

# CANOLA MEAL BACKGROUND & MARKET



Canola is an offspring of rapeseed (*Brassica napus* and *Brassica campestris/rapa*) which was bred through standard plant breeding techniques to have low levels of erucic acid (< 2%) in the oil portion and low levels of glucosinolates (< 30 µmol/g) in the meal portion. The canola seed is small and round, 1-2 mm in diameter. It contains approximately 42-43% oil, which is extracted for use as a premium edible vegetable oil. The remaining canola meal is a widely used protein source in animal feeds. The glucosinolates in rapeseed were reduced because they are toxic and unpalatable to most animals, and therefore limit the inclusion level of rapeseed meal in animal feeds to very low levels. The term “canola” (Canadian oil) was coined in order to differentiate it from rapeseed. Some countries, especially in Europe, use the term “double-zero rapeseed” (low erucic acid, low glucosinolate) to identify “canola quality” seed, oil and meal.

Canola and rapeseed meals are commonly used in animal feeds around the world. Together, they are the second most widely traded protein ingredients after soybean meal. The major producers and users of canola and rapeseed meal are Australia, Canada, China, European Union and India. Canada currently has a relatively stable production of approximately 7 million tonnes of canola seed per year (a range of 6 to 9 million tonnes). About half of the seed is exported and the other half is crushed in Canada (Table 1). Most countries that import canola seed from Canada mainly do so for the oil, which is the most valuable component. They crush the seed and then generally use the canola meal they produce for the animal feed industry in their own countries. An exception to this is China. In the last few years China has greatly increased its import of canola seed due to demand for the oil. Much of the resulting canola meal is then exported – mainly to other countries in Asia. China also exports a large amount of locally produced high glucosinolate rapeseed meal. Canola meal is widely available and traded. It is usually sold in bulk form as a mash or in pellets. Canadian canola meal is traded under the rules outlined in Table 2.

**Table 1** Canadian production, exports and domestic use of canola seed and canola meal in 000's t (CCC, 2001)

Canadian canola seed and meal production and markets	1997-98	1998-99	1999-00
Canola seed production	6,393	7,643	8,798
Canola seed exports	3,062	3,898	3,884
United States	391	277	280
Japan	1,829	1,814	1,801
Mexico	593	529	570
China	110	1,269	1,211
Others	139	9	22
Canola seed Canadian crush	3,239	3,062	2,983
Canola meal production	1,995	1,941	1,858
Canola meal exports	1,408	1,260	1,128
United States	1,223	1,135	1,066
Japan	26	24	1
South Korea	50	56	0
Europe	20	26	39
Others	89	19	22
Canola meal Canadian use	587	681	730

**Table 2** Trading rules for canola meal, COPA, 1999

Characteristic (as fed)	Canada and US	Export
Protein % minimum	34	-
Fat % minimum	2	-
Protein + fat % minimum	-	35
Moisture + fat % maximum	-	15
Moisture % maximum	12	12
Crude fibre % maximum	12	12
Glucosinolates µmol/g maximum	30	30
Sand and/or silica % maximum	-	1
Screen analysis (bulk), % through 2.0 mm screen	90	90
Screen analysis (pellets), % retained 2.0 mm screen	90	90

## References

**CCC. 2001.**

Canola Council of Canada.  
[www.canola-council.org](http://www.canola-council.org)

**COPA. 1999.**

Canadian Oilseed Processors Association.  
*Trading Rules. 1998-1999.*  
Winnipeg, Manitoba