



Perennial Ryegrass

Lolium perenne

Plant Breeder:

Dr. Jerry Peppin, Pickseed, Inc.
Experimental Designation – SYN-P

Morning Star is a new generation, high Endophyte, turf-type perennial ryegrass that has performed exceptionally well in national tests. **Morning Star** is truly an excellent performer when used for overseeding due to strong seedling vigor. Its dark green color and fine leaf texture will remain dense and healthy throughout its planting range and it is adapted for growth as a superior permanent turf in the North.

Characteristics:

- Excellent drought tolerance
- Strong seedling vigor
- Outstanding disease resistance
- Fine leaf texture, excellent turf density, dark green color
- Quick establishment
- Very good wear tolerance
- Medium shade tolerance
- High endophyte level for natural insect resistance

Recommended Use:

Golf Courses, Parks, Home Lawns, Athletic Fields, and Overseeding Warm Season Turfgrasses

Climatic Zones: 2, 3, 4, 5, 6, 7, 8, 9, 10 (may not be adaptable to all areas within each climatic zone)

Establishment & Maintenance:

Lime soil to 6.0 – 7.0 pH and follow soil test recommendations for fertilization. Under ideal conditions, germination begins in 6 days. Full germination may take up to 14 days. Subject to germination rate, first mowing may begin at 21 days after sowing.

Seeding Rates:

- Permanent Turf, Parks, Home Lawns 5 - 10 lbs/1000 sq ft
(2 - 5 kgs/100 sq meters)
- Fairways and Roughs (overseeding) 5 - 15 lbs/1000 sq ft
(2 - 7 kgs/100 sq meters)
- Greens (overseeding) 25 - 35 lbs/1000 sq ft
(11 - 15 kgs/100 sq meters)
- Tees (overseeding) 15 - 20 lbs/1000 sq ft
(6 1/2 - 9 kgs/100 sq meters)

Quality Ratings:

Table 10.

**SEEDLING VIGOR RATINGS OF PERENNIAL RYEGRASS CULTIVARS
GROWN AT 18 LOCATIONS IN THE U.S. AND CANADA
1995-98 DATA FROM 1994 TEST
SEEDLING VIGOR RATINGS 1-9; 9=MAXIMUM VIGOR**

NAME	QUALITY MEAN
DSV NA 9402	6.9
MORNING STAR	6.5
BRIGHTSTAR	6.2
MAJESTY	6.1
LINE DRIVE	5.9
HEAD START	5.6
NINE-O-ONE	5.5
LSD VALUE	0.3

Table 14.

**PERCENT LIVING GROUND COVER (SPRING) RATINGS OF PERENNIAL RYEGRASS CULTIVARS
GROWN AT 8 LOCATIONS IN THE U.S. AND CANADA
1995-98 DATA FROM 1994 TEST
PERCENT LIVING GROUND COVER IN SPRING: LOCATIONS / 2**

NAME	QUALITY MEAN
ASSURE	74.4
MORNING STAR	70.6
MAJESTY	70.6
BRIGHTSTAR	67.2
LINE DRIVE	66.3
HEAD START	64.1
LINN	42.1
LSD VALUE	4.0

Table 16.

**PERCENT LIVING GROUND COVER (FALL) RATINGS OF PERENNIAL RYEGRASS CULTIVARS
GROWN AT 8 LOCATIONS IN THE U.S. AND CANADA
1995-98 DATA FROM 1994 TEST
PERCENT LIVING GROUND COVER IN FALL: LOCATIONS / 2**

NAME	QUALITY MEAN
NOBILITY	85.9
MORNING STAR	85.7
MAJESTY	85.1
LINE DRIVE	81.6
HEAD START	78.0
BRIGHTSTAR	77.9
LINN	39.3
LSD VALUE	6.3

Table 20.

**DROUGHT TOLERANCE (WILTING) RATINGS OF PERENNIAL RYEGRASS CULTIVARS
GROWN AT 2 LOCATIONS IN THE U.S. AND CANADA
1995-98 DATA FROM 1994 TEST
DROUGHT TOLERANCE (WILTING) RATINGS 1-9; 9 = NO WILTING**

NAME	QUALITY MEAN
BUCCANEER II (WVPB-92-4)	7.0
MORNING STAR	6.7
HEAD START	6.7
MAJESTY	5.8
LINE DRIVE	5.8
BRIGHTSTAR	5.7
LINN	4.7
LSD VALUE	0.9

These examples represent 7 out of 96 varieties tested in the National Turfgrass Evaluation Program, Final Report 1995-98, NTEP No. 99-11 from 1994 test. For complete trial data go to www.ntep.org