

BREEDER

NJAES/Rutgers University

DESCRIPTION

Reliant II is one of the best performing and most recognized hard fescues in North America. It exhibits a distinct deep dark green, fine textured turf and spreads very slowly with basal tillering. It is also recognized for its reduced rate of vertical growth and low maintenance attributes requiring less frequent mowing than many other species. Once fully established it requires little supplemental irrigation or fertilizer and tolerates acidic, infertile shady planting sites.

APPLICATION

Reliant II is best utilized in poly species turfgrass mixtures for improved shade tolerance, elegant fine textured turf and reduced maintenance in mild temperate and transitional climates. Reliant II is compatible with Kentucky bluegrass, perennial ryegrass, colonial bentgrass and other fine fescues.

PERFORMANCE

Reliant II was entered in the 1998 Fine Fescue NTEP Test along with 79 fine fescue and 26 hard fescue varieties and experimental varieties. Data from the 2001 Final Progress Report 02-4 conducted across 30 locations in the U.S. and Canada indicates that Reliant II tied for 2nd in turf quality among hard fescue varieties and experimental varieties. Reliant II also exhibits good resistance to dollar spot incited by *Sclerotinia homoeocarpa*, red thread *Laetisaria fuciformi*, moderate resistance to summer patch *Magnaporthe poae*, and brown patch *Rhizoctonia solani*.

SEEDING

Dates: Spring and fall when soil temperatures are above 60°F or higher. Hard fescue is generally slow to tiller once germinated, so higher soil temperatures and increasing photoperiod in the spring or warm soils with decreasing photoperiod in the fall provide an optimal environment for seedling establishment.

Rates: 4.0-5.0 lbs. 1,000 ft.sq. Seed count of Reliant II is 540,000 seeds per pound and dependent on the year of harvest, location of production and seed production practices.

Depth: Sow at 1/4 to 1/2 inch.

CULTURAL PRACTICES

Soil preparation: Prepare firm seedbed free of clods, sticks and vegetative debris. Seed should be in contact with soil. Fine fescues are intolerant of poorly drained soils.

pH: Should be slightly acidic 6.5 or less for favorable growth.

NPK requirement: Of the cool-season grasses used for turf, hard fescues are more tolerant of infertile, dry soils and often

TURF CHARACTERISTICS

Growth Habit	Estab. Rate days	LHC Tol.	Mowing Freq.	Traffic Tol.	Thatch prod	Comp Mix	N. Req.	Shade Tol.	Cold Tol.	Drought Tol.	Et rate mm/day	Endophyte	Salinity Tol. mmhos
Bunch	Med. 18-21	Poor	2x Month	Fair- Poor	Med	Good	Med- High 6-8 lbs*	Very Good	Very Good	Good	Med 7-10	Yes >11%	>3 Poor

LHC-low height of cut, ET-evapotranspiration, N-nitrogen *per 1.000 ft*4; rates may increase or decrease based on location, soil type, irrigation practices, desired turf quality, humidity & other abiotic and biotic factors.



predominate where there is competition from trees and shrubs for nutrients and moisture. For these reasons, fine fescues are an excellent choice for low maintenance turfs. Hard fescues may not perform well during hot, humid summers, particularly if they are over fertilized, grown in poorly drained soils or mowed too closely.

Water use: Hard fescue is recognized as a dehydration resistant and tolerant species (Beard, 1986) with improved drought tolerance. An ET rate of 7-8 mm per day is the best among the cool-season turfgrass species.

Thatch management: The dense bunch type growth habit of Reliant II hard fescue provides opportunities for development of thatch. Verticutting, tight mowing and dethatching are recommended for dormant sod or for grass breaking dormancy in the spring. During any dethatching never remove more than ½ inch of thatch. If a thatch layer of greater than one inch exists, removal must be done over a period of years.

Mowing height: Standard mowing height for Reliant II is 1.0-2.5". Mowing heights is often dictated by species mixture components. Mixtures containing tall fescue and Kentucky bluegrass would

be mowed at the higher range of cutting heights. Mixtures containing perennial ryegrass and colonial bentgrass may be mowed at lower mowing heights.

Weed control: (From NCSU Pest Control Recommendations for Turfgrass Managers 2003). For general broadleaf control in established turf: 2, 4-D+dicamba, 2, 4-D +MCPP, 2, 4-D+MCPP+dicamba, 2, 4-D+2, 4-DP and others. Pre-emergent herbicides to control annual grassy weeds in established turf: benifin (Balan), bensulide (Pre-Far), dithiopyr+trifluralin, pendimethalin (pre-M), prodiamine (Barricade). Post-emergence herbicides for annual grassy weeds dithiopyr and fenoxaprop. Sethoxydim (Poast) and fluazifop (Fusilade) are used as broadspectrum herbicides to control broadleaf and annual grassy weeds in fine fescue seed production fields of Oregon.



