

North Dakota Dry Pea Variety Trial Results for 2014 and Selection Guide

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Introduction

Field pea fits well into small-grain rotations. The green- and yellow-seeded varieties are used for human consumption as dry split peas. Field peas also are used as protein concentrates for livestock and pigeon feeds. Field pea stems grow to a length of 33 to 36 inches, and the plant reaches maximum height at the early pod-fill stage. A cool growing season (a mean temperature of 55 to 65 degrees) is necessary for optimum pea yields. Hot weather during flowering may result in a reduced seed set.

In North Dakota, field pea takes about 60 days from seeding until flowering and 90 to 100 days to maturity. The moisture requirement for field pea is similar to that for cereal grains. Field pea can be grown on a wide range of soil types, but drainage must be adequate because field pea does not tolerate saturated or soggy conditions. Field pea can be grown in a no-tillage or conventional-tillage cropping system. Field pea grows best when seeded into a weed-free seedbed and fertile soils. Land preparation for seeding is similar to that of wheat.

To obtain good soil-to-seed contact, seedbeds should be firm. Avoid seedbeds with large clods. Do not work the soil too finely because subsequent soil crusting following rains may cause poor emergence. Drill the seeds 2 to 3 inches deep in narrow rows (less than 10 inch apart) as early in the spring as possible. The soil should not be excessively wet at seeding.

Seeding can be done with an air seeder or grain drill. Adjust the seeder to prevent cracking of the seed, especially with the large-seeded varieties, because cracked seed will not germinate. Do not pack or roll immediately after seeding if the soil moisture is high because excess compaction or crusting can occur.

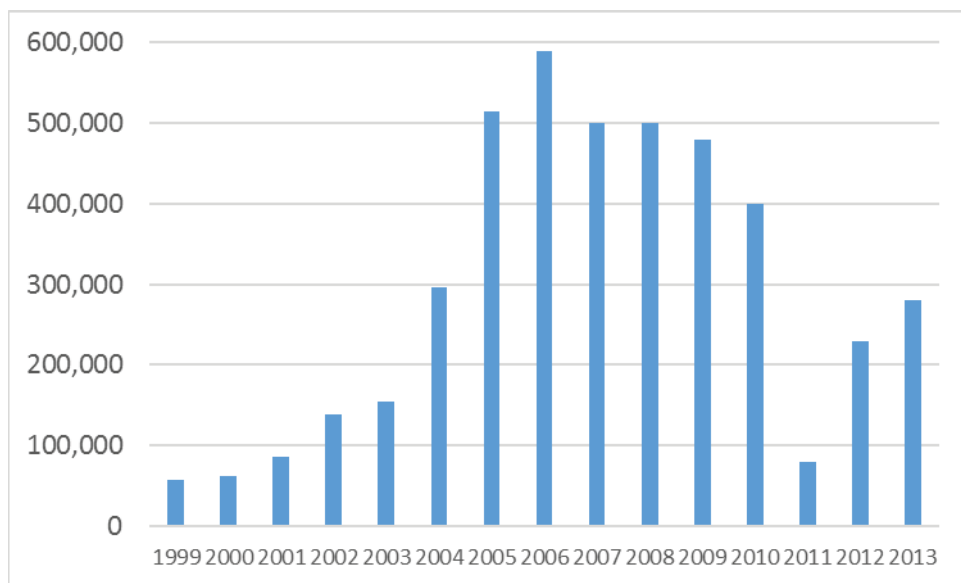
Pea seedlings can withstand considerable frost. Even if the frost is severe enough to kill the main shoot, the pea plant will regrow from buds at one of the nodes at or below the soil surface. However, this will delay plant maturity. The pea seed germination rate increases with increasing temperatures, but at temperatures greater than 64 degrees, the percentage of seed germination decreases.

Field peas are capable of utilizing bacterially fixed atmospheric nitrogen. The specific bacterial association for nitrogen fixation in field peas and lentils is with the bacterium *Rhizobium leguminosarum*, which is a different bacteria species than is used for soybean inoculation. If field peas are to be grown in a field for the first time or no peas were grown there recently, inoculating the seed with the proper *Rhizobium* bacteria prior to planting may be needed to ensure nodulation.

Treating the seed with a fungicide can improve emergence and plant establishment significantly. Fungicide labels should be checked to see if a particular fungicide can be used on field pea.

