

**PROJECT TITLE:** Dryland Statewide and Western Regional Chickpea Performance Trials near Huntley, Montana. (Exps. 99SCPT08 and 999908).

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**OBJECTIVES:** To provide producers in south central Montana with a reliable, unbiased, up-to-date source of information that will permit valid comparisons among chickpea varieties and experimental lines. This information should help producers in south central Montana select chickpea varieties best suited to their particular area and growing conditions.

**METHODS:** The 1999 dryland chickpea trial had eight entries and was planted using a randomized complete block design with three replications. Test plots consisted of a 30-foot, 4-row plot with 12-inch row spacing. All rows of each test plot were trimmed 36 inches and harvested using an experimental-plot combine. Recorded grain yields are reported in pounds per acre and thousand kernel weights are reported in grams. Flowering date was noted when 50% of the plants in a plot had at least one flower open. Flowering dates were recorded in Julian days (number of days from January 1) for statistical purposes. Corresponding calendar dates also are presented.

**RESULTS and SUMMARY:** Agronomic performance of the chickpea cultivars and experimental lines tested during 1999 under dryland conditions near Huntley is presented in Table 1. Dryland chickpea yields averaged 1588 lb/ac and ranged from 2415 lb/ac for 'CDC Chico' to 1384 lb/ac for 'Evans'. 'CDC Xena', 'CDC Yuma' and 'Myles' yielded between 2197 and 2187 lb/ac, which was equal to the yield of CDC Chico.

**FUTURE PLANS:** Chickpea evaluations under dryland conditions will continue in 2000 at Southern Agricultural Research Center.

Table 1. Performance of eight Kabuli and Desi type chickpea cultivars and experimental lines tested under dryland conditions near Huntley, Montana during 1999. (Exps. 99SCPT08 and 999908).

Cultivar	Seed Type	Seed Yield lb/ac	Seed Weight Thousand grams	Flower Date	
				Julian	Calendar
CA188587	Kabuli	2197*	501.3	178	Jun 26
CDC Chico	Kabuli	2415**	253.3	176	Jun 24
CDC Xena	Kabuli	2187*	457.7	175	Jun 23
CDC Yuma	Kabuli	1490	369.7	178	Jun 26
Dwelle	Kabuli	1605	489.7	182	Jun 30
Evans	Kabuli	1384	424.0	178	Jun 26
Myles	Desi	2188*	184.0	178	Jun 26
Sanford	Kabuli	1874	439.7	180	Jun 28
Average		1588	389.9	178	Jun 26
LSD (p=0.05)		347.5	11.7		
CV%		10.3	1.7		

\*\* Indicates highest yielding cultivar.

\* Indicates cultivars yielding equal to highest yielding cultivar based on Fisher's protected LSD (p=0.05).

Statewide and Western Regional Chickpea Performance Trial (Exps. 99SCPT08 and 999908)

Planted: May 7, 1999  
 Harvested: September 1, 1999  
 Fertility: none  
 Herbicide: Prowl, 1 pt/ac; Sencor, 0.375 lb/ac; May 12, 1999  
 Insecticide: none  
 Previous Crop: summer fallow  
 Precipitation: 4.90 inches