

# Western Canada Faba Bean Co-op Trial Guidelines 2008

## Protocol for 2008

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### The tests will be organized as follows:

1. The Western Canada Faba Bean Co-op Trial (WCFBCT) system for support of registration recommendations is based on a minimum of two years of testing to provide a minimum of 6 station years of performance data. The trial will be conducted at a minimum of 5 locations for 2 years or one year of WCFBCT testing and one other year of private testing (minimum of 3 locations). Target locations remain 2-Manitoba, 2-Saskatchewan, and 2-Alberta. Check varieties proposed for 2008 are: CDC Fatima (coloured flower), SSNS-1 (small seeded, coloured flower) and Snowbird (white flower). In 2008 separate trials may be established, if needed, for white flowered and colour flowered entries. Snowbird will be used as a check in both trials to provide cross-reference for performance.
2. **Experimental Design:** Randomized Complete Block Design (3) replicates  
**Sites:** Minimum of six: 2 in MB, 2 in SK; 2 in AB  
**Number of entries:** Plot plan including randomization sent with entries before seeding  
**Plots size:** Send seeder/plot dimensions to Co-op Trial Coordinator by March 31  
**Entries:** Five kg of each entry sent to Co-op Trial Coordinator by March 31.  
**Background site information :** a) Soil test information; b) Precipitation
3. **Data collection:**
  1. Emergence – uniform plant emergence in each replicate. Make note of entries with low plant densities.
  2. Flower date – time of 10% of plants with first open flower.
  3. Plant height prior to harvest.
  4. Maturity\* at time of desiccation (early, medium and late) or swathing.
  5. Seed yield in grams/plot (please send harvested plot size) and in kg/ha
  6. Seed weight-1000 kwt in grams. 100 seeds, weight in grams X 10. (1) measurement per replicate.
  7. Crude protein content may be analysed on second year entries if sufficient resources are available.
  8. Lodging if environmental conditions are conducive.

\*Maturity on faba bean may be variable because of its indeterminate growth habit. Staging on the basis of % change from green to black pod starting at the base of the plant may be useful as a guide to relative maturity. Observing the threshed grain sample for % immature green seeds may also be useful in determining relative maturity.
5. **Data Analysis:**

Normally only yield data with acceptable CV's (less than 15%) will be considered valid..

### Field Protocol:

**Seeding rate:** A target plant population of 4 plants/ft<sup>2</sup> or 43 plants/m<sup>2</sup>

**Seeding depth:** 5 cm – 8 cm deep

**Inoculation:** Field pea granular inoculant @ 5-6 kg/ha supplied with seed entries.

**Fertilizer application:** Apply 12-51-0 fertilizer up to 35 kg/ha with seed or if higher rates are required or extreme dry soil conditions, apply as a side band.

**Herbicides:** Pre-harvest **glyphosate** the year before is preferred for site preparation. If pre-harvest application of **glyphosate** has not been done, then a pre-seed burndown with **glyphosate** is recommended.

**Pre-emergent options** (Fall application only)

Treflan products, Edge Products, Sencor + Edge or Sencor + Treflan.

**Post-emergent options:** apply at 3 –5 node stage

1. Basagran
2. Pursuit Ultra (imazethapyr + sethoxydim)(minor use registration pending)
3. Odyssey

Check Crop Protection Provincial Manuals for application and cropping restriction information

### **Deadlines:**

**March 31, 2008:** Due date for sponsors to inform test coordinator of their intention to enter the first or second year entries in the 2008 Faba Bean Co-operative Registration Trial. Provide the name of the entry, name of sponsor, name of breeding institution to test coordinator.

**March 31, 2008:** A voluntary contribution of \$100 per variety per year is suggested. Please send the cheque with the 5 kg of seed. Current information on the germination level and 1000 seed weight would be appreciated.

**Please make the cheque or other forms of funds payable to Crop Development Centre, University of Saskatchewan, 51 Campus Drive, Saskatoon, SK S7N 5A8.** Seeds should be delivered to Bert Vandenberg at the same address listed above.

email: [vandenberg@usask.ca](mailto:vandenberg@usask.ca)

**November 15, 2008:** Due date for site co-operators to provide all agronomic and yield data to test coordinator. Rough draft of data will available for sponsors.

**January 15, 2009:** Due date for test coordinator to send report to all sponsors.