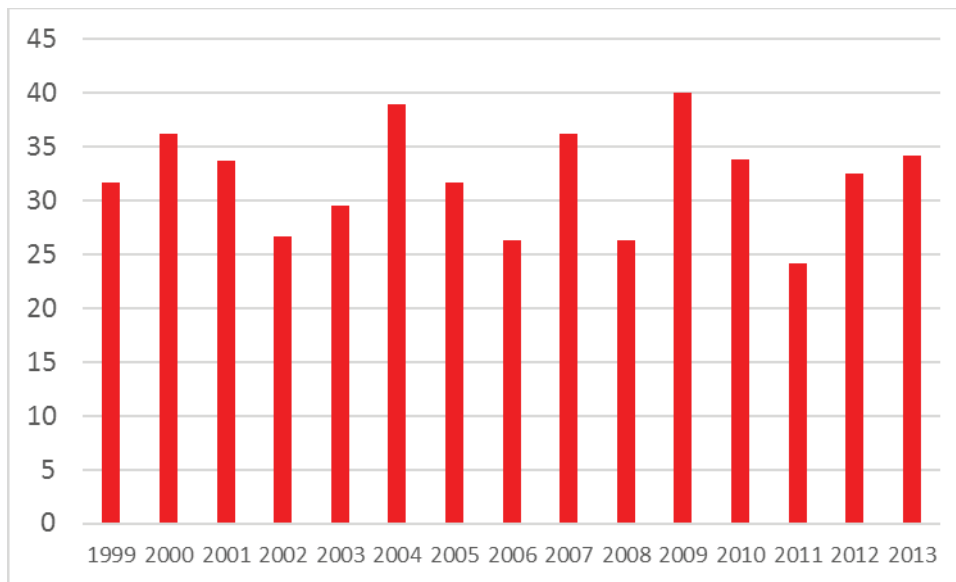
Having level ground is critical for easy harvesting. Stony fields should be avoided or rolled after seeding to bury loose stones that might be picked up during swathing and harvesting. For more production information, see publication A1166, "Field Pea Production," (www.ag.ndsu.edu/pubs/plantsci/rowcrops/a1166.pdf). Dry pea planted acres and yield have fluctuated during the past 15 growing seasons as shown in Figure 1 and 2.

Figure 1. North Dakota Dry Pea Harvested Acreage 1999 to 2013.



Source: North Dakota Agricultural Statistics Service – USDA.

Figure 2. North Dakota Dry Pea Yield in Bushels Per Acre 1999 to 2013.



Source: North Dakota Agricultural Statistics Service – USDA.

2014 Dry Pea Performance Trials

Variety trial data from all NDSU Research Extension Centers for all crops can be found at www.ag.ndsu.edu/varietytrials/. Weather data are provided in Table 1.

Table 1. April-September 2014 Average Temperature and Precipitation Rankings for Selected North Dakota Locations.

City	Temperature Ranking	Precipitation Ranking
Bowman	57.1 F (15th Coolest Period Since 1915)	17.6 inches (6th Wettest Period Since 1915)
Bismarck	59.7 F (63rd Coolest Period Since 1875)	11.7 inches (63rd Driest Period Since 1875)
Cavalier	56.7 F (20th Coolest Period Since 1934)	16.2 inches (30th Wettest Period Since 1927)
Fargo	60.8 F (46th Warmest Period Since 1881)	17.3 inches (51st Wettest Period Since 1881)
Minot Exp. Station	57.4 F (41st Coolest Period Since 1905)	18.2 inches (10th Wettest Period Since 1905)
Williston Exp. Station	58.9 F (50th Coolest Period Since 1894)	9.0 inches (34th Driest Period Since 1894)
North Dakota Average	57.6 F (41st Coolest Period Since 1895)	16.4 inches (19th Wettest Period Since 1895)

Source: Adnan Akyüz, NDSU, North Dakota state climatologist.

The agronomic data presented in this publication are from replicated research plots using experimental designs that enable the use of statistical analysis. The LSD (least significant difference) numbers beneath the columns in the tables are derived from the statistical analyses and only apply to the numbers in the column in which they appear. If the difference between two varieties exceeds the LSD value, it means that with 90 percent probability (LSD 0.10), the higher-yielding variety has a significant yield advantage. If the difference between two varieties is less than the LSD value, then the variety yields are considered similar. The abbreviation NS is used to indicate no significant difference for that trait among any of the varieties.

The CV is a measure of variability in the trial. The CV stands for coefficient of variation and is expressed as a percentage. Large CVs mean a large amount of variation that could not be attributed to differences in the varieties. In the tables, the “mean” indicates the average of the observations in the column. The abbreviation PM stands for physiologically mature. Physiological maturity is reached when the bottom 75 percent of the pods have turned yellow to brown. At this time, the upper 25 percent of the pods will be a dull green, with the pod surface no longer succulent. Yields are reported at 15 percent moisture content.

