

Canadian Update

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Canada has been an important producer and trader of agricultural commodities for many years. It is in recent years, however, that oilseeds have become a more significant factor in the cropping patterns of farmers. The largest oilseed crop in Canada by far, representing two-thirds of the total oilseed production, is canola.

Beginning with the licensing of the first canola variety in 1974, commercial production of seed low in erucic acid and glucosinolates (canola) was undertaken. Canola production in Canada has grown to the point that acreage now frequently exceeds 3.5 million hectares.

The largest acreage to date occurred in 1988 when canola was planted on 4.117 million hectares.

CANADIAN CANOLA PRODUCTION ('000 's)

	HECTARES	TONNES
1986	2960	3787
1988	4117	4218
1990	2894	3266
1992	3581	3689

The erucic acid level has continued downwards in the oil from Canadian canola and presently it stands at an average of 0.5% percent. The Canadian limit was reduced to two percent from five percent in the mid-1980's to reflect this reality. Two percent is also the maximum erucic acid level allowable under the legal definition of canola in the United States.

Canola oil is noted for its use in salad and cooking oil. Its strength here is largely due to its bland flavor, light color, and delicate aroma. The strength of canola nutritionally in North America is in its comparative fatty acid profile. Canola is lowest of the vegetable oils in saturated fat.

Canola oil is also widely used in the baking and frying market due to its excellent characteristics. Most noteworthy is that canola is more temperature-light-air stable than most vegetable oils.

The other identity of canola relates to the protein meal left when the oil is extracted, the meal then is used in animal feed. Traditional rapeseed meal had some restrictions on its use for animals because of components called glucosinolates. In fact, it was found that a 30 micromole/gram level of glucosinolates represented a maximum for widespread use of the meal in all animals.

In addition, because glucosinolates are sulphur compounds, a reduction in the sulphur levels of the oil has led to increased refining efficiencies.

The conversion in Canada to canola quality and the reduction of glucosinolates in the meal had its most marked effect on the meal's feeding value.

In Canada, canola oil is the leading vegetable oil. It out-distances its nearest competitor, soybean oil, by two to one.

Back in 1976, when Canada was just beginning her conversion to canola from rapeseed, canola oil's marketshare was just over 30% of all the vegetable oils deodorized in Canada. By 1989, canola oil supplied 62.8% of the deodorized vegetable oil market in Canada.

The Canola Council of Canada has been a central organization in the development of canola in Canada. By reviewing the Canola Council's long range focus, one gains a perspective on the future outlook of the total Canadian canola industry.

The broad focus of the Canola Council of Canada is:

To increase the profitability of growing and processing Canadian canola and to improve the overall quality of canola seed and canola products.

Within this context the Canola Council of Canada will focus specifically on:

1. Ensuring canola oil remains nutritionally superior.
2. Increasing the profitability of the Canadian canola industry through improving demand for canola meal and through specific emphasis on improving the physical quality of canola meal.
3. Increasing the sum of oil plus protein produced per acre by increasing oil content in canola seed, increasing protein content in canola seed, and increasing yield of canola per acre.
4. Increasing the profitability of the Canadian canola industry by increasing the physical quality of, and demand for, canola oil.

This focus will be directed primarily through the disciplines of processing, genetic, and agronomic research, as well as commercialization of technology, in a manner which is market oriented, economically sound and financially achievable. Market development will play a complementary role.

The basis of canola's strength for the future is its genetic flexibility. This genetic flexibility combined with a large production area, which is characterized by above average production capability and dependability, creates a future for canola as a natural factory for highly valued specialty products. We are currently seeing the first of these products reach the commercial stage.

In particular, development is taking place with specialty fatty acid profiles of canola. These include low linolenic acid. These modified canola oils will provide significant stability and functional benefits.

The current work with modified fatty acid canola is just a start. Over time, using canola as a genetically flexible natural factory, products may be marketed in areas of nutritional supplements, pharmaceutical products, food production additives, and fine chemicals for industrial use.

Canola's strength is demonstrated by the nutritional profile of its oil, and the market value of its meal. Canola oil, with its current characteristics, will continue to maintain a strong commodity position in developed nations with a high nutritional awareness. Both canola oil and low linolenic canola oil will continue to grow and will be the driving factor behind Canadian canola production and processing. It is anticipated that greater efforts to further improve canola meal will occur, resulting in improved value of canola meal relative to soybean meal.

Canola is in its infancy in terms of the life cycle of a crop. In spite of this, major developments have already taken place and further progress will continue.