

**PROJECT TITLE:**           **WESTERN REGIONAL DRY PEA YIELD TRIAL**

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**OBJECTIVE:**            Compare yield potential of experimental spring pea breeding lines in a northwest Montana environment.

**METHODS:**

Eleven dry pea accessions from Washington State University and one named variety were seeded into 100 ft<sup>2</sup> plots at 8.3 seeds/ft<sup>2</sup> on 4/17/06. All entries were short vine, semi-leafless type. The soil was fertilized with 22 lbs. N/a and 104 lbs. P<sub>2</sub>O<sub>5</sub>/a. Entries were arranged in a randomized complete block design with 3 replicates. Stand counts were taken on 5/11. Dates were recorded when 50% of each plot had bloomed and when 50% had reached maturity (yellow leaves, hard seed). The plants were direct combined when they reached maturity. The peas from each plot were weighed to determine yield and 100-seed samples weighed to determine seed weight (no. of seed/lb).

**RESULTS:** Pea yields were highly variable within replicates of each cultivar; therefore, yield comparisons were not statistically significant. Yields ranged from 2740 lbs/acre ('Stirling') to 3905 lbs/acre ('PS02101137'). 'PS02100128' had the smallest seeds and 'PS02101119' had the largest.

**2006 Western Regional Dry Pea Yield Trial**  
Kalispell

<u>Entry</u>	<u>Cultivar</u>	<u>Stand</u> <i>pl/sqft</i>	<u>Bloom</u> <i>date</i>	<u>Nodes</u> <i>to fst fl</i>	<u>Height</u> <i>in</i>	<u>Yield</u> <i>lbs/a</i>	<u>Seed Size</u> <i>#/lb</i>
2	PS0110745	14.0	6/14	12	27.0	2935	1949
3	PS0110767	15.2	6/14	12	<b>34.0</b>	3451	1809
4	PS0110805	13.2	6/18	10	<b>38.3</b>	3074	2020
5	PS02100026	13.6	6/16	10	31.0	2944	1769
6	PS02100128	13.3	6/16	12	<b>35.3</b>	3186	2394
7	Stirling	14.7	6/9	10	26.7	2740	2036
8	PS0010836	13.1	6/17	12	27.0	2949	1693
9	PS01102958	14.4	6/18	11	29.0	3038	1770
10	PS02101119	13.0	6/15	11	28.7	3429	<b>1531</b>
11	PS02101137	14.9	6/17	12	<b>35.3</b>	3905	1758
12	PS02101229	15.0	6/19	11	31.3	3485	1842
	mean	14.0		11	31.2	3194	1870
	Pr>F	0.5545		0.1902	0.0005	0.1562	< 0.0001
	LSD(0.05)	NS		NS	5.0	NS	131
	CV(%mean)	10.9		11.4	9.5	14.3	4.1