Harvesting Flax

Desiccation and Swathing

Flax can be chemically desiccated or swathed to dry down stalk tissue and green weeds after the crop has reached physiological maturity (75% of bolls are brown). Dessicated crops can then be straight combined, but swathing may be preferred when the crop is not uniform in maturity; in a swath seeds are also less susceptible to frost damage. Timing is important for swathing and/or dessication operations, as desiccation or swathing prematurely will reduce yield.

Flax can withstand weathering conditions better than canola, as the flax bolls are less susceptible to shelling out than are canola pods. If in a late fall situation where standing flax still remains, swathed flax may be easier to pick-up later this fall or next spring if the need arises. If left un-swathed, the weight of snow on the crop may result in significant stalk breakage and/or lodging. The longer the crop is exposed to freeze-thaw conditions, the more the seed quality and appearance will be reduced. Also, flaxseed overwintered in the field is less suitable for the human consumption market.

Combining

Flax seed with a moisture content of 10% can be safely combined without the need for drying. The combine must be adjusted correctly to minimize seed coat damage to flax. If seed is very dry and the cylinder speed is too high, significant seed damage can occur.

Straw Management

Flax straw can cause problems in seeding subsequent crops if it is chopped and spread, since the straw decomposes very slowly. The straw can be baled and sold to several industries that process the straw. To be sold, straw must be free of weeds and garbage. As a last resort, the straw can be burned.

Storage

The moisture content in flax can be reduced with aeration under the right conditions, as with canola, but in late fall, a grain dryer may be more effective in bringing the moisture content down to a storable level. Flax is considered tough from 10.1 to 13.5% moisture and damp if over 13.5% moisture.

If aeration bins are all that is available, the following table from NDSU article “Flax Drying in October” may be helpful. The table provides the approximate equilibrium guidelines for moisture contents of flax at various temperatures and relative humidity. This should be used as a general guide only as individual conditions may vary. For more information go to http://www.ag.ndsu.edu/procrop/flx/dryoct10.htm

	Crop Planted					
Previous Crop	**Spring Wheat**	**Barley**	**Oat**	**Canola**	**Flax**	**Field Pea**
Spring Wheat	90	101	101	103	102	102
Barley	92	88	91	100	99	97
Oat	93	91	85	95	97	93
Canola	103	105	104	83	90	93
Flax	98	104	102	98	81	79
Field Pea	100	104	105	101	111	–

Resulting Flax seed moisture at temperature/ humidity

Source: MASC Harvested Acreage Reports 1998-2007.

If using aeration and natural air to condition flax, sampling of resulting product is critical. Monitor the changes in moisture and temperature in the bin by sampling the bottom, middle and top of bin separately. Grain at the bin bottom closer to the aeration will probably be dryer than grain at the top of the bin. Move grain from the bin bottom to the top to provide mixing and evenly reduce moisture throughout the entire bin.

The sellable product is 10% moisture, but for successful long-term storage, targeting 8-9% moisture will reduce chances of heating and spoilage. Even dry, flax is prone to heating because of its high oil content. Stored flax should be routinely monitored to ensure there are no hot spots developing. A hot spot in stored flax can spread quickly – possibly throughout the entire bin.

Article as posted on the Manitoba Flax Growers Association website