Registration of 'MX-86' Sheep Fescue

'MX-86' sheep fescue (Festuca ovina L.) (Reg. no. CV-62, PI 537103) was released by Jacklin Seed Company, Post Falls, ID, in December 1988. MX-86 originated from selections made from a seedlot of common sheep fescue from eastern Germany in 1984. Twenty-three seed lots were screened for rate of germination before one from eastern Germany was selected. Seed was planted in a field near Spokane, WA, in May 1985. Plants were selected for uniform plant morphology from this population to produce the parental lines for MX-86. Seed yield potential was the major criteria of selection as this has been one of the major problems with cultivars of sheep fescue. A breeder seed field of spaced plants was planted in summer 1987 at Post Falls. Plants exhibiting low seed yield, light-green color, or coarse texture were removed prior to anthesis. Breeder seed was first harvested in August 1988.

In the National Turfgrass Evaluation Program fine fescue test 1990 to 1993 (2), MX-86 exhibited significantly improved seeding vigor, and dollar spot (caused by Lanzia succ. or Moellerodiscus Henne. spp.) resistance, compared with 'Bighorn'. MX-86 was significantly lower than Bighorn for mean turf quality, fall density, and leaf spot (caused by Drechslera spp.) resistance.

In a turf trial of fine fescues seeded October 1989 at North Brunswick, NJ, MX-86 had significantly better ground coverage on 27 June 1994 than 'Eureka' under low-maintenance conditions (1). MX-86 also exhibited significantly higher turf quality than Eureka in 1993 and 1994.

In fine fescue turf trials seeded October 1989 at Pittstown, NJ, MX-86 was significantly lower than Eureka and Bighorn sheep fescues, under low-maintenance conditions, for average turf quality for 1992 through 1994 (1). It was significantly less dense than Eureka in July 1994.

Turf trials seeded in September 1991 at North Brunswick and Adelphia, NJ, indicated that MX-86 had significantly lower turf quality than Bighorn E+ and Bighorn at Adelphia, and lower turf quality than 'Quatro' at North Brunswick.

Research at Texas A&M at College Station, TX, determined that MX-86 had high relative heat stress resistance as assessed by visual rating of leaf firing to supraoptimal air and soil temperatures under chronic conditions in 1990 (3).

MX-86 sheep fescue is a low-maintenance turfgrass cultivar with medium blue-green color, enhanced seedling vigor, improved dollar spot resistance, and moderate leaf spot resistance. MX-86 is adapted for use in golf course roughs, parks, cemeteries, roadsides and home lawns. Its rapid germination may be beneficial in high-variation light intensities, ranging from full sun to moderate shade. These blends and/or mixtures should do well under varying light intensities, ranging from full sun to moderate shade, in regions where Kentucky bluegrass is well adapted. Eagleton is recommended for lawn-type turf on home landscapes, parks, sports fields, and golf courses.

Breeder seed of Eagleton will be produced and maintained by Lofts Seed, Inc. in cooperation with the New Jersey Agricultural Experiment Station. Seed production is restricted to three cycles of increase from breeder seed, one each of breeder, foundation, registered and certified. U.S. Plant Variety Protection Certificate no. 9600277 has been made for 'Eagleton' Kentucky bluegrass in 1996.

Eagleton originated as a single, highly apomictic plant selected from the grounds of Woodlawn, home of the Eagleton Institute, on the Douglas College Campus of Rutgers University at New Brunswick, NJ, during the spring of 1975. An attractive, vigorous patch of grass approximately 3 m in diameter was observed in an area where most other Kentucky bluegrass plants were showing considerable discoloration from disease or had been replaced by weeds. Examination of the site indicated that Eagleton probably originated as a single seedling that had persisted and spread. Vegetative propagules were transferred to field nurseries at Rutgers University for observation and seed production. Eagleton was first included in a seeded turf trial in August 1976 at North Brunswick, NJ. In this trial and subsequent trials, it has performed well under medium-low maintenance and exhibited excellent resistance to billbugs (Sphenophorus spp.) (1,2). Field-grown, spaced-plant seed progenies were exceptionally uniform with more than 95% of the progeny plants being indistinguishable from their maternal parent indicating a high level of apomictic reproduction. The first certified seed of Eagleton was produced in Western Oregon in 1996.

Eagleton is a leafy, turf-type Kentucky bluegrass with an attractive medium-green color, medium-fine leaves, and moderately slow rate of vertical growth. It has the ability to produce a dependable, aggressive, persistent turf of medium high density with good summer performance. Eagleton has shown good resistance to important turfgrass diseases, including stripe smut [caused by Ustilago striformis (Westend.) Niessl] and dollar spot [caused by Sclerotinia homoeocarpa F.T. Bennett] (3). Eagleton can be used successfully in blends with many other adapted medium-green to medium-dark green cultivars of Kentucky bluegrass. Useful mixtures may include improved turf-type perennial ryegrass (Lolium perenne L.), strong creeping red fescue (Festuca rubra L. subsp. rubra), or improved turf-type tall fescues (F. arundinacea Schreb). These blends and/or mixtures should do well under varying light intensities, ranging from full sun to moderate shade, in regions where Kentucky bluegrass is well adapted. Eagleton is recommended for lawn-type turf on home landscapes, parks, sports fields, and golf courses.

Breeder seed of Eagleton will be produced and maintained by Lofts Seed, Inc. in cooperation with the New Jersey Agricultural Experiment Station. Seed production is restricted to three cycles of increase from breeder seed, one each of foundation, registered, and certified. Application no. 9600277 has been made for United States Plant Variety Protection.