

2016 Nebraska Dry Edible Bean Variety Trials,

Jim Schild, Extension Educator
Robert Hawley, Extension Technician
Gary Stone, Extension Educator

The 2016 dry bean variety trials were planted at two locations this past year. A Great Northern, Kidney, and Pinto trial was planted at the Mitchell Ag Lab. All market classes and the Cooperative Dry Bean Nursery were planted at the Scottsbluff Ag Lab.

The Mitchell Pinto, Kidney and Great Northern trials were planted with a Hege cone planter on May 31. The Scottsbluff trial was planted on June 1. Seeding rates of 85,000 seeds per acre were used for all market classes except the kidneys, which were planted at the rate of 100,000 seeds per acre. The herbicides Sonalan and Eptam were incorporated prior to planting. Treatments were replicated 4 times. Fertilizer was applied according to soil test recommendations. Row width was 22 inches. Plot size was 4 rows wide by 25 feet long. Stands were good at all sites. The Scottsbluff site was furrow irrigated and the Mitchell site was sprinkler irrigated. Fields were irrigated every 7 to 9 days from late June to late August. The Scottsbluff site was hailed on July 5, copper was sprayed on July 7. The Mitchell site was also hailed on July 5 and also on July 18. The site was treated with copper on July 28.

The Scottsbluff site was undercut on Sept. 16. The center two rows of each plot were harvested with a Wintersteiger plot combine with a finger pickup attachment on Sept. 19. The Mitchell Pinto, Kidney, Great Northern site was undercut on Sept. 8 and harvested Sept 16.

Yield- lbs per acre corrected to 14% moisture

DTM – Days to Maturity

Test WT – bs/bu

Plant Type – 1A Determinate upright, 2b indeterminate upright, 3a indeterminate prostrate short vine, 3b indeterminate prostrate long vine.

GN Scottsbluff						
	Variety	PLT	Maturity	% Moist	Test Wt	Yield lbs/A
12	PV 13151	2b	95.0	11.4	60.6	3372
10	PV 13172	2b	97.5	11.5	60.7	3017
5	Hydra	3b	99.0	11.3	62.0	2957
11	PV 13150	2b	99.3	11.6	62.1	2955
13	PV 12134	2b/3a	97.0	11.0	60.3	2884
7	PV 08162	3a	99.8	12.4	60.7	2855
14	Marquis	3b	95.5	10.9	62.7	2827
9	PV 08148	3b	95.3	11.0	63.2	2747
3	Taurus	3a	99.3	11.4	62.2	2725
16	Beryl R	3b	94.5	10.8	62.6	2712
6	Draco	3a	98.3	11.3	61.1	2661
8	Pv 08165	2b	98.5	11.8	59.8	2657
15	Ivory	3b	90.0	10.8	61.3	2614
1	Orion	3a	98.8	11.2	61.4	2496
20	NE1-15-13	3b	99.3	11.7	61.6	2460
22	NE1-15-28	3a	98.5	11.4	60.0	2455
18	NE1-15-11	3a	98.3	10.7	62.5	2390
17	NE 1-15-5	3a	99.0	11.9	62.1	2336
4	Aries	2b	96.8	11.1	61.4	2309
2	Gemini	3a	93.0	11.0	61.7	2283
19	NE1-15-19	3a	99.0	10.7	60.1	2177
21	NE1-15-22	3a	99.0	11.9	62.0	2027
102	Powderhorn	2b	93.0	10.6	58.5	1827
Mean			97.1	11.3	61.3	2597
% CV			2.1	3.5	0.9	13.2
LSD 5%			2.9	0.6	0.8	483

GN Mitchell						
	Variety	PLT	Maturity	% Moist	Test Wt	Yield lbs/A
5	Hydra	3b	92.0	11.4	61.6	2929
14	Marquis	3b	91.5	10.6	62.4	2920
12	PV 13151	2b	89.0	10.9	59.6	2844
16	Beryl R	3b	89.5	10.8	61.9	2565
15	Ivory	3b	87.3	11.2	59.8	2527
21	NE1-15-22	3a	93.3	11.2	61.3	2496
17	NE 1-15-5	3a	94.0	11.3	62.2	2483
13	PV 12134	3b	93.5	11.1	59.4	2401
22	NE1-15-28	2b	89.8	11.0	59.0	2396
20	NE1-15-13	3a	93.5	11.3	60.0	2349
7	PV 08162	2b	95.3	11.4	59.8	2269
18	NE1-15-11	3a	91.3	10.9	62.2	2077
8	Pv 08165	2b	92.5	11.2	59.3	2060
9	PV 08148	3a	88.0	11.0	62.1	2040
11	PV 13150	2b/3a	94.0	10.9	61.2	1947
10	PV 13172	2b	89.8	10.9	59.1	1916
2	Gemini	2b/3a	84.0	10.9	61.2	1844
4	Aries	2b	85.5	11.0	61.1	1779
19	NE1-15-19	2b/3a	92.0	10.8	58.6	1726
3	Taurus	2b/3a	93.8	11.2	62.1	1663
6	Draco	3a	90.0	10.5	60.6	1633
1	Orion	2b/3a	89.3	10.8	60.0	1623
102	Powderhorn	2b	85.3	10.6	57.4	1424
Mean			90.6	11	60.5	2170
% CV			3	2.3	0.8	13.9
LSD 5%			3.8	0.4	0.6	427

