

ENDURANCE ORCHARDGRASS

Endurance is a true dual purpose orchard-grass, it excels at both grazing and harvested forage production.

Persistence

The germplasm used to develop Endurance was first selected for low cutting height. Plants were maintained at a 1.25 inch mowing height for three years. Survivors were then placed in a nursery and allowed to inter-pollinate. Seed was then sent to Dr. Joe Burton of the University of Georgia. After three years of intense grazing pressure, survivors were selected and sent to Oregon. This became the base population for Endurance.

The improved grazing tolerance has been demonstrated at university grazing trials in Georgia, Kentucky and Pennsylvania.

In addition to persistence under grazing, Endurance endures wide temperature extremes, from the winter cold of Canada, to the heat of the south. Endurance is registered in Canada.

Disease resistance is above average.

DM Yield

Unlike other grazing tolerant varieties, Endurance excels as a silage and hay type. It is consistently in the top group for DM yield, including trials in Tennessee, Virginia, Kentucky, Ohio, New York and British Columbia.

Maturity

In the DLF Forage maturity scale, which includes very late European genetics, Endurance is listed as a medium maturity. However when compared to US developed varieties, the maturity of Endurance is as late as Pennlate, Latar and Command. Endurance can successfully be matched with the maturity of alfalfa, to produce high quality dairy hay and silage.

Because of its unique development, Endurance has demonstrated a very broad range of adaptability.



GROWTH HABIT
Perennial Bunch

ESTAB. RATE
14-21 days

NITROGEN REQ.
Med-High 60-80 lbs/ac

ANEROBIC SOIL TOL.
Poor

pH RANGE
5.5-9

MINIMUM RAINFALL
>18 inches

DRY MATTER YIELD
4-6 tons

REGROWTH
Very good

PRIMARY UTILIZATION
Grazing, Silage & Hay

VEG REPRO TIL RATE
Medium

ENDOPHYTE
No

SEEDING RATE
15-25 lbs/ac pure stand
4-5 lbs/ac mixed with alfalfa

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2008 Ohio Forage Performance Trials

South Charleston - Planted 4/13/2006

Variety	Total Yield [3 Years]	Relative Yield % of Mean	Maturity
Endurance	13.56	109	4.3
Command	14.52	114	4.3
Persist	13.40	108	4.5
Potomac	12.83	103	3.3
Shiloh II	12.75	103	4.3

2009 Ithaca Perennial Forage Grass Summary

Sown April 28 2006

Variety	Average Yield [DM/Year]	Total Yield [3 Years]	Average Heading Date
Endurance	6.62	19.86	12-May
Pennlate	6.70	20.12	12-May
Potomac	6.17	18.51	10-May
Olympia	6.16	18.48	10-May
Intensiv	5.88	17.66	19-May

2003 Cattle Grazing Tolerance Study

Percent Stand - Lexington Kentucky, sown Sept 17, 2003

** Top statistical group*

Variety	Mar.26/04	Nov. 8/04	Mar. 30/05	Oct. 31/05	Apr. 4/06	Oct. 23/06
Endurance	98	88	88	99	100	98*
Haymate	96	90	88	99	98	95
Tekapo	97	90	78	98	98	95
Intensiv	95	90	88	95	94	87
Hallmark	63	77	77	91	90	86