

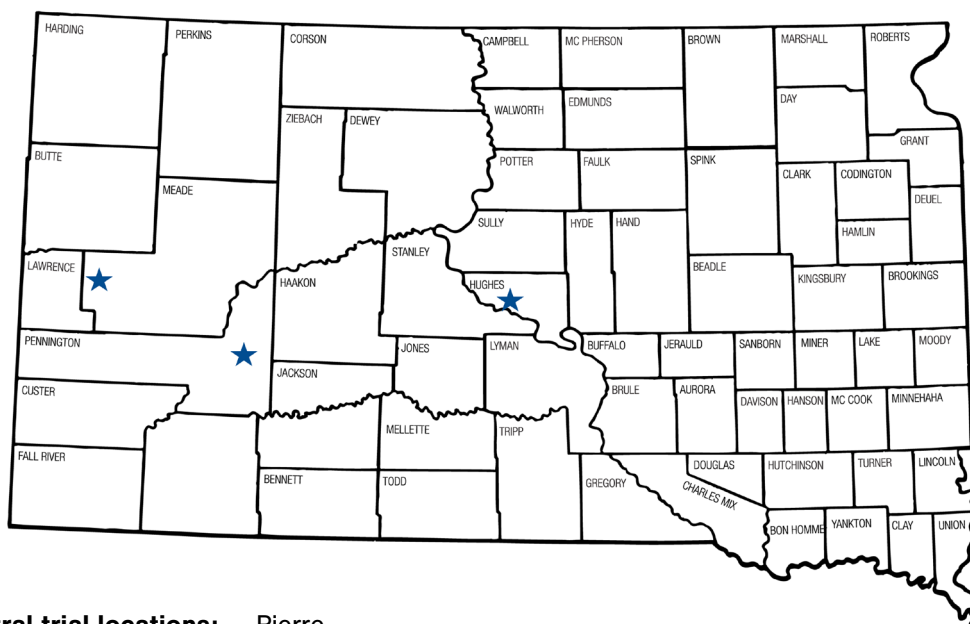


**SOUTH DAKOTA
STATE UNIVERSITY**
College of Agriculture, Food
and Environmental Sciences

South Dakota State University Extension
South Dakota Agricultural Experiment Station at SDSU

2023 South Dakota Field Pea Variety Trial Results Sturgis

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Central trial locations: Pierre

Western trial locations: Wall, Sturgis

Cultural Practices:

Planting Rate: 350,000 viable seeds/ac

Inoculation: N-Charge granular inoculant

Herbicide: Sulfentrazone + Roundup

Acknowledgements: Thanks to the South Dakota Pulse Council for funding these trials and Sam Ireland and the Dakota Lakes staff for plot assistance.

Individual trial location results can be accessed online at: <https://extension.sdstate.edu/field-pea-variety-trial-results>

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**2023 South Dakota
Field Pea Variety Trial Results
Variety List**

Table 1. List of field pea varieties tested in 2023 along with seed supplier and agronomic characteristics.

Variety	Seed Supplier	Seed Color	Seeds/lb
GTPC001	Gen Tech	Yellow	1747
GTPC003	Gen Tech	Yellow	2188
GTPC004	Gen Tech	Yellow	1918
GTPC005	Gen Tech	Yellow	1968
GTPC006	Gen Tech	Yellow	1960
Durwood	Pulse USA	Yellow	2215
LG Amigo	Pulse USA	Yellow	1882
Korando	Pulse USA	Yellow	1688
DL Apollo	Pulse USA	Yellow	2048
LG Sunrise	Pulse USA	Yellow	1633
Arcadia	Pulse USA	Green	1491
Flute	Pulse USA	Green	1916
PS17100022	USDA ARS	Yellow	1980
PS17100008	USDA ARS	Yellow	1873
AAC Carver	Meridian Seeds, LLC	Yellow	2296
CDC Inca	Meridian Seeds, LLC	Yellow	1853
CDC Spectrum	Meridian Seeds, LLC	Yellow	2204
MS Grow Pro	Meridian Seeds, LLC	Yellow	2609
AAC Beyond	Meridian Seeds, LLC	Yellow	2536
MS ProStar	Meridian Seeds, LLC	Yellow	2131
Winterberry	Meridian Seeds, LLC	Yellow	3266
Aragorn	Progene	Green	2495
Pro 024-7510	Progene	Yellow	1740
Pro 171-7665	Progene	Green	3007
Pro 213-7333	Progene	Yellow	1965
Boast	Great Northern AG	Yellow	2045
5206	Great Northern AG	Yellow	2594
AAC Chrome	Great Northern AG	Yellow	2293
Hyline	Great Northern AG	Yellow	2132
Julius	Great Northern AG	Yellow	2624
AAC Profit	Great Northern AG	Yellow	2270
Salamanca	Great Northern AG	Yellow	2508
Shamrock	Great Northern AG	Green	2076
CDC 5791-9	LimaGrain	Yellow	1804
CDC 5845-2	LimaGrain	Yellow	1904
6124-7	LimaGrain	Yellow	2066
6087-11	LimaGrain	Yellow	1946
6121-9	LimaGrain	Yellow	2108
6020-11	LimaGrain	Yellow	2246
6138-1	LimaGrain	Yellow	2208
6232-4	LimaGrain	green	1708
LGP4184	LimaGrain	Yellow	2350
LGP4185	LimaGrain	Yellow	2130



