



*THE PULSE AGRONOMY NETWORK
PARTNERSHIP WITH INDUSTRY*



PAN - All Pulse Bulletin #11 – August 24, 2009

In this issue:

- Seven Good Tips for Drying, Conditioning and Storing Pulse Crops
- Monitoring Field Peas in Storage
- New Split Pea Grade Schedules
- Pea Sample request
- Identifying GROU Candidates
- Allegro 500F

Seven Good Management Tips for Drying, Conditioning and Storing Pulse Crops

Sarah Foster, 20/20 Seed Labs

- Proper storage preserves the quality, quantity and integrity of the harvested crop.
- Pulses are often harvested damp or tough therefore controlling the respiration rate is critical to storage. An increase in temperature and moisture will not only age and deteriorate the seed more rapidly; it will also contribute to the growth of fungi and molds. Pulse crops spoil very quickly if left wet for too long; the germination and vigour are affected as well as the health of the seed.
- It is important to test pulses as soon after harvest as possible, this gives the producer a "Base line" on the quality; at the very minimum we recommend a germination and disease screen. A perfect portfolio would be to include the Electrical conductivity vigour test.
- Drying pulses to 14% moisture and cooled to less than 15°C ensures a safe and prolonged storage.
- Cleaning the weed seeds and dockage out of the pulses immediately increases the longevity of the seed; it also prevents the risk of heating. Pulses cleaned as soon after harvest as possible are also less prone to mechanical damage.
- Cleaning and processing is also an effective control of fungi, insect, mites and pests.
- For seed purposes the maximum drying temperature should be 45°C for moisture contents of less than 24%. For moisture content above 24% the maximum drying temperature should be 38-40°C.

Monitoring Field Peas in Storage

Neil Whatley, Crop Specialist, Ag-Info Centre - Alberta Ag & Food

Larger pulse crop seeds, like field pea seeds, continue to breathe or respire after being harvested and “go through a sweat” period for several weeks. This raises the temperature and moisture content of the stored grain, producing conditions favourable for mould growth. Usage of aeration bins is the most effective method to control this situation. When monitoring, one should not rely on readings of average moisture content throughout the bin because there may be hot spots in isolated locations where moisture is high and mould can occur. To avoid spoilage when this respiration occurs, bins should be routinely monitored via probing, and aeration applied as required. The same should be done in the spring to warm the grain, adjusting for the seasonal temperature change.

Please see the following table indicating the number of weeks for safe storage of field pea at the specified grain moisture content and storage temperature.

Table 1: Safe Storage (Weeks)

Storage temp. in °C	Moisture content (%)				
	12	14	16	18	21
25	31	16	7	4	2
20	55	28	13	7	4
15	100	50	20	12	6
10	200	95	38	20	21
5	370	175	70	39	20

Source: Sokhansanj, 1995.

Canadian Grain Commission Develops New Split Pea Grade Schedules

In order to facilitate the handling and marketing of split peas from Canada and upon the recommendation from the Western and Eastern Standards Committees, the Canadian Grain Commission (CGC) has created grades by order for yellow and green split peas. Grade schedules for both classes can be found on the Canadian Grain Commission website at (<http://www.grainscanada.gc.ca/legislation-legislation/memo-note/2009/2009-03-eng.htm>). Moisture testing of split pea samples will be performed as outlined in the moisture testing section of the Official Grain Grading Guide which is also available on the CGC website (www.grainscanada.gc.ca).

If you have any questions or comments, please contact Norm Woodbeck at (204) 983-2780.

Pea samples needed from growers

The University of Manitoba, together with the Alberta Pulse Growers and Saskatchewan Pulse Growers, is conducting a study relating to stem and bulb nematode in peas in Western Canada. However success of this project requires your help.

The study requires your assistance to provide pea samples so researchers better understand linkages between the peas and the nematode and understand management practices that influence nematode presence. Participation by as many pea growers as possible to provide pea harvest samples for analysis is very critical as the frequency of occurrence of this nematode pest is very low.

If you have one or many fields of peas, then APG has sample envelopes available to provide samples, with the shipping costs prepaid. Please contact Tammy Jones at the APG office for envelopes by e-mail at tjones@pulse.ab.ca or by phone at 780-986-9398.

Selecting new products for consideration under GROU

The GROU Nomination Committee, represented by key grower associations, was formed to nominate appropriate candidate products for the GROU program to the benefit of Canadian producers. The GROU Nomination Committee is comprised of the Grain Growers of Canada, Canadian Canola Growers Association, Canadian Horticultural Council, Pulse Canada, the Canadian Federation of Agriculture and AGCare.

There will be a GROU Nominating Meeting on September 29th, 2009 in Ottawa. In preparation for the meeting, APG is seeking input as to what active ingredients could potentially be added to the GROU Approved List. This list needs to be submitted to Pulse Canada by September 1st, so responses should be submitted as soon as possible.

Additionally, APG is looking to identify any agricultural chemicals that ARE registered in the U.S. but NOT in Canada. These will be submitted for consideration through Project 914, a project first introduced in 2006, which helps to address the technology gap in minor use active ingredients by allowing Health Canada to utilize US EPA reviews to inform Canadian registration needs before a submission is even made.

Candidates for either program should be submitted to the Mark Goodwin at Pulse Canada by e-mail to mqconsulting@shaw.ca.

Allegro 500F

The Allegro 500F Fungicide has been amended to include control of white mold on dry shelled beans. According to the label, the rate of application is 1.0L of product/ha, and must be applied in sufficient water to obtain adequate coverage of foliage. The maximum seasonal use rate is 2.0 liters per hectare during each growing season, and the pre-harvest interval is 30 days. Please refer to the amended Allegro 500F label for all product information. The amended label is attached to this e-mail.

Previous PAN Bulletins

View Previous PAN Bulletins at:

<http://www.pulse.ab.ca/ForProducers/Publications/PulseAgronomyNetwork/tabid/125/Default.aspx>

If there is an article that you would like to see or contribute to the Pulse Agronomy Network, e-mail reply or call 780-986-9398 Ext3.

If you would like to subscribe or unsubscribe to this mailing list please reply to office@pulse.ab.ca