

Other barley varieties:

Innovation – (2010 BARI) Six-rowed, high yield, and excellent malting quality.

Pinnacle – (2007 NDSU) Two-rowed, high yield, excellent quality, and strong straw strength.

Tradition – (2003 BARI) Six-rowed, high yield, excellent agronomic performance, and very strong straw.

Conlon – (1996 NDSU) Two-rowed, good yield and test weight, and plump kernels.

Plant Quality Certified Seed

Certified seed is field inspected and lab analyzed to help ensure variety identity, germination, and purity. Contact your local seed producer or dealer for quality certified seed.

Seed producers or dealers can be found in the North Dakota Field Inspected Seeds Directory. The directory is available from the North Dakota State Seed Department (NDSSD), your NDSU Extension Service agent, or under the field seeds program of the NDSSD website. www.ndseed.com



Varieties protected under PVPA with Title V option can only be sold as a certified class of seed. It is the responsibility of the buyer and/or seller to confirm the PVP status of a specific crop variety prior to buying or selling the variety. PVP status information can be obtained from the NDSSD.

For information on the availability of Foundation seed contact:

NDSU Research Extension Centers

Agronomy Seed Farm, Casselton.....(701) 347-4743
Carrington Research Extension Center.....(701) 652-2951
Hettinger Research Extension Center.....(701) 567-4323
Langdon Research Extension Center.....(701) 256-2582
North Central Research Ext. Center.....(701) 857-7679
Williston Research Extension Center.....(701) 774-4315

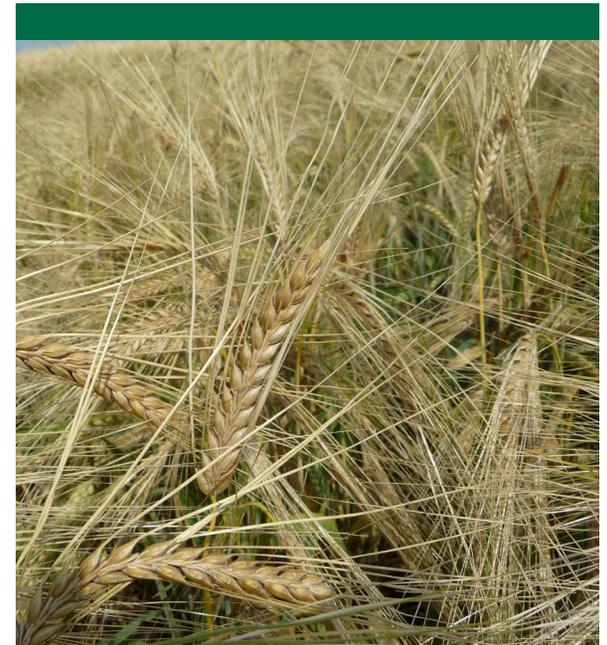
Or

NDSU Foundation Seedstocks Project
(701) 231-8140
www.ndfss.com

NDSU[®]

AGRICULTURE

ND Genesis Two-Rowed Barley



www.ndcropimprovement.org

ND Genesis Two-Rowed Barley

ND Genesis was developed by the NDSU Barley Breeding Program and released by the North Dakota Agricultural Experiment Station in 2015.

ND Genesis is a high yielding two-rowed barley variety. Based on eight years of the barley breeding program's yield trials across ND, ND Genesis has about a 5% yield advantage over Pinnacle. The average yield advantage is over 8% in eastern ND and nearly 3% in western ND.

The test weight of ND Genesis is similar to that of Pinnacle. Results from micro-malting tests show that ND Genesis and Pinnacle have similar percent grain protein.

ND Genesis has medium-strong straw strength and medium-late maturity. ND Genesis is slightly taller than Pinnacle, Lacey, and Conlon. Resistance to lodging is superior to that of Conlon.

ND Genesis has large, plump kernels, and good malt extract values. It accumulates less deoxynivalenol (DON) and has lower beta-glucan values than Pinnacle. ND Genesis accumulates around 20% less DON than Pinnacle. Kernel plumpness of ND Genesis and Pinnacle is similar. This variety has semi-smooth awns, long rachilla hairs, and white aleurone color.

ND Genesis has good disease resistance. It is moderately-resistant/resistant to the net form of net blotch, moderately-resistant to the spot form of net blotch, and moderately-resistant to spot blotch based on greenhouse seedling evaluations. This variety has better resistance to the net and spot forms of net blotch than Pinnacle, and similar resistance to spot blotch as Pinnacle. Compared to Tradition, ND Genesis has better resistance to the net form and spot form of net blotch.

The improved foliar disease resistance and yield potential of ND Genesis as compared to Pinnacle make it a possible replacement for Pinnacle.

ND Genesis seems adapted to all areas of ND and adjacent parts of MN, MT, and SD where barley is grown. Its large kernel and low grain protein traits may be helpful when growing malting barley in environments where moisture stress occurs after heading. Besides the Upper Midwest production area, ND Genesis also has some promise in the spring barley production areas of the eastern USA where growers producing barley for the craft brewing market have been growing Pinnacle because of its low protein.

To help ensure genetic purity, ND Genesis will be protected under the Plant Variety Protection (PVP) under Title V and must be sold as a class of certified seed.

ND Genesis General Characteristics

- High yield
- Low protein
- Good disease resistance
- Large, plump kernels
- Some drought tolerance
- Accumulates less DON than Pinnacle
- Good malt extract values
- Lower beta-glucan values than Pinnacle

Agronomic comparisons of barley cultivars grown in NDSU barley breeding program yield trials, 2009-2014.

Entry	Yield (bu/acre)	Days to heading*	Height (inches)	Lodging score (1-9)**	Test weight (lb/bu)	Protein (%)	Plump kernels (%)
Environments	46	53	52	18	29	20	27
ND Genesis	97.6	30.8	30.8	3.1	50.2	11.5	92.0
Pinnacle	92.6	30.4	28.8	2.7	50.2	11.5	89.5
Conlon	88.1	27.1	29.3	3.9	53.5	13.1	92.3
AC Metcalfe	87.6	32.0	29.7	4.4	50.1	13.4	82.6
Stellar-ND	91.3	29.0	29.8	3.2	48.8	13.2	86.5
Robust	87.4	29.4	31.9	3.9	49.8	13.7	84.2
Lacey	94.6	28.9	29.4	4.0	50.0	13.5	85.2
Tradition	93.6	29.5	30.6	3.5	49.9	13.5	86.2
Quest	91.8	29.6	31.0	3.9	49.7	13.2	84.1
Celebration	94.4	30.3	29.9	3.5	48.8	13.9	84.6
Innovation	95.4	29.0	29.6	3.1	49.8	13.3	87.3

*Days after May 31.

**Lodging score of 1 = no lodging and 9 = severe lodging.

For additional information

about ND Genesis or other barley varieties visit www.ag.ndsu.edu/varietytrials/barley or contact the NDSU barley breeder or small grains agronomist at 701-231-7971.