

***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 PVP 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
- Canning quality similar to 'T-39'
- Purple flowers
- Dark glossy green leaf

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
Anthraco ¹ (Race 7)	R	R	R	R
Anthraco 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 DryBean 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.