

## Other dry edible bean varieties

released by the North Dakota Agricultural Experiment Station:

**ND-307** – (2008) Pinto bean with medium-early maturing, high yields, and with good seed size, shape, and appearance. It is resistant to BCMV and rust.

**Lariat** – (2007) Pinto bean with medium maturing, high yields and upright architecture with synchronous dry-down. It is resistant to leaf rust and BCMV.

**Stampede** – (2007) Pinto bean with medium maturing, high yields. Resistant to BCMV. It has erect plant structure and synchronous dry-down.

**Eclipse**– (2004) Black bean with medium maturity, very erect, tall growth, and good resistance to lodging.

~~**Arthur** – (2000) Navy bean with medium maturity, very erect, tall growth, and good resistance to lodging.~~

**Maverick**– (1996) Medium-early, semi-prostrate pinto bean with maturity similar to Othello. Resistant to rust but susceptible to BCMV. Small seed size with canning quality better than Othello.

**For information** on the availability of Foundation seed contact:

**For information on the availability of Foundation seed contact: Treasure Valley Seed Company Inc. 208-337-4626. Treasure Valley has exclusive rights to produce and distribute seed of Avalanche.**

## Plant Quality Certified Seed

Certified seed is a guarantee for variety identity, germination, and purity. Contact your local seed producer or dealer for quality certified seed.

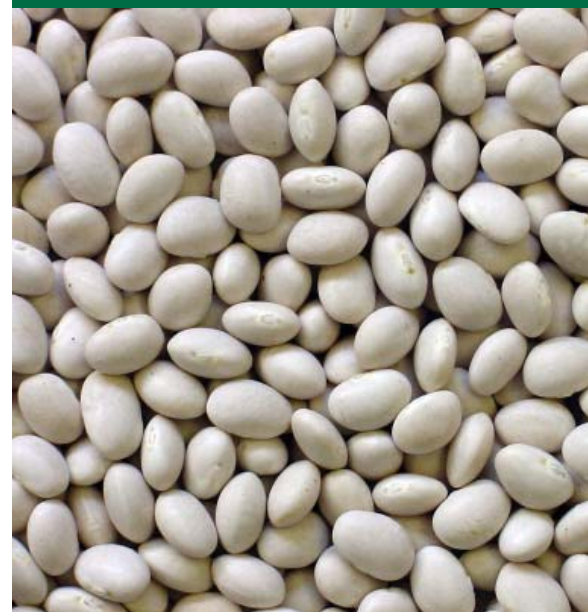
Seed producers or dealers can be found in the North Dakota Field Inspected Seeds Directory. The directory is available from the North Dakota State Seed Department (NDSSD), North Dakota Crop Improvement & Seed Association, your local county agent, or under the field seeds program of the NDSSD website. [www.ndseed.com](http://www.ndseed.com)



Varieties protected under PVP 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 ND State Seed Department.

**NDSU**  
AGRICULTURE

**Avalanche**  
**Navy Bean**



[www.ndcropimprovement.org](http://www.ndcropimprovement.org)

# Avalanche Navy Bean

**Avalanche** is a navy bean variety released by the North Dakota Agricultural Experiment Station (NDAES) in 2008.

Avalanche is a navy bean line selected from the cross 96-177-01-01//Voyager/Black Knight, which was made in 1999. This cross was an attempt to combine several traits such as good yield, earliness, erect architecture, desirable seed characteristics, and multiple disease resistance.

Avalanche is a medium maturing, high yielding navy bean, with very good seed size, shape, and appearance. The seed is very uniform in size, and of similar appearance. Avalanche has white flowers, dark green leaf color, is erect (Type II, short vine), with good lodging resistance. Avalanche exhibits good synchronous plant dry-down prior to harvest (both plant and pods mature concurrently). The upright plant structure, help to avoid white mold, and combined with its synchronous dry-down, suggests that this line may be suitable for direct combining. Avalanche is resistant to BCMV and moderately resistant to most rust races present in North Dakota. Avalanche is susceptible to the new rust race 20-3. It has good canning qualities.

**Development of this variety was made possible through funds provided by the Northarvest Bean Growers Association and the North Dakota Dry Edible Bean Seed Growers Association.**

## Avalanche Navy Bean

### General Characteristics

- High yield potential
- Good protection against BCMV and most common bean rust races
- Excellent seed quality
- Synchronous dry down and upright growth habit
- Early maturity

### Agronomic performance of Avalanche navy bean and commercial varieties summarized from several tests in North Dakota.

	Avalanche	Vista	Mayflower
Maturity (days)	102	103	107
Seed Size (g/100 seeds)	18.4	18.2	18.7
Growth Habit <sup>1</sup>	II	II	II
Height (cm)	53	55	58
Lodging Score <sup>2</sup>	2	1	1

<sup>1</sup> I= determinate bush; II=upright, short vine; III=prostrate vine; IV=indeterminate climber.

<sup>2</sup> Scale of 0 to 9 with 0 being the best.

### Disease reaction of Avalanche navy bean and commercial varieties summarized from several tests in North Dakota.

	Avalanche	Vista	Mayflower
Rust <sup>1</sup>	MR <sup>2</sup>	R	R
BCMV <sup>1</sup>	R	R	S
Anthracnose <sup>1</sup> (Race 73)	S	S	S

<sup>1</sup> R=resistant; MR=moderately resistant; MS=moderately susceptible; S=susceptible

<sup>2</sup> Screening performed using a mixture of races present in N.D. It is susceptible to the new rust race 20-3.

### Yield performance (cwt/acre) of Avalanche navy bean compared to commercial varieties.

Avalanche	Vista	Mayflower	Loc. Years
21.4	19.3	19.7	21
22.3	20.6	–	27
21.3	–	18.9	22

## For additional information

about Avalanche and other dry bean varieties, refer to the most recent North Dakota Dry Bean Performance Testing circular A-654, contact the dry bean breeder or extension agronomist at (701) 231-7971 or visit [www.ag.ndsu.edu/crops/](http://www.ag.ndsu.edu/crops/).