

Turfgrass Selection Fescues

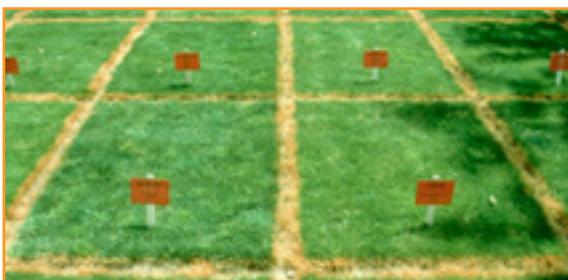
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There are more than 100 species of fescues worldwide. Annual species are usually considered weeds. Perennial species including chewings (*F. rubra* L. ssp. *falax* Thuill., *F. rubra* L. var. *commutata* Gaud.), hard (*F. longiafolia* auct. non Thuill.), sheep (*F. ovina* L.), slender creeping (*F. rubra* L. ssp. *trichophylla*, *F. rubra* var. *littoralis* Vasey) and strong creeping (*F. rubra* L. *rubra*) fescues have narrow leaves and are categorized as fineleaf fescues. Species including tall fescue (*F. arundinacea* Schreb.) have wider leaves and are categorized as coarse fescues.

Fineleaf Fescues

Chewings Fescue

This light-to-medium green, bunch-type species is indigenous to cool, forested areas of Europe where it is valued as a cold- and shade-tolerant turfgrass. Chewings fescue is deeply rooted and often forms a denser, more upright turf than strong creeping fescue. A lack of stolons and rhizomes contributes to its poor traffic tolerance and recuperative ability. Although tolerant of drought, chewings fescue is often dormant during hot, dry summer months. The species is prone to disease during hot, wet weather and can produce excessive thatch. In Tennessee, chewings fescue is not generally as persistent as strong creeping fescue and hard fescue. Chewings fescue grows best in slightly acidic, infertile and well-drained soils. This



Fine Fescue Variety Trial

species is a common component of seed mixtures intended for use in shaded landscapes in north central and upper East Tennessee.

Varieties

Twenty-three chewings fescues were evaluated in 20 states and Quebec during the 1998 NTEP Fineleaf Fescue Test. Presently, 14 varieties of chewings fescue are entered in the 2003 NTEP Fineleaf Fescue Test for evaluation in 22 states and Quebec. Results of the 1998 NTEP Test indicate that varieties including 'Ambrose,' 'Ambassador,' 'Treasure,' 'Bridgeport,' 'Culombra,' 'Intrigue,' 'Shadow II,' 'Banner III,' 'Brittany,' 'Longfellow II,' 'Magic,' 'SR5100' and 'Jamestown II' retain color during and recover well following extended periods of drought. In 2005, the chewings fescue varieties '7 Seas,' 'Ambassador,' 'Cascade,' 'Compass,' 'DP 77-9885,' 'IS-FRC-17,' 'Longfellow II,' 'PST-4TZ,' 'SR5130' and 'Zodiac' demonstrated resistance to dollar spot.

Hard Fescue

Hard fescue, a non-creeping species from Europe, resembles sheep fescue; however, leaves are usually dark green, tougher and wider. Although shallow-rooted and less tolerant of drought compared to several other fescues, hard fescue has superior heat tolerance and may remain green during hot summer months. Used for many years to stabilize disturbed soils in the Pacific Northwest, seeds of several improved hard fescue varieties are being mixed with Kentucky bluegrass, perennial ryegrass and other fineleaf fescues to establish low-maintenance turfs in shade in north central and upper East Tennessee.

Varieties

Twenty-six hard fescues were evaluated in 20 states and Quebec during the 1998 NTEP Fineleaf Fescue Test. Ten varieties of hard fescue were entered in the 2003 NTEP Fineleaf Fescue Test.

Results of the 1998 Test indicate that hard fescue varieties including 'ABT-HF-2,' 'ABT-HF-3,' 'ABT-HF-4,' 'Berkshire,' 'Chariot,' 'Minotaur,' 'Nordic,' 'Osprey,' 'Oxford,' 'PICK FF A-97,' 'PST-4HM,' 'Reliant II,' 'Rescue 911,' 'Stonehenge' and 'Viking' are tolerant of drought and provide excellent summer density. Varieties with good overall disease resistance include 'Defiant,' 'Discovery,' 'Nordic,' Oxford, Rescue 911 and 'Scalds II.' Hard fescue varieties including 'Gotham,' 'Predator,' 'Reliant IV,' 'SPM,' 'SRX 3K' and 'Spartan II' demonstrated good drought resistance in Kingston, Rhode Island during 2005.

