

Project Title: 2008 Statewide Lentil Evaluations

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Objective: Compare the production of 10 lentil (*Lens culinaris*) cultivars in a northwestern Montana environment.

Results:

Ten lentil cultivars, treated with Apron-Maxx RTA, were seeded at 7 seeds/sq.ft. on April 14, 2008. The soil was a Creston silt loam previously cropped to barley and prepared by minimum tillage. Fertilizer containing 11 lbs N/acre and 52 lbs P₂O₅/acre was incorporated prior to seeding. Prowl, at 4 pints/acre, was pre-plant incorporated for broadleaf weed control. The lentils were direct harvested with a plot combine between Aug. 11 and 13, 2008.

The lentils reached 50% flowering between June 21 and 23 and were mature (13-15% moisture) between July 29 and Aug. 6, 2008. Yields ranged from 1844 lbs/a ('Brewer') to 2676 lbs/a ('LC01602300R'). The smallest variety was 'Crimson' with 12971 seeds/lb., and the largest was 'Riveland' with 5690 seeds/lb (Table 1).

Summary: The highest yielding lentil cultivars were 'Merrit' and experimental Eston-, Pennell-, and Riveland-types.

Table 1. Results of the Statewide Lentil Evaluation at Kalispell in 2008.

<u>Cultivar</u>	<u>50% Flower</u> <i>date</i>	<u>Canopy Ht.</u> <i>in</i>	<u>Grain Maturity</u> <i>date</i>	<u>Yield</u> <i>lbs/a</i>	<u>SeedWT</u> <i>#/lb</i>
Vantage	6/23	17	8/5	2089	8668
Brewer	6/21	18	8/2	1844	7276
Crimson	6/23	14	7/29	2309	12971
Merrit	6/21	16	8/3	2445	6486
Pennell	6/22	16	8/3	2256	6503
Riveland	6/22	18	8/6	2046	5690
LC1602307E	6/23	19	8/6	2670	9332
LC01602062T	6/22	16	8/4	2310	9080
LC01602245P	6/21	15	8/2	2477	11035
LC01602300R	6/22	16	8/3	2676	9080
	mean	16		2312	8612
	Pr>F	0.0001		<.0001	<.0001
	LSD(0.05)	2		270	548
	CV%	7.0		8.1	4.3