

## **2017 Dry Bean Performance Evaluation**

Mike Moore and Jolene Sweet, Wyoming Seed Certification Service; Camby Reynolds and Andi Pierson, Powell Research and Extension Center

In 2015, Wyoming ranked ninth nationally in dry bean (*Phaseolus vulgaris L.*) production, and fourth in the production of pinto beans. In the same year, Wyoming growers produced 542,000 hundred-weight of pinto beans on 31,000 harvested acres, averaging 23 hundred-weight per acre. The University of Wyoming Seed Certification Service coordinates the dry bean variety performance evaluation at this location in a continuous and on-going program. In cooperation with the National Cooperative Dry Bean Nursery, a wide range of germplasm is evaluated each year, assisting producers in selecting varieties best suited for Wyoming soils and climate.

### **Materials and Methods**

The experiment was located at the University of Wyoming Research and Extension Center in Powell, Wyoming. The soil, a Garland clay loam, (fine, mixed, mesic: Typic Haplarid), was prepared by roller harrow and leveled in the spring. Chemical weed control consisted of a preplant incorporated chemical treatment of 40 ounces of Eptam and 2 pints of Sonalan applied on May 24. The plots received 60 units of N, 30 units of P and 5 units of Zn per acre on May 30. The plots were planted on June 2 in three row plots that were 5.5 feet wide by 20 feet long. IH 185 planter units with cone attachments were used, set on 22-inch row spacing. The experimental design was a randomized block with 4 replications. Cultivation controlled weed escapes during the growing season. Furrow irrigation was applied on June 6, July 10, July 20, and August 10, August 20, and August 31. Visual estimates for days to 50 percent bloom (50 percent of plants at second bloom) and days to maturity (50 percent of the plants with one buckskin pod) were made. Subplots of one row by 10 feet were pulled by hand, and plots were threshed with an Almaco stationary plot thresher. The seed was hand-picked to remove dirt clods and seed mixtures. Samples were then weighed for clean seed yield per plot and seeds per pound.

### **Results and Discussion**

Stand establishment was erratic due to a heavy rain after planting that created a thick soil crust. Summer temperatures and precipitation were reasonable, and while all entries matured prior to the first frost, precipitation delayed threshing.

### **Acknowledgements**

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Name	Market class	Bloom Days after Planting	Buckskin Days after Planting	Yield lbs/A	Seeds per Pound
PT10-12-1	pinto	53	88	3033	1299
NE2-16-33	pinto	51	88	2615	1107
Black Foot	pinto	51	81	2365	1274
Nez Perce	pinto	54	87	2335	1399
Twin Falls	pinto	56	90	2921	1339
La Paz	Pinto	56	90	3155	1210
Othello	Pinto	49	77	3096	1157
Staybright (COSD 35)	SLD	54	90	3403	1268
COSD 7	SLD	51	85	2780	1262
Palomino	SLD	49	85	3264	1175
SR10-2-1	small red	52	86	2344	1177
ACUG 13-SR1	small red	57	89	2161	2245
ACUG 15-B4	black	57	93	3019	2189
ACUG 14-1	navy	50	86	1918	2086
Eclipse	Black	57	88	3026	2326
Dynasty	DRK	49	91	2912	796
DRK 1	DRK	50	92	2592	980
Cornell 612	LRK	49	86	1984	845
CELRK	LRK	49	81	2137	788
CO 14790-3	Pinto	54	88	2989	1253
	<b>Mean</b>	52	87	2702	1359
	<b>LSD</b>	2	2	857	95
	<b>CV</b>	2.4	1.5	19.1	4.2