The standard for reporting protein in field pea is at 0 percent moisture. The harvest index reflects the plant height at the time of harvest relative to plant height at end of bloom (maximum plant height). The harvest ease score is taken at the time the plants are dried down sufficiently to allow threshing or harvesting to occur. Harvest ease is an assessment of combining efficiency. The lower the score, the easier the operator will be able to get the cutter bar underneath the lowest pods and make decent travel speed through the field.

Only compare values within the table and look for trends for the desired trait among different experimental sites and years. In the tables, the dry pea varieties are arranged in alphabetical order within market class (yellow and green cotyledon types). Footnotes provide more details for the table under which they appear. Characteristics to evaluate for selecting a dry pea variety include market class, yield potential in your area, test weight, reaction to problematic diseases and maturity date.

When selecting a high-yielding and good-quality variety, use data that summarizes several years and locations. Table 2 provides information on a core group of varieties that were included in most locations. Choose the variety that, on average, performs the best at multiple locations near your farm during several years. Presentation of data for the varieties tested does not imply approval or endorsement by the authors or agencies conducting the test. North Dakota State University approves the reproduction of any table in this publication only if no portion is deleted, appropriate footnotes are given, the order of the data is not rearranged and NDSU is given credit for conducting the trial.

Variety	Vine Length	Harvest Ease	Powdery Mildew Tolerance		Seed Size	2011 Avg. Yield	2012 Avg. Yield	2013 Avg. Yield	2014 Avg. Yield
			Maturity	11 locations ¹		15 locations ²	7 locations ³	10 locations ⁴	
						(bu/a)	(bu/a)	(bu/a)	(bu/a)
Yellow Cotyledon Type									
Agassiz	Tall	Good	Good	Medium	Medium	42.5	50.3	56.3	54.0
CDC Golden	Medium	Good	Good	Medium	Medium	39.3	49.6	--	--
CDC Meadow	Medium	Good	NA ⁵	Medium	Med. Small	--	--	51.6	54.2
DS Admiral	Medium	Good	Good	Early/Med.	Medium	42.9	49.3	47.6	51.1
Green Cotyledon Type									
CDC Striker	Medium	Good	Poor	Medium	Medium	38.3	51.4	46.1	48.4
Cruiser	Medium	Fair	Poor	Medium	Small	32.6	44.3	45.4	46.6
Majoret	Medium	Fair	Poor	Medium	Medium	40.2	44.3	48.4	48.1
Mean						39.3	48.2	49.2	50.6
CV %						9.7	7.9	9.1	9.6
LSD 0.10						2.7	2.3	4.1	3.6

¹These varieties appeared in all the locations reported in the 2011 publication except for Cathay organic and Nesson Valley irrigated.

²These varieties appeared in all the locations reported in the 2012 publication except for Carrington Forage/Cover Crop.

³These varieties appeared in all the locations reported in the 2013 publication except Tables 10, 11 and 14.

⁴These varieties appeared in all the locations reported in the 2014 publication except Table 9.

⁵NA is not available.

Table 3. 2014 Dry Pea - Carrington - Authors, M. Ostlie, B. Schatz, K. Bjerke and L. Berg.

