

Other dry edible bean varieties

released by the North Dakota Agricultural Experiment Station:

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.

Frontier – (1997) Late maturing pinto bean with large seed size and resistance to 39 rust races. Upright growth with good total plant dry down at harvest. Canning quality is similar to 'Sierra.'

Norstar – (1991) Upright, short (Type II) navy bean with good pod load. Resistant to bean rust races found in ND and may be less susceptible to white mold due to growth habit. May exhibit green stem characteristics associated with leaf retention at maturity.

For information on the availability of Foundation seed contact:

NDSU Research/Extension Centers

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

Or

NDSU Foundation Seedstocks Project
P.O. Box 5051
Fargo, ND 58105-5051
701-231-8140
www.ag.ndsu.nodak.edu/aginfo/seedstock/fss/

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



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 ND State Seed Department.

NDSU[®]

AGRICULTURE

Eclipse Black Bean



Eclipse Black Bean

Eclipse is a black bean variety released by the North Dakota Agricultural Experiment Station (NDAES) in July of 2004. This is the first black bean variety to be released by NDAES. Development of this variety was made possible in part through funds provided by the Northharvest Bean Growers Association.

Eclipse was selected from the progeny of the cross 'Tacaragua'/'Nighthawk'/'Navigator'. Tacaragua is a black bean landrace from Mexico which offers some resistance to white mold. Nighthawk is an early maturing variety from the University of Saskatchewan. Navigator is a navy bean variety from Rogers Seed Company which has excellent plant architecture and disease resistance. The intent of this cross was to combine tolerance to white mold with early maturity and erect plant architecture.

Eclipse has exhibited a yield potential advantage over 'T-39' and also canned product appearance scores similar to T-39. The upright plant growth of Eclipse, together with excellent lodging resistance, early maturity and synchronous dry down of plant and pods at harvest, may provide a benefit in harvest efficiency for dry bean producers.

To help ensure genetic purity, Eclipse black bean will be protected under PVPA Title V and must be sold as a class of certified seed.

Eclipse Black Bean General Characteristics

- High yielding
- Synchronous dry down
- Early maturing
- Type II upright growth habit
- Excellent lodging resistance
- Dull black seed coat
- Dark glossy green leaf
- Purple flowers
- Canning quality similar to 'T-39'

Agronomic performance and canning scores of Eclipse black bean and commercial varieties summarized from several tests in North Dakota.

	Eclipse	T-39	Raven	Jaguar
Maturity (days)	99	102	100	98
Seed Size (seeds/lb)	2,248	2,226	2,522	2,467
Growth Habit ¹	II	IIb	II	II
Height (inches)	23.6	21.3	24.0	24.4
Lodging Score ²	2	7	1	2
Canning Score ³	3.0	2.7	2.0	4.5

¹I=determinate bush; II=upright, short vine; III=prostrate vine; IV=indeterminate climber

²Scale of 0 to 9 with 0 being the best

³Scale of 1 to 7 based on subjective evaluation of physical integrity of bean, color and clarity of brine, and overall visual appeal.

Disease reaction of Eclipse black bean and commercial varieties summarized from several tests in North Dakota.

	Eclipse	T-39	Raven	Jaguar
Rust ¹	R	R	S	R
BCMV ¹	R	R	R	R
Anthracnose ¹ (Race 7)	R	R	R	R
Anthracnose ¹ (Race 73)	S	S	S	R

¹R=resistant; MR=moderately resistant; MS=moderately susceptible; S=susceptible

Yield of Eclipse black bean and commercial black bean varieties in NDSU yield trials conducted 2001-2003.

	Eclipse	T-39	Raven	Jaguar	Loc. Years
Yield (cwt/acre)	23.9	22.2	—	—	14
Yield (cwt/acre)	22.7	20.4	—	20.5	9
Yield (cwt/acre)	27.3	24.6	21.2	—	5

For additional information

about Eclipse and other dry bean varieties, refer to the most recent North Dakota Dry Bean Performance Testing circular A-654, or www.ext.nodak.edu/extpubs/plantsci/rowcrops/a654.pdf or contact the dry bean breeder or extension agronomist at (701) 231-7971.