 'Common' and 'Roselawn' are examples of light-green, coarsetextured, forage-type varieties that lack shade tolerance and disease resistance. Several turf-type varieties, including 'Bitterblue,' 'DelMar,' 'Floratine,' 'Jade,' 'Raleigh' and 'Seville,' are tolerant of shade. Although the varieties DelMar and Raleigh have improved cold tolerance, they are not usually recommended north of Birmingham, AL or Augusta, GA. The species is established vegetatively, has poor wear tolerance and often requires routine dethatching. Chinch bug is a common insect pest of St. Augustinegrass.



St. Augustinegrass, Orlando, FL

## Chronological history, method of breeding and descriptions of several varieties of St. Augustinegrass.

Variety, Experimental (EN) and/or Plant Patent (PP) Number	Release Information	Method of Breeding	Description
Bitterblue	~ 1930	Selection based on finer texture, greater stand density and darker green color compared to Common	Improved low- temperature and shade tolerance compared to Common; susceptible to chinch bug attack and gray leaf spot disease; and less tolerant of triazine herbicides than many other varieties

Variety, Experimental (EN) and/or Plant Patent (PP) Number	Release Information	Method of Breeding	Description
Floratine	1959, Florida AES	Natural selection – most likely a seedling from Bitterblue; and originally selected in 1948 and maintained at Belle Glade, FL before being moved to Gainesville, FL in 1953	Low-growing, fine- textured and blue-green color with branching stolons; and rate of ground coverage similar to Bitterblue
Floratam, EN FA-110	1973, Florida Foundation Seed, Inc. and Texas A&M University (developed at University of Florida and Texas A&M University)	Probable seedling descendent of Roselawn, a pasture-type; unknown male parent; and selected based on resistance to the St. Augustine decline strain of panicum mosaic virus	Blue-green leaf color with a distinctive, pinkish color in the collars; plants have thick stolons and long spikelets; improved resistance to gray leaf spot compared to Bitterblue; and relatively poor tolerance of low temperatures and shade
Seville	1978, Pursley, Inc. (developed by O. M. Scott & Sons Company)	Clone obtained from #1081	Dark green color; finer texture than Floratam; semi-dwarf; limited low-temperature hardiness compared to Delmar, Raleigh and Palmetto; very good shade tolerance; and susceptible to chinch bug and sod webworm attacks
Raleigh	1980, North Carolina State University AES	Obtained from a lawn in Raleigh, NC; individual plant selection for five years based on winter-hardiness; and 10 best plants were selected for increase the sixth year	Coarse-textured; medium-green color; well-adapted in acidic, heavy clay soils; resistant to St. Augustinegrass decline virus; very good cold tolerance; susceptible to brown patch disease and chinch bug attack
Floralawn, EN FA-108	1985, Florida Foundation Seed, Inc. (developed at University of Florida)	Probable seedling descendent of Roselawn, a pasture-type; unknown male parent; and selected based on resistance to the St. Augustine decline strain of panicum mosaic virus and southern chinch bug	Blue-green leaf color and pinkish color in collars; thick stolons; long spikelets; poor shade tolerance; more resistant to atrazine and leaf spot disease than Bitterblue; and better fall color retention than Floratam

Variety, Experimental (EN) and/or Plant Patent (PP) Number	Release Information	Method of Breeding	Description
DelMar	1986, O. M. Scott & Sons Company	Clone from a single plant obtained by crossing Seville and a cold-tolerant selection from TN	Dark-green, fine- textured, semi-dwarf variety resistant to St. Augustine decline virus and gray leaf spot; very good low-temperature tolerance; and good shade tolerance
Jade	1988, O. M. Scotts & Sons Company	Clone from a single plant obtained by crossing Seville and a cold-tolerant selection from TN	Very fine texture; dark-green color; semi- dwarf; shade-tolerant (> DelMar); stolons have short internodes; good low-temperature tolerance; and poor chinch bug resistance
Sunclipse	1988, Pacific Sod Company (developed by O. M. Scott & Sons Company)	Clone from a single plant obtained by crossing a cold- tolerant selection from TN and an unreleased variety from FL	Fine-textured; dark- green color; good cold tolerance; very good shade tolerance; stolons have short internodes; and very well-adapted to climatic conditions in southern CA
FX-10, PP7852	1990, exclusive license, Florida Sod Growers Cooperative (developed at University of Florida Research and Education Center, Ft. Lauderdale, FL)	Hybrid produced in 1983 from four accessions from Africa	Blue-gray color; coarse texture; poor low-temperature and shade tolerance; less susceptible to leaf spot disease than Bitterblue and Floratam; good resistance to southern chinch bug attack; and greater drought tolerance than Floralawn and Floratam

## **References:**

Alderson, J. and W. C. Sharp. 1995. Grass Varieties in the United States. U. S. Dept. Agr., Lewis Publishers, CRC Press, Inc., Boca Raton, FL, formerly Agriculture Handbook No. 170, Revised Nov.1994, S.C.S., U.S. Dept. Agr., Washington, D. C. Hanson, A. A. 1972. Grass Varieties in the United States, Agricultural Research Service, U.S.D.A., Agriculture Handbook Number 170, Washington, D. C.

McCarty, L. B., and J. L. Cisar. 1995. St. Augustinegrass for Florida Lawns *In* Florida Lawn Handbook, SP 45, Dept. Environ. Hort., Institute of Food and Agricultural Sciences, Cooperative Extension Service, University of Florida, Gainesville, FL.

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