

Versatile Red Fescues: Improvements in Chewings and Creeping Red Fescues

Fine Fescue Improvements

The fine fescues are traditionally known as fine textured, low maintenance, shade tolerant turfgrasses. However, recent breeding advances have expanded the range of use, improving the heat and drought tolerance of all species. These species can now be used in sun and shade over a much broader climatic range than traditionally thought.

Fine Fescue Characteristics

The fine fescues can be divided into two subtypes based on genetic relationships, red and hard fescues. The hard fescues, including hard (*Festuca brevipila*), sheep (*F. ovina*) and blue (*F. glauca*) fescue, have traditionally been known as the species that are more drought tolerant and require lower nitrogen. The red fescues, including Chewings (*F. rubra ssp. commutata*), strong creeping red (*F. rubra ssp. rubra*) and slender creeping red (*F. rubra ssp. litoralis*) fescues, germinate more rapidly and have better winter and spring growth.

Superior Red Fescues

Recent trials have shown that improved Chewings and red fescues can be used for many of the turf sites traditionally reserved for hard and blue, while capturing the advantages of the red fescues. The newest red fescues are much more drought tolerant, have excellent heat tolerance and can be used for low maintenance sites, while retaining the rapid germination, excellent spring and winter growth and low mowing tolerance of the red fescues. They can be used from high maintenance golf greens, tees and fairways to low maintenance golf roughs, parks and home lawns. They can also be used unmown. The hard fescues continue to be the grass of choice in areas of dense, dry shade.

Using red fescues, especially Chewings fescue, also helps control weeds. Research at Cornell University has demonstrated that these species release a chemical from their roots that retards the germination of many broadleaf weed species, crabgrass and annual bluegrass. Using red fescues can help reduce the use of herbicides.

Red fescues are very salt tolerant and resistant to Rapid Blight. Slender creeping red fescues are the most salt tolerant of these species and are often used next to areas with salt usage due to



deicing. They also germinate under cooler soil temperatures than many species and have excellent fall, winter and spring growth. This also makes them useful for winter overseeding on dormant bermudagrass.

Seed Research for many years has been at the forefront of breeding these species for improved performance under a broad range of management conditions. SR 5130 and Silhouette Chewings fescue, Shoreline slender creeping red fescue and SR 5250 strong creeping red fescue all provide superior performance.

**Quality Ratings of Fine Fescue Cultivars
Under Low Input in 10 Locations
1999-2002 Data**

Turfgrass Quality Ratings 1-9, 9=Ideal Turf

<i>Variety</i>	<i>Quality</i>	SR 5100 Chewings	5.5	Bighorn Sheep	5.2
Longfellow II Chewings	5.8	SR 3150 Hard	5.5	Jamestown II Chewings	5.1
Jasper II Strong Creeping	5.7	Scaldis II Hard	5.2	Boreal Strong Creeping	4.5
Oxford Hard	5.7	Scaldis Hard	5.2	Common Strong Creeping	4.5
SR 5250 Strong Creeping	5.6	Quatro Sheep	5.2	<i>LSD @ 5%</i>	0.3

**Quality Ratings of Fine Fescue Cultivars Under Fairway Traffic at WI
1999 Fine Fescue NTEP
1999-2002 Data**

Turfgrass Ratings: 1-9, 9=Ideal Turf

<i>Variety</i>	<i>Quality</i>	Silhouette Chewings	5.5	Common Strong Creeping	4.8
Longfellow II Chewings	6.0	SR 3150 Hard	5.4	Quatro Sheeps	4.6
Jasper II Strong Creeping	5.8	Jamestown II Chewings	5.3	Bighorn Sheeps	4.5
SR 5100 Chewings	5.7	Reliant II Hard	4.9	Defiant Hard	4.5
SR 5250 Strong Creeping	5.7	Boreal Strong Creeping	4.9	<i>LSD @ 5%</i>	0.8

**Quality Ratings of Fine Fescue Cultivars Under Low Maintenance in RI
No Irrigation and Low Nitrogen
2003 Fine Fescue NTEP**

Turfgrass Ratings: 1-9, 9=Ideal Turf

<i>Variety</i>	<i>Quality</i>	Garnet Strong Creeping	6.3	Boreal Strong Creeping	2.4
Spartan II Hard	7.4	Longfellow II Chewings	6.0	<i>LSD @ 5%</i>	0.9
SR 5130 Chewings	6.8	Quatro Sheeps	5.6		
Compass Chewings	6.6	SR 3000 Hard	5.5		

**Crabgrass Ratings of Fineleaf Fescue: 2003 NTEP
2004 – 2007 Data Mean of Two Locations**

Crabgrass Ratings: 1-9, 9=None

<i>Variety</i>	<i>Quality</i>	LaCrosse Chewings	8.3	Dawson E Slender Creeping	3.5
SR 5130 Chewings	8.7	Garnet Strong Creeping	8.2	Boreal Strong Creeping	3.2
Berkshire Hard	8.7	Spartann II Hard	8.0	Shademaster Strong Creeping	2.8
Longfellow II Chewings	8.3	Shoreline Slender Creeping	4.7	<i>LSD @ 5%</i>	2.6

**Quality Ratings of Fine Fescue Cultivars in the Transition Region (VA)
2003 Fine Fescue NTEP
2006 Data**

Turfgrass Ratings: 1-9, 9=Ideal Turf

<i>Variety</i>	<i>Quality</i>	Spartan II Hard	7.0	Longfellow II Chewings	6.1
Reliant II Hard	7.6	Scaldis Hard	6.6	Boreal Strong Creeping	4.3
SR 5130 Chewings	7.2	Quatro Sheeps	6.5	<i>LSD @ 5%</i>	1.3
Cardinal Strong Creeping	7.2	Garnet Strong Creeping	6.3		

**Fall Color (December) of Fineleaf Fescue: 2003 NTEP
2004–2007 Data**

Fall Color: 1-9, 9=Complete Color Retention

<i>Variety</i>	<i>Quality</i>	Boreal Strong Creeping	5.0	J-5 Chewings	3.0
Predator Hard	7.7	Garnet Strong Creeping	4.0	LaCrosse Chewings	3.0
Shoreline Slender Creeping	7.3	SR 5130 Chewings	3.7	Splendor Chewings	3.0
Dawson E Slender Creeping	7.0	Longfellow II Chewings	3.7	<i>LSD @ 5%</i>	1.6
Oracle Strong Creeping	5.7	Treasure II Chewings	3.7		

To determine whether a cultivar's performance is different from another, subtract one entry's mean from another entry's mean. If this value is larger than the LSD value, the observed difference in cultivar performance is significant and did not happen by chance. Complete tables are available upon request.