Variety	Days to Flower	Days to PM	Vine Length ¹	Canopy Height ²	Height Index ³	Plant		Seed Protein	Seeds/Pound	1,000 Seed Weight	Test Weight	Seed Yield	
						Lod-ge ⁴	Harvest Ease ⁵					2014	3-yr. Avg.
	(DAP) ⁶	(DAP) ⁶	(inch)	(inch)	(%)	(0-9)	(0-9)	(%)	(seeds)	(gram)	(lb/bu)	---(bu/a)---	
Yellow Cotyledon Type													
Abarth	56	90	36	20	55	2	6	23.6	1,616	281	64.5	80.9	--
Agassiz	57	92	37	22	61	1	6	25.7	1,763	258	63.6	80.4	69.3
Bridger	55	89	35	20	58	2	7	25.3	1,838	247	63.9	74.1	66.2
CDC Meadow	56	89	33	19	57	3	6	25.2	2,000	227	65.0	71.0	64.1
DS Admiral	56	87	34	17	50	3	6	25.9	1,837	247	63.8	62.0	58.3
Durwood	58	91	39	22	57	1	7	25.5	1,712	266	63.6	74.2	--
Earlstar	56	89	37	23	60	2	7	24.0	2,022	225	63.2	77.7	--
Gunner	58	91	35	21	60	1	7	25.1	1,820	250	63.9	73.0	63.2
Hyline	58	91	36	17	46	2	6	24.8	1,671	272	64.4	76.8	--
Jetset	56	88	35	19	54	3	6	25.2	1,786	254	63.5	76.7	--
Korando	52	91	35	18	53	2	6	26.8	1,719	264	64.4	69.5	68.6
Mystique	57	93	37	21	57	1	7	25.0	1,630	279	63.6	74.1	65.1
Navarro	50	89	34	17	49	4	6	25.5	1,661	273	64.0	73.7	64.0
Nette	55	88	35	17	50	2	6	25.0	1,960	232	64.6	75.9	65.7
Quantim	59	94	36	18	51	1	6	24.9	1,511	301	63.3	79.7	--
Salamanca	60	91	37	21	56	2	7	26.5	1,700	267	64.0	74.2	64.4
Spider	58	91	34	18	51	2	6	25.7	1,723	264	64.6	80.3	66.2
SW Midas	57	89	36	16	45	3	5	25.1	2,077	219	64.0	71.9	64.3
Torch	60	90	35	20	57	2	6	26.0	1,629	279	63.2	75.6	63.1
Vegas	59	90	40	21	53	2	7	26.0	1,846	246	64.3	75.9	65.0
Yellowstone	50	86	34	18	52	3	5	25.2	1,633	278	64.0	65.0	--
Green Cotyledon Type													
Aragorn	55	91	34	18	53	2	5	27.2	1,968	231	62.6	67.4	54.8
Arcadia	57	90	33	15	45	6	4	25.8	2,134	213	63.8	81.4	66.6
Blumoon	58	92	38	20	52	2	7	26.3	1,704	266	64.0	77.9	67.0
CDC Striker	57	90	34	14	40	6	5	25.4	2,086	219	63.1	73.6	63.1
Cruiser	57	92	35	18	51	1	6	26.2	2,029	224	63.2	67.8	58.5
Daytona	59	91	33	15	45	3	5	24.9	1,711	266	63.5	75.3	--
Ginny	56	91	35	17	48	3	5	25.7	2,096	217	63.6	68.1	--
Greenwood	57	91	33	16	47	3	5	24.4	2,097	217	64.6	64.6	--
K2	56	90	34	20	58	2	6	25.6	2,014	226	64.1	69.7	58.0
Majoret	59	91	35	18	52	2	6	27.1	1,766	258	63.7	72.7	59.6
Matrix	61	90	36	15	43	3	6	24.6	1,602	284	63.9	72.7	--
Shamrock	61	94	34	19	56	1	6	25.1	1,712	265	63.7	75.3	58.2
Mean	57	90	35	18	52	2	6	25.5	1,820	252	63.9	73.6	63.3
CV %	1.5	1.7	6.9	12.1	13.5	53.6	11	2.4	3.3	3.2	1.0	8.0	--
LSD 0.10	0.8	1.4	2.2	2.1	6.6	1.1	0.6	0.7	53	7.6	0.6	5.3	--

Planted: May 1. Harvested: Aug. 11. Previous crop: spring wheat.

¹Plant height at end of flowering.

²Height to the top of the canopy at harvest.

³Height Index: Calculated as the ratio of canopy height/plant height.

⁴Lodging: 0 = none, 9 = lying flat on ground.

⁵Harvest Ease: 0 = all plants upright (very easy harvest) to 9 = all plants flat (very difficult to direct harvest).

⁶DAP = Days after planting.

Table 4. 2014 Dry Pea - Organic - Carrington - Authors, S. Zwinger and S. Schaubert.