Pinto Scottsbluff						
	Variety	PLT	Maturity	% Moist	Test Wt	Yield lbs/A
51	NE2-15-6	3a/3b	99.0	10.9	58.4	3775
24	SV6139Gr	2b	91.3	10.5	60.7	3455
25	Windbreaker	2b/3a	93.5	10.5	58.1	3351
49	NE 2-15-3	3b	100.8	11.5	58.9	3332
43	GTS 904	3a	98.5	10.4	60.0	3274
36	PV13-7014	3a	98.0	11.0	61.1	3251
33	Cowboy (11278)	2b	92.3	10.8	60.4	3235
37	PV15-7072	2b	93.0	10.2	62.9	3225
26	La Paz	3a	95.0	11.2	61.3	3205
44	Galeena	3a	96.3	10.7	60.8	3193
28	Monterrey	2b/3a	95.5	11.2	61.1	3173
32	Radiant (12324)	2b	91.3	10.0	60.7	3138
48	NE 2-15-19	3a	91.3	10.3	58.4	3125
29	Santa Cruz	2b	94.8	10.9	61.2	3103
31	Vibrant (11258)	2b	92.3	9.9	61.3	3080
45	Poncho	3b	91.8	10.7	60.9	3014
40	Centennial	2b	99.5	11.4	60.5	2956
23	Rough Rider SV6533Gr	2b	91.0	10.5	60.6	2932
50	NE2-15-5	3a	99.0	10.9	57.7	2927
34	PV11303	3a	98.5	11.2	61.1	2918
35	PV10305	2b	95.5	10.3	60.5	2908
47	NE 12-15-161	3b	99.8	11.6	58.8	2790
27	Sinaloa	2b	91.5	10.8	61.5	2769
42	GTS 907	3a	91.5	10.6	58.6	2762
30	Torreon	2b	94.8	11.1	61.5	2728
39	Croissant	3a	97.3	10.6	59.7	2716
41	El Diablo	3a	92.8	10.2	57.1	2655
38	Long's Peak	2b	96.8	10.9	59.1	2632
46	Montrose	3b	90.8	10.7	60.9	2463
52	NE2-15-7	3a	98.3	10.6	57.8	2101
Mean			95	10.7	60.1	3047
% CV			2.4	3.3	1.3	11.1
LSD 5%			3.2	0.5	1.1	467

Pinto Mitchell						
	Variety	PLT	Maturity	% Moist	Test Wt	Yield lbs/A
39	Croissant	3a	94.0	11.0	60.2	3103
36	PV13-7014	2b	94.8	11.5	61.7	3024
26	La Paz	2b	94.0	11.3	62.0	2867
34	PV11303	2b/3a	94.3	11.5	61.8	2829
40	Centennial	3a	96.0	11.9	60.8	2819
33	Cowboy (11278)	2b	90.8	11.3	60.7	2725
28	Monterrey	2b	93.0	11.6	61.8	2687
27	Sinaloa	2b	91.0	11.3	60.7	2684
50	NE2-15-5	3b	94.8	11.3	58.4	2647
51	NE2-15-6	3b	95.5	11.0	57.4	2643
31	Vibrant (11258)	2b	92.0	11.1	60.1	2620
48	NE 2-15-19	3a	90.8	10.6	57.7	2551
32	Radiant (12324)	2b	92.5	11.5	60.7	2547
35	PV10305	2b	91.3	10.9	60.2	2475
41	El Diablo	3a	90.3	10.8	56.6	2451
49	NE 2-15-3	3b	97.5	11.0	57.9	2159
47	NE 12-15-161	3b	95.5	11.4	58.9	2059
25	Windbreaker	3a	90.3	11.1	57.3	2018
38	Long's Peak	2b	93.0	11.6	58.7	1908
29	Santa Cruz	2b	92.3	11.5	61.4	1865
46	Montrose	3b	88.5	10.7	59.3	1845
37	PV15-7072	2b	89.3	11.2	60.5	1827
52	NE2-15-7	3a	90.8	11.4	57.9	1776
44	Galeena	3b	91.8	11.0	60.7	1687
24	SV6139Gr	2b	88.3	11.1	61.5	1640
30	Torreon	2b	89.8	11.1	61.4	1633
43	GTS 904	3a	89.5	11.1	58.8	1379
45	Poncho	3b	88.0	10.9	59.7	1360
23	Rough Rider SV6533Gr	2b	86.5	11.2	60.5	1298
42	GTS 907	2b	87.8	10.6	57.4	1095
Mean			91.8	11.2	59.7	2207
% CV			2	3.4	0.9	13
LSD 5%			2.6	0.5	0.8	404

