Pulse Agronomy Network~ *Partnership in Industry*

October 14, 2004 - All Pulse Bulletin #17

In this issue...

Editors note - Although this was written in Saskatchewan, the storage issues are valid here in Alberta this fall as well...

Safe storage of pulses: try to avoid surprises

Pulse producers who have finally been able to harvest their crops, now need to take care so as not to lose what they have.

Ray McVicar, Special Crops Specialist with Saskatchewan Agriculture, Food and Rural Revitalization (SAFRR) says producers should monitor their stored crops immediately to prevent any losses due to spoilage.

“The risk of spoilage is particularly high this year due to the slow maturity and recent wet weather which have led to high moisture content. This risk is greatly reduced if the grain is aerated immediately,” McVicar said.

The safe storage of pulse crops is important every year, and the key to avoiding mold and other storage problems is the use of aeration to cool and dry the seed. Testing with a moisture meter should be carried out several times after the crop is binned.

“Because of their large seed, chickpea and pea need time for the moisture to equalize throughout the seed,” McVicar said. “If harvested at high temperatures, there is a strong possibility the seeds will ‘sweat’ in the bin.”

For prolonged safe storage, pulse crops should be cooled to less than 15 degrees Celcius (C) and dried to 14 per cent moisture. Seed that is cooled to 10 degrees C will store well for long periods, McVicar said.

A bin equipped with an aeration fan can provide both cooling and drying. But, while cooling may be completed in one day, drying can take three to four weeks.

“Drying, therefore, requires an aeration fan that has adequate power to provide air flow through the grain,” McVicar said. “The recommended requirement for aeration drying of a pulse crop is about one to two cubic feet of air per minute per bushel. That’s about 2,000 to 4,000 cubic feet of air per minute for a 2,000-bushel bin.”

The cleanliness of a crop is another factor to be considered, as foreign material can greatly reduce airflow and channel air movement around wet spots, McVicar said.

“Due to slow crop development all season and the poor harvest conditions in late August and September, there is a large variation in crop quality and grades of our pulse crops throughout Saskatchewan this year,” he said. “The market will most likely respond to this variation by rewarding growers who have top grades for sale. Producers should do all they can to maintain the grade and quality of their crop in order to obtain the best price possible.”