

# FALCON III

## BREEDER

McCarthy Research Farms, Inc.

## DESCRIPTION

Falcon III builds on a fine tradition of Falcon and Falcon II by being one of the top varieties in NTEP turf type tall fescue trials. Falcon III gets strong marks in NTEP turf trials for excellent performance in sun, dense shade, under traffic stress, severe drought and brown patch disease pressure. Falcon III is a moderately fine textured variety with deep dark green turf. Falcon III is an endophyte enhanced tall fescue with >60% *Neotyphodium coenophialum* endophyte which provides resistance to a number of leaf and crown feeding insects and nematodes. The presence of endophyte also contribute to improved biotic and abiotic stress tolerance, faster seedling establishment, enhanced fall recovery and reduced summer weed invasion.

Falcon III is recommended for permanent turf in full sun or partial shade, on home lawns, commercial sites, parks and golf course roughs. It was developed for the discriminating superintendent, landscaper and top grounds maintenance professionals in a range of environments. Falcon III is best utilized in grass seed mixtures maintained at a high height of cut with Kentucky bluegrass, perennial ryegrass, hard fescue, sheep fescue or strong creeping red fescue.

## PERFORMANCE

Falcon III tied for 4th in mean turf quality in the 1997-2000 Final Report NTEP No. 01-14 tall fescue test conducted across 28 US and Canadian locations respectively. Falcon III exhibits improved resistance to brown patch disease one of the most limiting factors in tall fescue propagation in warm summer-humid continental

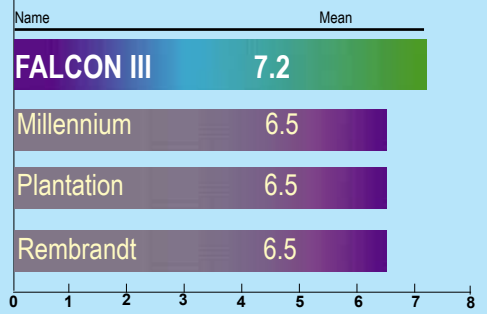
and transitional-humid climates of the southern USA. Falcon III tied for 1st in brown patch resistance across 15 test locations in the coastal plains of Virginia, mid Atlantic region of Maryland and New Jersey; the Piedmont region of Georgia and Arkansas. It also exhibits improved resistance to leaf spot, pythium blight and winter net blotch.

### Brown Patch

Ratings of Tall Fescue Cultivars at Fayetteville, AR



1997-2000 Data/ 1-9.9= no disease



## SEEDING

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

**Rates:** 6-8 lb./1,000 ft.sq. on new seeding and 2-3 lb./1,000 ft.sq. on established turf. Seed count of Falcon III is 229,000 seeds per pound and is dependent on the year of harvest, location of

## TURF CHARACTERISTICS

Growth Habit	Estab. Rate days	LHC Tol. 1/2"	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. 14-21	Poor	2x Week	Very Good	Low-Med	Fair Good	Med 6 lbs*	Very Good	Very Good	Excell.	Very High >10%	Yes 60%	11 good

LHC=low height of cut, ET=evapotranspiration, N=nitrogen \*per 1,000 ft<sup>2</sup>; rates may increase or decrease based on location, soil type, irrigation practices, desired turf quality, humidity & other abiotic and biotic factors.



production and seed production practices.

**Depth:** Sow @ ¼ to ½ inch. Slice seeding of existing turf may require lowered mowing height or growth regulator to reduce canopy height of existing turf. This management practice enhances establishment of newly emerging tall fescues seedlings

## CULTURAL PRACTICES

**Soil preparation:** Prepare firm seed bed free of clods, sticks and vegetative debris. Seed should be in contact with the soil. Tall fescues are best established in well drained soils, but will tolerate heavy soil conditions better than many other cool season grasses.

**pH:** Soil is best maintained at a neutral pH of 7.0. However, Falcon III is adapted to a range of soil pH conditions and will perform relatively well in moderately acidic or alkaline soils.

**NPK requirements:** Falcon III would be described as a medium to high user of fertilizer. In Northern regions 4-5 lbs. N/year; in transitional climates 5-7 lbs. N/year, southern regions 5-7 lbs. N/year with minimal utilization in summer months to discourage foliar turfgrass diseases such as brown patch. NPK ratios are generally recognized as 5-1-3 with clippings retained on the turf.

**Water use:** Tall fescue is recognized as a dehydration avoidant species (Beard, 1986) with improved drought tolerance. Tall fescue has an abundant deep and fibrous root mass which mines available subsoil moisture during stress periods. ET rate of >10 mm per day is highest among cool season turfgrass. Infrequent but heavy irrigation to stimulate deep subsoil root growth is recommended.

**Thatch management:** Requires little thatch management. Only high N levels with minimal traffic pressure encourages thatch accumulation. Verticutting, lower mowing heights and dethatching are recommended for dormant sod or grass breaking dormancy in the spring. At any given dethatching, never remove

### Mean Turfgrass Quality

Ratings of Tall Fescue Cultivars



### Grown Under Traffic Stress

At Meade, NE / 1997-2000 data  
Turfgrass Quality Ratings 1-9, 9=Ideal

Name	Mean
Plantation	6.6
<b>Falcon III</b>	<b>6.2</b>
Olympic Gold	6.2
Millennium	6.2
Coyote	6.1
Masterpiece	6.1
Arid 3	6.1
Crossfire	6.1
Rebel Sentry	6.1
Rembrandt	6.0
Shenandoah II	6.0
Kentucky - 31 w/endo	4.2
LSD Value	0.6

more than ½ inch of thatch layer. If the thatch layer is greater than 1 inch, removal must be done over a period of years.

**Mowing height:** Falcon III should be mowed at 1.5-3.0 inch

**Weed Control:** (From NCSU Pest Control Recommendations for Turfgrass Managers, 2003). In established turf for post-emergent broadleaf control 2-4,D and *dicamba* (Banvel). Spring pre-emergent control DCPA or *bensulide* (dacthal). Pre-emergent crabgrass and goosegrass control on established tall fescue with *pendimethalin* (Pre-M), *prodiamine* (Barricade), *oxadiazon+benefin*, or *oryzalin* (Surflan), *benefin* (Balan), *siduron* (Tupersan), *dithiopyr* (Dimension).