Variety	Days to Flower Flower (DAP) ³	Flower Duration (days)	Days to PM (DAP) ³	Canopy Height ¹ (inch)	Seeds/ Pound (seeds)	Plant Lodge ² (0-9)	Seed Protein (%)	Test Weight (lb/bu)	Seed Yield	
									2014 ------(bu/a)-----	3-yr. Avg.
Yellow Cotyledon Type										
Agassiz	54	23	96	18	1,970	6	26.2	64.6	69.8	60.2
Bridger	53	21	93	19	1,990	4	25.0	65.1	71.1	--
CDC Meadow	53	23	91	18	2,169	6	25.3	65.1	66.9	61.6
DS Admiral	54	19	90	16	1,966	7	24.8	64.2	58.4	51.3
Nette	54	19	92	20	2,002	5	24.3	65.2	77.1	--
Salamanca	57	16	95	20	1,773	5	27.0	64.9	68.9	--
Spider	56	20	95	18	1,848	7	26.0	65.4	74.1	57.7
Green Cotyledon Type										
Bluemoon	54	17	93	18	1,826	6	26.4	63.9	66.4	--
CDC Striker	57	16	95	20	1,875	6	27.2	65.0	54.9	54.5
Cruiser	54	22	94	18	2,220	6	25.8	64.6	62.7	53.0
Ginny	54	21	93	15	2,355	8	25.7	64.6	70.7	--
K2	53	20	93	18	2,124	6	24.8	65.0	63.8	--
Majoret	55	20	94	16	2,049	8	26.3	64.3	64.1	56.0
Matrix	59	14	94	16	1,666	7	24.2	64.8	69.4	--
Shamrock	59	17	97	17	1,816	7	25.1	64.4	58.4	--
SW Arcadia	55	19	93	14	2,283	9	25.8	64.2	69.6	--
Mean	55	19	93	18	1,996	6	25.6	64.7	66.6	56.3
CV %	1.2	5.6	1.0	14.1	4	19	2.1	0.9	6.3	10.8
LSD 0.10	0.8	1.3	1.1	2.1	99	1.2	0.6	0.7	5	8.8

Planted: May 2. Harvested: Aug. 12. Previous crop: wheat.

¹Height to the top of the canopy at harvest.²Lodging: 0 = none, 9 = lying flat on the ground.³DAP = Days after planting.

Table 5. 2014 Dry Pea - Langdon - Authors, B. Hanson, T. Hakanson and L. Henry.

Variety	Days to Flower (DAP) ⁵	Days to PM (DAP) ⁵	Vine Length ¹ (inch)	Canopy Height ² (inch)	Height Index ³ (%)	Harvest Ease ⁴ (0-9)	1,000 Seed Weight (gram)	Seed Protein (%)	Test Weight (lb/bu)	Seed Yield	
										2014	3-yr. Avg.
Yellow Cotyledon Type											
Abarth	48	85	31	21	69	5	323	23.5	63.8	73.0	--
Agassiz	51	89	32	26	80	3	264	24.2	63.6	80.2	78.7
CDC Meadow	49	87	30	20	67	5	238	23.9	64.3	81.6	--
DS Admiral	51	84	31	21	69	5	264	23.9	64.8	72.9	68.1
Korando	47	84	29	21	73	4	281	25.5	63.8	65.7	--
Mystique	53	88	29	25	85	3	284	24.8	64.0	69.2	--
Nette	49	86	30	20	68	5	284	24.0	64.8	80.4	--
Green Cotyledon Type											
CDC Striker	50	85	24	19	79	7	251	22.4	64.2	71.8	68.2
Cruiser	51	86	28	17	60	6	239	24.3	63.7	77.4	68.0
Majoret	54	86	28	25	90	3	276	25.3	64.3	68.7	68.5
Mean	50	86	29	22	74	4	270	24.2	64.1	74.1	70.3
CV %	2	2	9	17	16	44	4	3.1	0.9	10.1	--
LSD 0.10	1	2	3	4	15	2.2	13	0.9	0.7	9.0	--

Planted: May 15. Harvested: Aug. 20.

¹Plant height at end of flowering.²Height to the top of the canopy at harvest.³Height Index: Calculated as the ratio of canopy height/plant height.⁴Harvest Ease: 0 = all plants upright (very easy harvest) to 9 = all plants flat (very difficult to direct harvest).⁵DAP = Days after planting.**Table 6. 2014 Dry Pea - Recrop - Dickinson - Author, G. Martin.**

Variety	Days to Flower (DAP) ¹	Flower Duration (days)	Canopy Height (inch)	Seeds/ Pound (seeds)	Seed Protein (%)	Test Weight (lb/bu)	Seed Yield	
							2014	2-yr. Avg.
Yellow Cotyledon Type								
Agassiz	51	20	25	1,821	23.5	63.3	56.0	46.8
CDC Meadow	52	19	25	2,041	24.5	63.9	49.1	43.5
DS Admiral	52	17	25	1,855	23.4	63.4	50.0	45.4
Green Cotyledon Type								
CDC Striker	52	17	22	1,895	24.5	62.9	48.0	37.6
Cruiser	52	19	25	2,177	23.9	63.0	45.5	37.7
Majoret	53	16	24	1,771	26.2	63.4	44.6	39.7
Mean	52	18	24	1,927	24.3	63.3	48.9	41.8
CV %	1.5	6.0	6.5	5.0	1.4	0.8	6.0	8.2
LSD 0.10	NS	1	NS	120	0.4	NS	3.6	6.9

Planted: May 5. Harvested: Aug. 11. Previous crop: barley.

