

## FEATURES

- XRE= eXtreme Rhizome Expression
- Better ability to recover from stress than other tall fescue mixtures
- Dark green color
- Semi-dwarf growing habit
- Excellent disease resistance
- Uses: Ideal for commercial landscape, sports fields, parks, golf roughs and residential lawns

## BENEFITS

- Fast recovery from injury
- Superior wear resistance
- High levels of endophytes which offer a natural resistance to many surface feeding insects
- Proven Brown Patch resistance

## SEEDING RATES

- Seeds/lb: 220,000
- New Turf:  
8 - 10 lbs/1,000 ft<sup>2</sup>  
350 - 400 lb/acres
- Overseeding/Interseeding:  
6 - 8 lbs/1,000 ft<sup>2</sup>  
250 - 350 lbs/acre

## ESTABLISHMENT

- Germination: 7 - 10 days under ideal conditions
- First mowing: 21 - 30 days
- First limited use: 60 - 75 days

## DEFIANCE! XRE

TURF TYPE TALL FESCUE BLEND

**Defiance! XRE Turf Type Tall Fescue Blend** with eXtreme Rhizome Expression (XRE) is the ideal choice for commercial landscape, sports fields, parks, golf roughs or residential lawns. Defiance! XRE with rhizomes is the key to a robust, beautiful turf. Rhizomes give plants the ability to spread densely across large areas and provide strong knitting ability, enabling easier sod lifting. Defiance! XRE is a tall fescue blend featuring Blackwatch 2, Guardian 41, Grande 3, Rowdy, Speedway, SR 8650 and other high rhizome varieties. The high incidence of rhizomes in these varieties, combined with other improved tall fescue varieties, gives Defiance! XRE faster recovery from injury, superior wear resistance and better ability to recover from stress than other tall fescue mixtures. In addition to rhizomes, Defiance! XRE also has very high levels of endophytes, which give it a natural resistance to many surface feeding insects.

### Characteristic

Defiance! XRE has rich dark green color and proven Brown Patch resistance. The roots of Defiance! XRE reach deep into the soil for exceptional water absorption and less frequent irrigation. Defiance! XRE also relies less on chemical input than comparable mixtures, giving you an environmentally friendly answer to the ongoing challenge of providing hearty lush turf for your clients.



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TURF TYPE TALL FESCUE BLEND

### Turf Type Tall Fescue Management

If you read all the advertisements that have recently appeared, you would think the turf type tall fescues are miracle grasses. Indeed, for many situations they may perform miracles, being cool season turfgrasses that are very heat, drought and wear tolerant. Tall fescues are the most drought resistant cool season turfgrass species, primarily due to a very well developed root system that can reach depths greater than six feet. This root system allows the plant access to larger ground water reserves. In fact, studies have shown that turf type tall fescues have better developed root systems than the older forage types. Often tall fescues are the only cool season turfgrass species that will remain green the entire growing season on a limited water budget. In addition, tall fescues often perform well in shaded areas, where they actually develop a finer texture. Tall fescues can provide an excellent turf for home lawns, athletic fields, golf course roughs and other high traffic areas. However, as with all grasses, they have specific maintenance requirements to obtain the best possible turf.

#### Adaptation

Tall fescues are best adapted to areas of the transitional zones, between the cool humid and warm humid regions of the United States. Tall fescue will also perform well in the arid regions of the Western United States provided water is available. Increasingly, the turf types are being utilized in additional area where their drought resistance is an advantage, alone or in combination with Kentucky bluegrass. Tall fescues are adapted to a wide variety of soil conditions, from droughty soils to wet. They even can tolerate periods of submersion. Although they will grow on infertile soils, tall fescue does respond to fertilization. Tall fescues can also tolerate pH ranges from 4.7 to 8.5, but does best in soils with a pH ranging from 5.5 to 6.5.



#### Seeding Rates

The seeding rate for turf type tall fescues should range between 4 to 8 pounds per 1,000 sq. ft depending on environmental and site conditions at the time of planting. The lower end of the seeding range will result in slower establishment but will provide a dense, fine textured turf that is more vigorous due to an increase in tillering of individual plants. Higher seeding rates (12 lbs.) should be avoided with turf type tall fescues because there will be less tillering due to excessive competition. The resulting plants will be weaker and thin out under adverse conditions. Since tall fescues are a bunch type grass, overseeding may be required at rates of 2 to 3 pounds per 1,000 sq. ft. annually. The idea is to keep the density of the stand high so the texture will remain fine; as sensitivity decreases, the leaf texture often becomes coarser. However, recent emphasis in breeding has been towards finer texture and increased tillering so overseeding may be less necessary with the newest varieties.

#### Dwarf Types

Dwarf varieties of turf type tall fescue have a slower rate of leaf growth. However, they will produce more tillers per unit area than do non-dwarf varieties, leading to a denser turf. The dwarf types may possess a finer leaf texture and a more prostrate growth habit than do non-dwarf varieties. The degree of dwarfness is related to the genetic inheritance of a variety. This factor will also influence the rate of establishment. The more dwarf the variety, the slower the establishment will be. The wear tolerance and recuperative potential may also be reduced in the more dwarfed varieties. Due to the higher density achieved with the dwarf varieties; there may be more incidence of disease such as Brown Patch, Fusarium Blight and Pythium.

#### Mowing Heights

Turf type tall fescues look the best when cut at 1.0 to 2.5 inches. Lower heights will result in thin turf. If persistent cutting occurs below the recommended height, there will be a gradual fading out of the tall fescue. This will leave areas open for the invasion of other weedy grasses and the tall fescue will develop into a coarse bladed turf with a weedy appearance. Initial trials suggest some of the newest varieties may tolerate a closer cut if other environmental factors are at optimum.

*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.*