

**PROJECT TITLE: Western Regional Spring Lentil Yield Trial**

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**OBJECTIVE:** Compare yield potential of experimental lentil breeding lines with released varieties in a northwest Montana environment.

**METHODS:**

Fourteen lentil accessions from Washington State University and 6 named cultivars were seeded into 100 ft<sup>2</sup> plots at 8.3 seeds/ft<sup>2</sup> on 4/18/05. The soil was fertilized with 22 lbs. N/a and 104 lbs. P<sub>2</sub>O<sub>5</sub>/a. Stand counts were taken 5/11/05. Dates were recorded when 50% of each plot had bloomed. When the plants reached maturity (yellow leaves, hard seed) they were uprooted and left to dry in the plots. The lentils were thrashed out with a plot combine when the plants were dry. The lentils from each plot were weighed to determine yield and 100-seed samples weighed to determine seed weight (no. seeds/lb).

**RESULTS:** All the entries developed excellent stands. First blooms appeared between 6/21 and 7/5. The plants were swathed on 8/12 and the seeds were thrashed out on 8/16. Lentil yields ranged from 341 lbs/acre ('LC01600698L') to 1122 lbs/acre ('Pardina'). 'Crimson' had the smallest seeds and 'LC99602075L' had the largest.

**WESTERN REGIONAL SPRING LENTIL YIELD TRIAL**

Kalispell 2005

<u>Cultivar</u>	<u>Cotyledon</u> <u>Color</u>	<u>Type</u>	<u>Yield</u> <i>lbs/a</i>	<u>SeedWt</u> <i>#/lb</i>
Pennell	Yellow	Laird Type	391	7187
LC860359L	Yellow	Laird Type	546	7235
LC860616L	Yellow	Laird Type	544	6604
LC99600747L	Yellow	Laird Type	450	7358
LC99602075L	Yellow	Laird Type	428	6592
LC01600698L	Yellow	Laird Type	341	8005
Merrit	Yellow	Brewer Type	355	7843
Richlea	Yellow	Richlea Type	458	9382
LC01600732R	Yellow	Richlea Type	639	9710
LC01600828R	Yellow	Richlea Type	756	9351
Eston	Yellow	Eston Type	638	<b>13163</b>
LC01600736E	Yellow	Eston Type	714	12032
LC01602307E	Yellow	Eston Type	834	10702
LC02600698E	Yellow	Eston Type	512	<b>13015</b>
Pardina	Yellow	Pardina Type	1122	12356
LC02600397P	Yellow	Pardina Type	450	<b>13061</b>
Crimson	Red	Crimson Type	755	<b>14077</b>
LC01601751T	Red	Turkish Red Type	443	<b>13639</b>
LC01602062T	Red	Turkish Red Type	558	9982
LC02600449T	Red	Turkish Red Type	422	11338
		mean	521.7	8705
		LSD(0.05)	NS	1101
		Pr>F	0.101	< 0.0001
		CV(%mean)	46.4	9.3