¹DAP = Days after planting.

Table 7. 2014 Dry Pea - Minot - Authors, K. McPhee, T. Stefaniak and E. Eriksmoen.

Variety	Days to Flower	Days to PM	Vine Length ¹	Canopy Height ²	Height Index ³	Seed Protein	Seeds/Pound	1,000	Test Weight	Seed Yield	
								Seed Weight		2014	2-yr. Avg.
Yellow Cotyledon Type	(DAP) ⁴	(DAP) ⁴	(inches)	(inches)	(%)	(%)	(seeds)	(gram)	(lb/bu)	---(bu/a)---	
Agassiz	45	85	37	16	43	26.5	2,023	228	62.0	40.0	38.5
Bridger	43	81	28	22	79	25.3	2,003	228	63.9	28.8	29.5
CDC Meadow	45	83	33	17	51	24.4	2,235	205	63.7	31.3	33.9
DS Admiral	45	81	32	15	48	24.8	2,065	222	62.7	30.1	30.9
Durwood	44	88	35	25	74	26.1	1,804	253	63.2	35.8	--
Earlstar	45	85	32	17	55	24.1	2,202	207	63.0	30.6	--
Gunner	45	87	33	19	60	25.5	2,080	219	62.7	28.6	35.8
Hyline	45	84	34	23	70	23.8	1,854	248	63.1	26.3	--
Jetset	45	82	33	22	68	26.3	1,952	234	63.2	31.8	--
Navarro	39	82	29	22	54	26.8	1,842	251	63.0	26.6	31.5
Nette	43	81	24	20	81	25.2	1,980	230	63.8	29.5	34.6
Quantim	48	84	37	16	48	24.9	1,733	272	61.9	42.2	--
Salamanca	46	82	36	23	63	26.6	1,839	248	62.2	34.7	31.3
Spider	45	87	31	17	56	25.8	1,848	249	63.0	25.5	33.7
Torch	45	86	26	21	81	24.4	1,795	254	63.4	14.3	24.3
Trapeze	43	84	26	14	57	25.8	1,864	246	62.5	25.5	--
Vegas	45	90	32	22	67	28.6	1,858	245	62.7	31.6	28.9
Yellowstone	41	81	30	27	96	25.0	1,635	281	63.0	32.2	--
Green Cotyledon Type											
Aragorn	42	79	25	16	63	26.4	2,247	203	62.4	21.3	24.5
Arcadia	43	82	25	12	55	24.2	2,026	225	63.3	28.8	--
Bluemoon	45	82	29	17	61	24.3	1,782	262	63.1	25.4	29.5
CDC Striker	44	84	24	11	50	23.8	2,105	219	62.6	23.9	25.6
Cruiser	45	84	33	13	43	25.7	2,270	201	62.1	29.9	28.4
Daytona	45	84	30	18	64	25.4	1,690	269	62.7	28.2	--
Ginny	46	82	26	15	56	25.2	2,084	225	62.7	28.6	--
Greenwood	44	82	31	15	49	23.9	2,162	211	63.4	29.1	35.2
K2	42	82	29	17	59	25.1	2,169	211	62.8	27.6	28.6
Majoret	48	86	26	19	60	26.2	1,856	245	62.6	34.5	34.7
Shamrock	48	86	33	21	66	25.3	1,950	234	62.6	30.1	29.3
Viper	42	80	27	19	70	26.9	1,976	230	62.6	27.2	33.7
Mean	44	84	30	18	62	25.4	1,964	235	62.9	29.3	31.1
CV %	4.9	4.9	19.9	22.0	32.1	3.8	8.8	9.0	0.8	20.3	--
LSD 0.10	2.0	4.0	5.0	4.0	18.0	1.0	156	20	1.0	5.4	--

Planted: May 2. Harvested: Sept. 2. Previous crop: hard red spring wheat.

¹Plant height at end of flowering.²Height of canopy at harvest.³Calculated as the ratio of canopy height/plant height.⁴DAP = Days after planting.

Table 8. 2014 Dry Pea - Williston - Authors, J. Bergman, G. Pradhan and D. Amiot.

