

MARKETING GRAIN CORN

Manitoba producers grew very little corn for grain prior to 1978. In 2012, grain and silage corn acres reached a record of 349,000 acres. This is a 63% increase in acres from 2003.

As of 2013, the majority of Manitoba corn is sent to the Husky ethanol plant in Minnedosa, MB, producing 130,000,000 litres of ethanol a year. Here it takes one bushel of grain (wheat or corn) to make roughly 10 litres of ethanol. Plant operations preference is for high corn content and Husky has typically been over 70% corn content per year in usage, though the plant is not committed to any predetermined percent use between wheat and corn. In a four year average the plant is to use a minimum of 80% Manitoba grown grain.

The distillery at Gimli uses about 60,000 metric tonnes (2.4 million bushels) of corn annually. Manitoba producers supply most of the distillery requirements for high quality corn. This market demands a clean sample of screened corn of high test weigh (56 lb/bu), with 14.5% moisture or lower. Corn is accepted up to 15% moisture, but at a discount. Storage management practices are very important in ensuring that the corn does not have any objectionable odours.

Corn is also processed and used for hog and poultry feed. Corn silage is fed to dairy and beef cattle. Manitoba corn is also used across the Prairies as livestock feed.

QUALITY

Grain Corn

Several quality factors are involved in producing corn, depending on the market for which it is destined, but test weight is of prime concern. As might be expected, quality factors have a higher emphasis in the distillery trade than in corn marketed for feed. The Canadian Grain Commission is the agency responsible for determining the primary and export grade determinants of corn (See Table 15).

TABLE 15. Grades of Corn (Canadian Western - Primary and Export Grade Determinants)

Grade Name	Minimum Test Weight (kg/hL)	Degree of Soundness	Heated	Total Damaged Corn	Cracked Corn and foreign material
No. 1 Canada Western	68	Cool and sweet, uniform in size	About 0.1%	3.0%	2.0%
No. 2 Canada Western	66	Cool and sweet	About 0.2%	5.0%	3.0%
No. 3 Canada Western	64	Cool and sweet	About 0.5%	7.0%	5.0%
No. 4 Canada	62	Cool and sweet	1.0%	10.0%	7.0%
No. 5 Canada Western	58	May have a slight odour, but should not be sour or musty	3.0%	15.0%	12.0%

In addition to the official grades of corn, there are a number of additional points that corn producers should be aware of when delivering their grain to a commercial facility:

- It is unlawful to deliver into commercial channels grain which has been treated with a seed treatment. The suspected presence of treated kernels is sufficient cause for rejecting a load of corn at any elevator and may result in segregation and disposal of the grain.
- Unnatural or objectionable odours will result in down-grading.
- With the exception of a few factors (i.e. stones, odour, test weight), all factors affecting corn quality are expressed as a percentage by weight. They should not be determined on the basis of kernel counts (e.g. 1 kernel in 100 kernels = 1.0%).
- Moisture content of corn is not a grading factor.
- There is no tolerance for insects in Canadian grains and oilseeds.

Feed Quality

Grain corn is a well-accepted energy source in livestock feeds in Manitoba. The two main aspects of quality considered by feed corn buyers are test weight and cleanliness. Cleanliness simply refers to whether the corn has been screened. Buyers prefer screened corn but they will compare the price and quality with unscreened corn. Screened corn provides a clean sample of uniform seed size and buyers are attracted to this since they feel they are getting more for their money. Screening is, therefore, an attractive marketing feature. Most growers have screening equipment with their grain handling system.