Kidney Scottsbluff						
	MC	Variety	Maturity	% Moist	Test Wt	Yield lbs/A
94	DRK	Chaparral (07323)	98.3	9.9	58.2	1998
97	DRK	PV 09426	99.3	10.2	58.2	1950
98	DRK	Montcalm	99.5	10.3	57.7	1914
95	DRK	PV 09431	99.3	10.4	58.9	1736
93	DRK	PV 09424	100.0	11.1	58.6	1699
96	DRK	EPIC (PV 09430)	98.5	9.8	58.9	1673
87	LRK	Ronnie's Red (09360)	99.0	10.2	57.5	1650
100	DRK	GTS 104	99.3	10.1	58.4	1543
83	LRK	Red Zone (09356)	98.0	10.2	56.9	1533
81	LRK	Red Flag (09353)	99.0	9.6	57.8	1461
80	LRK	Big Red	93.0	10.2	57.7	1454
79	LRK	PV 0629	98.5	9.8	58.4	1443
92	LRK	NE 10-14-12	94.0	10.0	57.8	1275
82	LRK	Red Dog (09354)	98.3	10.0	57.9	1255
89	LRK	Pink Panther	96.3	10.2	56.8	1156
86	LRK	PV 07302	95.5	9.7	55.6	1138
101	WK	COB 228-03	95.0	9.8	61.1	1107
88	LRK	Pv 09363	90.0	9.6	56.7	1106
84	LRK	PV 09378	90.3	9.8	58.0	1067
85	LRK	PV 09357	91.5	9.6	56.9	1014
99	DRK	Redhawk	95.0	10.1	56.7	995
90	LRK	CELERK	90.5	9.8	57.9	976
91	LRK	Rosie	99.3	10.7	59.4	931
Mean			96.4	10	57.9	1394
% CV			2.1	4.5	1.3	26.1
LSD 5%			2.8	0.6	1.1	515

Kidney Mitchell						
	MC	Variety	Maturity	% Moist	Test Wt	Yield lbs/A
94	DRK	Chaparral (07323)	96.5	10.8	56.4	1819
98	DRK	Montcalm	96.8	10.4	55.5	1417
97	DRK	PV 09426	99.0	10.5	55.5	1367
95	DRK	PV 09431	93.3	10.2	56.8	746
99	DRK	Redhawk	87.8	9.9	53.9	680
91	LRK	Rosie	94.0	10.3	58.2	650
88	LRK	Pv 09363	81.8	10.3	54.2	593
80	LRK	Big Red	84.0	10.1	54.7	566
92	LRK	NE 10-14-12	87.5	10.3	54.8	532
84	LRK	PV 09378	84.3	10.1	55.7	505
93	DRK	PV 09424	94.8	10.0	55.1	503
87	LRK	Ronnie's Red (09360)	91.8	9.9	55.8	496
79	LRK	PV 0629	91.3	10.0	55.0	460
90	LRK	CELERK	82.3	10.0	55.6	427
83	LRK	Red Zone (09356)	91.8	10.2	54.7	363
82	LRK	Red Dog (09354)	87.5	10.1	55.8	359
89	LRK	Pink Panther	83.0	10.2	53.3	332
81	LRK	Red Flag (09353)	89.3	9.9	55.6	319
96	DRK	EPIC (PV 09430)	88.8	10.1	53.0	251
85	LRK	PV 09357	84.3	9.5	55.0	169
86	LRK	PV 07302	86.5	9.7	55.0	157
Mean			89.3	10.1	55.2	605
% CV			3.4	2.6	2.5	31
LSD 5%			4.3	0.4	1.9	265