Sheep Fescue

This bunch-type species indigenous to the Northern Hemisphere has very stiff, upright leaves and, once established, requires very little maintenance. Sheep fescue tolerates low temperatures and grows well in infertile, acidic, sandy or gravelly soils. Sheep fescue is most often used for soil reclamation and erosion control. The distinct blue or grayish-blue color limits its use in seed mixtures. Varieties including 'Bighorn,' 'Career,' 'MX-86,' 'Quatro' and 'SR3000' are intended for use as low-input turfs on sites where fineleaf fescues are adapted.

Slender Creeping Fescue

Slender creeping fescue is native to Europe, where it is found growing in pastures, lawns and undisturbed, shady sites. Plants have hair-like leaves and spread by small, short rhizomes. The species is adapted to dry, infertile soils. Slender creeping fescue is sometimes used as a component of seed mixtures intended for use in shade in north central and upper East Tennessee. Four varieties, 'ASR 049,' 'BAR SCF 8 FUS3,' 'Dawson' and 'Seabreeze,' were evaluated under high and low levels of management from 1998 through 2002 during the 1998 NTEP Fineleaf Fescue Test. In Kingston, Rhode Island, all four varieties recovered well from severe drought stress. Three slender creeping fescue varieties, Dawson, 'SRX 55R' and Seabreeze, were entered in the 2003 NTEP Fineleaf Fescue Test.

Strong Creeping Fescue

Also referred to as creeping red fescue, this species has thicker, longer and more vigorous rhizomes than slender creeping fescue. Strong creeping fescue, valued for its shade tolerance and low maintenance requirement, is native to Europe. Plants usually form a thin, drought-tolerant sod. Like slender creeping fescue, strong creeping fescue may be mixed with other fine fescues for use in shaded landscapes in north central and upper East Tennessee. Twenty-five of the 53 varieties entered in the 2003 NTEP Fineleaf

Fescue Test are strong creeping fescues. In 2005, during a severe drought in Kingston, Rhode Island, the strong creeping fescue varieties 'Audubon,' 'DP 77-9578,' 'Epic,' 'Oracle,' 'PST 8000,' 'Shademaster' and 'Wendy Jean' maintained active growth while several other varieties were severely stressed.



Coarse Fescue

Tall Fescue

Tall fescue, a bunch-type species with wide leaves and deep roots, was introduced from southern Europe where it is primarily used as forage. Tall fescue is the most common cool-season species used for home lawns in Tennessee. Plants grow best



in moist and fertile soils, and spread laterally by tillers and very short rhizomes. Although tall fescue has excellent heat and drought tolerance, pesticide applications are often needed to control brown patch, white grubs, crabgrasses and goosegrass. Tall fescue does not usually produce thatch as quickly as bermudagrass, Kentucky bluegrass, St. Augustinegrass and *Zoysia*, yet dethatching before fall inter-seeding may result in more seeds contacting soil and the uniform emergence of seedlings.

Varieties

'Kentucky 31,' intended to be used for hay, pasture and conservation plantings, was an early variety used for turf in Tennessee. 'Rebel,' the first improved, turf-type tall fescue marketed in the Southeast, was selected for



release in 1981 on the basis of attractiveness, persistence, disease resistance and overall performance in turf trials. Since the release of Rebel in 1981, many improved, turf-type tall fescues have been evaluated for overall quality, susceptibility to disease, drought tolerance, insect resistance and seedling vigor throughout the U.S. In the 1983 NTEP Tall Fescue Test, a total of 30 entries were evaluated at 41 locations in 24 states and the District of Columbia. Seventy-nine entries were evaluated from 1993 to 1995 at 47 locations in 27 states, Washington, D. C., British Columbia and Saskatchewan. One-hundred-twenty-nine varieties were evaluated for four years at 31 locations in 24 states during the 1996 NTEP Tall Fescue Test; and a total of 159 varieties were entered in the 2001 NTEP Tall Fescue Test maintained at 31 locations in 24 states. Several dwarf-type varieties (e.g., 'Barlexas II,' 'Bonsai,' 'Leprechaun,' and 'Pixie.') grow slowly and are shorter than standard varieties such as 'Arid,' 'Falcon II,' 'Plantation' and 'Southern Choice.' Varieties with the ability to recover from disease, insect attack and wear by "spreading" after

being injured are gaining popularity in Tennessee.

Populations of 'Cochise' and 'Titan 2' have many plants with short rhizomes. The variety 'Grande,' developed from germplasm originally selected for improved color, texture, stand density and brown patch resistance, often produces measurable rhizomes within 12 weeks after planting. 'Labarinth,' marketed as the first RTF™ (rhizomatous tall fescue) variety, was bred for increased rhizome number and length. Many varieties of tall fescue colonized by endophytes have improved insect resistance. Most outperform Kentucky 31 when fertilized with an appropriate amount of nitrogen, phosphorus and potassium, and maintained at a mowing height from 2 to 3½ inches.



Tall Fescue Variety Trial

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