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Field Pea Variety Trial Results
Sturgis (West River Research Farm)**

Table 2. 2023 field pea variety performance trial results in Sturgis, South Dakota. Varieties ranking in the top 1/3 of each trial category are bold and shaded light blue.

Variety	2023				2-Year Average		3-Year Average	
	Yield (bu/a)	95% Confidence Interval (bu/a)‡		Protein (%)	Yield (bu/a)	Protein (%)	Yield (bu/a)	Protein (%)
5206	76	64	87	24.3	-	-	-	-
6020-11	69	58	81	24.2	-	-	-	-
6087-11	65	54	77	25.5	-	-	-	-
6121-9	81	69	92	24.7	-	-	-	-
6124-7	76	64	87	24.4	-	-	-	-
6138-1	66	55	78	25.0	-	-	-	-
6232-4	68	57	80	23.3	-	-	-	-
AAC Beyond	94	80	107	23.8	-	-	-	-
AAC Carver	75	64	87	24.4	45	25.0	40	25.2
AAC Chrome	69	57	80	22.7	43	24.1	36	24.8
AAC Profit	76	64	87	24.6	48	26.1	40	26.5
Aragorn	71	60	83	24.6	42	25.4	-	-
Arcadia	58	46	70	23.4	35	24.4	30	24.9
Boast	70	58	82	24.1	-	-	-	-
CDC 5791-9	77	65	88	24.5	-	-	-	-
CDC 5845-2	74	63	86	23.9	-	-	-	-
CDC Inca	83	71	94	21.7	50	24.2	42	25.3
CDC Spectrum	74	62	85	24.5	46	25.0	39	25.8
DL Apollo	72	60	83	26.2	43	27.4	37	27.7
Durwood	72	60	83	24.2	47	25.5	41	26.2
Flute	64	53	76	25.0	41	26.4	-	-
GTPC001	71	60	83	22.9	-	-	-	-
GTPC003	70	59	82	24.4	-	-	-	-
GTPC004	79	68	91	24.7	-	-	-	-
GTPC005	73	62	85	24.7	-	-	-	-
GTPC006	65	54	77	24.1	-	-	-	-
Hyline	76	65	88	24.0	44	24.9	-	-
Julius	64	52	76	26.4	39	26.7	-	-
Korando	70	59	82	25.6	43	26.2	37	26.7
LG Amigo	56	44	67	24.5	31	25.2	29	25.9
LG Sunrise	76	64	87	23.0	-	-	-	-
LGPN4184	73	62	85	24.1	-	-	-	-
LGPN4185	86	75	98	25.4	-	-	-	-
MS GrowPro	73	62	85	25.8	46	27.0	39	27.4
MS ProStar	80	68	91	24.3	-	-	-	-

† Value required (≥LSD) to determine if varieties are significantly different from one another.

‡ The confidence interval suggests that if this trial was conducted many times over, the mean for each variety would fall within this range 95% of the time.



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Variety	2023				2-Year Average		3-Year Average	
	Yield (bu/a)	95% Confidence Interval (bu/a)‡		Protein (%)	Yield (bu/a)	Protein (%)	Yield (bu/a)	Protein (%)
Pro-024-7510	69	57	80	25.3	-	-	-	-
Pro-213-7333	57	45	69	24.9	-	-	-	-
Pro-7665	63	51	74	22.4	38	24.2	-	-
PS17100008	63	51	74	24.7	36	25.6	-	-
PS17100022	75	63	87	24.1	43	25.7	-	-
Salamanca	84	72	95	24.7	53	26.3	44	26.6
Shamrock	69	58	81	24.1	41	25.4	36	25.9
Winterberry	71	59	82	23.0	-	-	-	-
Average	72	-	-	24.3	43	25.5	38	26.1
CV	14	-	-	3	-	-	-	-
LSD†	11.7	-	-	0.8	6.0	0.7	4.2	0.6

† Value required (\geq LSD) to determine if varieties are significantly different from one another.

‡ The confidence interval suggests that if this trial was conducted many times over, the mean for each variety would fall within this range 95% of the time.