Variety	Days to	Flower	Canopy	Seed	Test	Seed Yield		
	Flower	Duration	Height ¹	Protein	Weight	2014	2-yr. Avg.	3-yr. Avg.
	(DAP) ²	(days)	(inch)	(%)	(lb/bu)	------(bu/a)-----		
Yellow Cotyledon Type								
Abarth	37	6	23	25.3	63.2	46.8	50.4	--
Agassiz	37	7	21	26.0	64.2	50.9	52.2	40.4
Bridger	37	6	22	26.8	64.4	45.6	51.3	41.2
CDC Meadow	37	8	24	25.8	65.7	52.3	56.2	43.6
DS Admiral	37	5	22	25.3	64.7	51.4	53.0	41.6
Durwood	39	5	25	24.8	65.2	46.2	--	--
Earlstar	37	7	25	25.0	64.9	48.7	--	--
Gunner	38	7	26	26.3	65.2	46.2	46.4	35.4
Hyline	40	4	22	25.7	65.3	45.7	--	--
Jetset	39	4	25	26.3	65.0	49.7	--	--
Korando	35	3	23	27.8	63.5	47.9	48.3	38.4
Mystique	38	7	23	27.5	64.3	43.0	51.3	39.7
Navarro	33	5	18	27.3	63.4	49.5	53.7	42.3
Nette	37	6	24	24.7	65.5	51.3	53.2	41.5
Quantim	42	3	23	27.5	64.7	46.9	53.7	39.6
Salamanca	38	6	26	28.0	63.8	45.5	52.0	39.1
Spider	39	6	24	26.8	65.3	48.1	48.1	38.3
SW Midas	38	7	21	25.0	65.0	45.3	52.8	40.8
Torch	40	4	22	26.8	64.9	42.5	51.6	38.1
Trapeze	37	7	21	26.5	62.9	44.0	50.2	38.3
Vegas	38	7	22	27.3	64.6	44.8	48.7	37.5
Yellowstone	34	4	23	26.5	64.1	51.8	--	--
Green Cotyledon Type								
Aragorn	37	4	19	26.0	63.3	41.5	44.1	34.7
Arcadia	37	4	19	26.5	64.4	50.4	52.8	41.7
Bluemoon	39	3	23	26.0	64.1	45.5	52.2	40.9
CDC Striker	37	6	19	26.0	64.0	45.0	51.1	39.5
Cruiser	37	4	22	25.8	63.4	45.3	46.9	36.9
Daytona	40	4	25	26.8	64.3	44.9	--	--
Ginny	37	6	20	25.3	64.3	55.2	--	--
Greenwood	37	5	23	23.0	65.6	44.6	49.2	--
K2	37	6	22	26.0	64.2	43.5	44.7	35.6
Majoret	40	3	21	27.3	65.2	43.4	47.8	36.3
Shamrock	41	3	22	25.8	64.4	44.5	53.2	39.4
Viper	38	8	23	26.3	64.1	43.1	48.7	38.4
Mean	38	5	23	26.2	64.5	46.9	50.7	39.3
CV %	3	24	7	2.5	0.5	11.0	8.1	9.1
LSD 0.10	1.1	1.3	1.9	0.8	0.4	6.0	7.0	4.9

Planted: May 8. Harvested: Aug. 12. Previous crop: durum.

¹Height to the top of the canopy at harvest.²DAP = Days after planting.

Table 9. 2014 Dry Pea - Divide County (Williston REC) - Authors, G. Pradhan, D. Amiot and C. Hill.

Variety	Seed	Test	Seed Yield	
	Protein	Weight	2014	2-yr. Avg.
Yellow Cotyledon Type	(%)	(lb/bu)	(bu/a)	
Agassiz	27.8	65.0	51.8	39.0
CDC Meadow	27.8	65.6	66.2	--
DS Admiral	27.7	65.1	50.1	40.9
Mystique	29.7	64.0	44.4	--
Green Cotyledon Type				
CDC Striker	27.8	63.8	55.4	43.9
Cruiser	29.0	63.5	41.0	33.1
K2	28.0	64.6	56.6	--
Majoret	28.6	64.8	44.3	38.7
Mean	28.3	64.5	51.2	39.1
C.V.%	2.9	1.3	15.8	--
LSD 10%	1.2	1.2	11.6	--

Planted: May 23. Harvested: Aug. 28. Previous crop: durum.

Table 10. 2014 Dry Pea - McKenzie County (Williston REC) - Authors, G. Pradhan, D. Amiot and C. Wahlstrom.

Variety	Seed	Test	Seed Yield	
	Protein	Weight	2014	2-yr. Avg.
Yellow Cotyledon Type	(%)	(lb/bu)	(bu/a)	
Agassiz	27.8	63.7	34.1	33.5
CDC Meadow	27.0	64.1	48.2	--
DS Admiral	27.5	64.0	53.6	41.7
Mystique	28.6	63.3	43.0	--
Green Cotyledon Type				
CDC Striker	28.1	63.6	40.2	37.9
Cruiser	28.2	62.7	39.7	34.2
K2	27.1	64.3	41.4	--
Majoret	29.6	63.3	42.2	35.4
Mean	28.0	63.6	42.8	36.5
C.V.%	2.7	0.7	11.6	--
LSD 10%	1.1	0.6	7.4	--

Planted: May 14. Harvested: Aug. 28. Previous crop: barley.

