

Other Dry Edible Bean varieties

released by the North Dakota Agricultural Experiment Station:

Avalanche – (2008). Navy Bean with medium maturity, high yields, nice seed shape and size. Possesses erect architecture with uniform dry-down. Resistant to BCMV and moderately resistant to rust.

Lariat – (2007). Pinto Bean with medium maturity, high yields, and upright architecture with synchronous dry-down. Resistant to leaf rust and BCMV.

Stampede – (2007). Pinto Bean with medium maturity and high yields. Resistant to BCMV. Erect plant structure and synchronous dry-down.

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

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

Treasure Valley Seed Company Inc. has exclusive rights to produce and distribute seed of Rio Rojo outside of North Dakota and Minnesota. For information please call 208-337-4626.

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 local county agent, or under the field seeds program of the NDSSD website.

www.ndseed.com



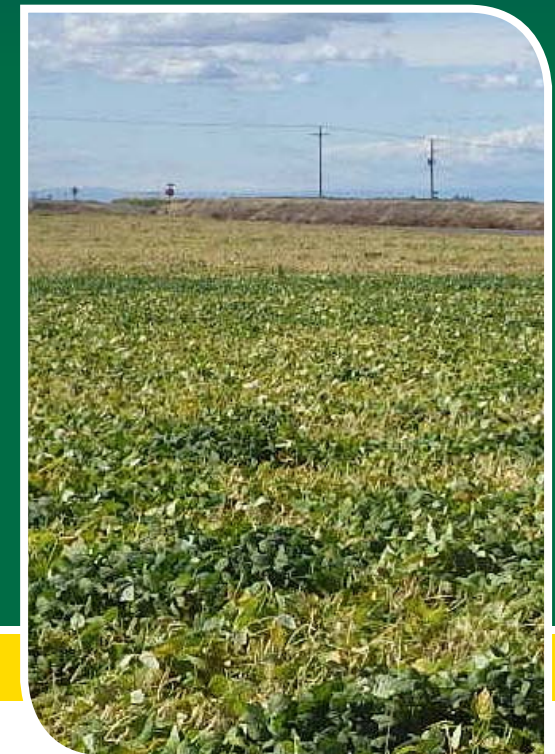
Varieties protected under PVP with Title V option can only be sold as a certified class of seed. **It is the responsibility of the buyer and/or seller to confirm the PVP status of a specific crop variety prior to buying or selling the variety.** PVP status information can be obtained from the ND State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

NDSU

AGRICULTURE

Rio Rojo

Small Red Bean



www.ndcropimprovement.org

Rio Rojo

Small Red Bean

Rio Rojo was released by the North Dakota Agricultural Experiment Station (NDAES) in 2013 with the first public distribution in 2014.

Rio Rojo is a medium-early maturing, high-yielding small red bean with commercially acceptable seed size, shape, and appearance. Rio Rojo is erect, has good lodging resistance, and exhibits good and synchronous plant drydown before harvest. It has shown superior performance in yield and disease resistance when compared with other small red bean varieties.

Rio Rojo has improved resistance to common bacterial blight (CBB). Even though it cannot be considered resistant, the intermediate levels observed in field tests showed that Rio Rojo is better than all the small red cultivars commonly grown in the U.S. Rio Rojo also has the marker linked to the *I* gene, which confers resistance to bean common mosaic virus (BCMV).

Rio Rojo is a selection from a cross between Buster and VAX 3. Seed quality (shape, size, color, etc.) is within the commercial ranges of acceptability. Rio Rojo is susceptible to the new race of bean rust (20-4) and anthracnose (race 73). Canning tests conducted at NDSU during 2011 (using seed produced in 2010) rated Rio Rojo as average.

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

Rio Rojo General Characteristics

- improved resistance to common bacterial blight
- good protection against bean common mosaic virus
- high yield potential

2006-2011 agronomic performance of Rio Rojo and the most commonly grown small red bean variety averaged across 17 environments in ND.

	Rio Rojo	Merlot
Maturity (Days)	104	104
Days to Flowering	57	55
Seed Weight (g/100 seeds)	30.3	35.6
Height (cm)	49	52

Disease reaction of Rio Rojo and the most commonly grown small red bean variety averaged across three environments in ND.

	Rio Rojo	Merlot
Common Bacterial Blight ¹	5	8

¹CBB Scores: 1 to 3 = Resistant, 4 to 6 = Intermediate, 7 to 9 = Susceptible

Mean yield (cwt/acre) of Rio Rojo compared to the most commonly grown small red bean variety across 34 environments in ND and MN from 2006-2013.

	Rio Rojo	Merlot
	23.34	19.97



For additional information

about Rio Rojos or other dry bean varieties, refer to the most recent North Dakota Dry Bean Performance Testing circular A-654. The dry bean breeder, Dr. Juan Osorno, or extension agronomist, Dr. Hans Kandel, may also be contacted at 701-231-7971, or visit www.ag.ndsu.edu/ndsuaug/crops.