



2020 South Dakota Field Pea Variety Trial Results Elm Springs

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Central trial locations: Blunt (lost to hail), Pierre (Dakota Lakes)

Western trial locations: Elm Springs, Sturgis

Cultural Practices:

-Planting Rate: 350,000 viable seeds/ac

-Inoculation: N-Charge granular inoculant

-Herbicide: Targa

Acknowledgements: Thanks to the South Dakota Pulse Council for funding these trials and Mr. Tyrel Eisenbraun for hosting this trial.

Individual trial location results can be accessed online at:

<https://extension.sdstate.edu/field-pea-variety-trial-results>

Table 1. List of field pea varieties tested in 2020 along with seed supplier and agronomic characteristics.

Variety	Seed Supplier	Seed Color	Seeds/lb	Germination (%)
AAC Asher	Legume Logic	Yellow	2215	94
AAC Carver	Meridian Seeds, LLC.	Yellow	1882	95
AAC Chrome	Valesco Genetics	Yellow	1747	91
AAC Comfort	Meridian Seeds, LLC.	Green	1610	86
AAC Profit	Valesco Genetics	Yellow	1918	89
AC Agassiz	Meridian Seeds, LLC.	Yellow	1890	91
AC Earlystar	Meridian Seeds, LLC.	Yellow	2345	97
CDC Amarillo	Meridian Seeds, LLC.	Yellow	2224	93
CDC Dakota	Legume Logic	Yellow	2093	95
CDC Greenwater	Meridian Seeds, LLC.	Green	1740	86
CDC Inca	Meridian Seeds, LLC.	Yellow	1688	83
CDC Saffron	Meridian Seeds, LLC.	Yellow	2048	95
CDC Spectrum	Meridian Seeds, LLC.	Yellow	1633	85
CDC Striker	Pulse USA, Inc.	Green	1988	95
DL Apollo	Pulse USA, Inc.	Yellow	2076	92
DS-Admiral	Pulse USA, Inc.	Yellow	1804	94
Durwood	Pulse USA, Inc.	Yellow	1904	95
Empire	Valesco Genetics	Green	2054	91
Fairyway	Progene	Green	2719	91
Ginny 2	Progene	Green	2259	91
Goldenwood	Progene	Green	2403	91
Greenwood	Progene	Green	2402	91
Hyline	Valesco Genetics	Yellow	1822	95
Jetset	Meridian Seeds, LLC.	Yellow	1840	95
Keystone	Progene	Green	3290	92
Korando	Pulse USA, Inc.	Yellow	1946	94
LG Amigo	Pulse USA, Inc.	Yellow	2108	87
LG Koda	Pulse USA, Inc.	Green	2226	93
LG Sunrise	Pulse USA, Inc.	Yellow	2224	90
Majestic	Legume Logic	Yellow	1888	88
Mystique	Pulse USA, Inc.	Yellow	1735	90
Nette 2010	Pulse USA, Inc.	Yellow	2067	94
Orchestra	Legume Logic	Yellow	1500	95
Salamanca	Valesco Genetics	Yellow	1968	92
Shamrock	Valesco Genetics	Green	1960	95
Spider	Valesco Genetics	Yellow	1994	85
SW Arcadia	Pulse USA, Inc.	Green	2208	95
SW Midas	Pulse USA, Inc.	Yellow	2286	93
Viper	Pulse USA, Inc.	Green	1708	95

Table 2. 2020 field pea variety performance trial results in Elm Springs, South Dakota. Varieties ranking in the top 1/3 of each trial category are shaded light blue.

Variety	2020		
	Yield (bu/a)	Test Wt (lbs)	Protein %
AAC Asher	53	58.9	25.3
AAC Carver	72	62.2	23.9
AAC Chrome	53	58.5	24.0
AAC Comfort	54	59.1	24.6
AAC Profit	63	58.6	26.1
AC Agassiz	49	59.9	25.2
AC Earlstar	54	59.1	24.2
CDC Amarillo	58	59.0	25.2
CDC Dakota	50	54.8	26.6
CDC Greenwater	51	57.6	25.5
CDC Inca	69	62.9	25.5
CDC Saffron	52	62.1	25.7
CDC Spectrum	61	62.0	25.5
CDC Striker	51	57.5	26.9
Daytona	53	60.4	25.2
DL Apollo	54	59.7	26.8
DS-Admiral	53	61.6	24.7
Durwood	58	60.9	25.5
Empire	45	63.6	24.2
Fairway	48	55.7	25.8
Ginny 2	42	53.5	25.2
Goldenwood	54	60.7	24.7
Greenwood	38	62.4	24.0
Hylene	58	61.3	25.3
Jetset	57	59.5	25.7
Korando	49	59.5	26.8
LG Amigo	58	62.4	26.0
LG Koda	33	49.7	25.0
LG Sunrise	46	58.6	23.5
Majestic	54	59.7	26.2
MS-19YP3	51	59.7	25.6
Mystique	47	59.2	26.0
Nette 2010	49	62.6	24.4
Orchestra	37	61.0	27.5
Salamanca	50	60.5	26.5
Shamrock	46	57.8	25.2
Spider	49	59.2	26.9
SW Arcadia	57	60.3	24.4
SW Midas	38	62.4	23.9
Viper	54	59.4	25.2
Average#	52	59.6	25.4
LSD†	19	NSD	1.1
CV‡	6	9	2.5

Trial averages may include values from experimental lines that are not reported.

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

‡ C.V. is a measure of variability or experimental error, 15% or less is considered acceptable.

Table 3. 2019 and 2020 combined field pea variety performance trial results for Elm Springs, South Dakota. Varieties ranking in the top 1/3 of each trial category are shaded light blue.

Variety	2-Year Average	
	Yield (bu/a)	Protein (%)
AAC Asher	40	22.7
AAC Carver	50	21.0
AAC Chrome	43	22.2
AAC Comfort	38	22.8
AAC Profit	45	23.8
AC Agassiz	37	23.1
AC Earlstar	40	22.1
CDC Amarillo	41	23.4
CDC Dakota	39	25.3
CDC Greenwater	36	23.4
CDC Inca	50	24.0
CDC Saffron	40	23.2
CDC Spectrum	44	23.9
CDC Striker	36	24.9
DL Apollo	37	24.4
DS-Admiral	40	23.3
Durwood	40	24.0
Empire	33	23.4
Greenwood	29	21.9
Hyline	42	23.4
Jetset	40	23.8
Korando	35	25.5
LG Amigo	36	24.2
LG Koda	28	22.5
LG Sunrise	33	21.7
Majestic	37	24.9
Mystique	37	24.6
Nette 2010	33	22.3
Salamanca	35	24.4
Shamrock	34	23.8
Spider	32	24.4
SW Arcadia	40	22.6
SW Midas	27	22.5
Viper	35	23.9
Average#	38	23.4
LSD†	11	1.1

Trial averages may include values from experimental lines that are not reported.

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