Table 11. 2014 Dry Pea - Golden Valley County (Williston REC) - Authors, G. Pradhan and D. Amiot.

Variety	Seed	Test	Seed Yield	
	Protein	Weight	2014	2- yr. Avg.
Yellow Cotyledon Type	(%)	(lb/bu)	(bu/a)	
Agassiz	24.1	64.7	33.5	47.7
CDC Meadow	24.0	65.0	26.4	41.0
DS Admiral	24.3	65.5	34.0	37.7
Mystique	26.1	63.4	26.0	--
Green Cotyledon Type				
CDC Striker	24.2	65.1	28.2	38.1
Cruiser	25.8	63.6	19.8	35.8
Majoret	27.6	64.7	27.3	33.6
K2	23.3	64.4	23.9	--
Mean	24.9	64.5	27.4	39.0
CV %	2.7	1.1	15.5	--
LSD 0.10	1.0	1.0	6.1	--

Planted: May 22. Harvested: Aug. 14. Previous crop: field pea.

Table 12. 2014 Dry Pea - Hettinger - Authors, J. Rickertsen and Rick Olson.

Variety	Days to Flower	Flower Duration	Days to PM	Vine Length ¹	Canopy Height ²	Height Index ³	Lod-ge ⁴	Seed Protein	1,000	Seeds/Pound	Test Weight	Seed Yield	
									Seed Weight			2014	3-Yr. Avg.
	(DAP) ⁵	(days)	(DAP) ⁵	(inch)	(inch)	(%)	(0-9)	(%)	(gram)	seeds	(lb/bu)	-----	(bu/a)-----
Yellow Cotyledon Type													
Abarth	52	23	88	30	21	70	4	25.6	234	1,942	59.8	54.8	--
Agassiz	53	27	94	28	20	71	5	26.7	227	2,003	60.6	52.8	50.1
Bridger	52	21	87	26	19	72	4	24.9	216	2,103	60.7	59.8	55.0
CDC Meadow	53	24	91	27	22	81	4	24.6	198	2,296	60.7	54.4	--
DS Admiral	53	22	89	26	19	73	4	24.6	226	2,008	61.2	55.5	52.7
Durwood	54	22	90	32	26	80	4	25.9	224	2,031	61.1	53.2	--
Gunner	55	22	90	32	22	68	5	25.4	210	2,163	60.8	56.6	50.8
Korando	50	24	88	27	21	77	4	28.0	237	1,913	59.7	51.6	51.3
Mystique	54	23	91	29	23	78	4	25.6	234	1,946	60.6	56.4	--
Nette	52	20	86	27	21	77	5	24.4	207	2,195	61.7	56.9	--
Quantim	54	19	87	33	19	60	6	25.1	273	1,665	61.1	58.5	--
SW Midas	54	23	91	28	17	61	6	24.9	196	2,320	61.5	51.0	50.3
Torch	57	16	87	25	22	89	3	26.5	247	1,840	61.4	54.9	--
Green Cotyledon Type													
Aragorn	52	22	87	25	17	69	6	24.9	191	2,374	60.2	46.4	--
Arcadia	54	19	87	25	15	61	8	24.3	196	2,317	60.3	56.9	54.4
CDC Striker	54	22	90	25	16	67	7	24.7	194	2,340	61.1	53.4	51.9
Cruiser	53	23	91	25	17	66	6	24.7	188	2,419	60.8	46.5	45.4
Majoret	54	20	88	28	16	56	5	27.5	221	2,055	61.6	47.7	46.6
Shamrock	54	19	87	30	19	65	5	25	231	1,963	60.7	58.3	--
Mean	53	22	89	28	20	71	5	25.4	218	2,100	60.8	54	50.9
CV %	1.1	5.1	1.1	7.8	8.8	11.0	20.0	2.4	3.9	3.9	1.0	6.7	5.0
LSD 0.10	0.7	1.3	1.2	2.5	2.0	9	1	0.7	10	98	0.7	4.3	3.6

Planted: May 6. Harvested: Aug. 18. Previous crop: oat.

¹Plant height at end of flowering.²Height to the top of the canopy at harvest.³Height Index: Calculated as the ratio of canopy height/plant height.⁴Lodging: 0 = none, 9 = lying flat on ground.⁵Days after planting.

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