# PLACE OF RAPESEED IN WORLD MARKET

J. J. Banfield

Although world production of rapeseed in 1973 again exceeded 7,000,000 metric tons for the fourth successive year, when measured by volume, rapeseed is still far behind that of other major vegetable oilseeds such as soybeans, cottonseed, groundnuts and sunflowerseed. However, in international trade, rapeseed has steadily increased its share of the world market during the past 10 years.

In 1964, for example, rapeseed in terms of oil equivalent, enjoyed only 3.3 % of total world net exports of soft oils from primary producing countries. By 1972, the last calendar year for which complete data are available, rapeseed had increased its share of the market to 12.2 %. Further gains are expected to show when the statistics for the calendar year 1973 are published.

Canada has contributed substantially to both the production and marketing of rapeseed in recent years. The seeded area in Canada's prairie provinces, where the crop is grown, doubled between 1968 and 1969, doubled again in 1970, and reached its peak of 5.3 million acres (2.14 million hectares) in 1971. The big upsurge in Canadian production of 2.2 million metric tons in 1971, occurred when a government program was initiated to reduce the acreage planted to wheat of which huge surplus stocks had accumulated in Western Canada.

By this time, Canada was not only the largest single exporter of rapeseed, but had become the world's largest single producer of the crop in a list of some 33 countries growing rapeseed. The carryover from this large crop in 1971 of 41.8 million bushels or 948,024 metric tons brought about a sharp reduction in planted acreage in both 1972 and 1973 when production totalled approximately 1.2 million metric tons in each of those two years. The booming market in oilseeds in 1973 absorbed not only the carryover from 1971 but appears likely to leave Canada with a relatively small carryover on July 31st this year when the 1973/74 crop year comes to an end.

A feature of the past two years has been the striking growth in world trade in rapeseed oil. The 1973 review of vegetable oils and oilseeds, published by the Commonwealth Secretariat in London, England, reports that since 1969, when the level of net exports of rapeseed and rapeseed oil virtually stagnated, they expanded by no less than 19 % in 1970 and by a further 38 % in 1971. The indications are that the 1971 peak was surpassed in 1972.

Canada's position in this expansion in world trade was significant. Most of the expansion in 1970 and 1971 took the form of greatly increased seed shipments from Canada, these more than trebelling between 1969 and 1971,

and accounting in the latter year for no less than 67 % of net exports of seed and oil from all primary producers. In 1969, they had represented only some 29 % of world exports.

Most of these figures are on a calendar year basis, but if we look at the crop year 1972/1973, exports of rapeseed alone from Canada, amounted to 1.2 million metric tons, while exports of rapeseed oil in the same crop year, totalled 26,500 short tons and rapeseed meal exports rose to 21,443 short tons from quite insignificant levels in the previous crop years. It will therefore, be realized, that although Canada disposes of the bulk of her production in overseas markets, the volume being processed in Canada is steadily rising. Processing reached the record level in 1972/1973 of 15.6 million bushels, the equivalent of 354,500 metric tons.

For several areas throughout this world, the promotion of markets for rapeseed and rapeseed products has had to be carried out under quite adverse circumstances. The erucic acid scare in 1970, for example, which erupted during the International Rapeseed Conference held that year in St. Adèle, Quebec, cast some dark shadows over the use of rapeseed oil in human food. Laboratory tests had revealed ill effects on rats fed a high level of rapeseed oil in their diet and this caused Health and Agricultural Officials to recommend production of rapeseed with a much lower erucic acid content.

This recommendation was put into effect in Canada in 1971, when three varieties of known low erucic acid content were made available for planting. These new varieties had some shortcomings in terms of bushel yield per acre and oil content and, consequently, were less than popular with producers and rapeseed processors who had to absorb losses because of the change-over. By 1973, Canada was on the way to eliminating these deficiencies.

Our plant breeders were able, in that year, to introduce new low erucic varieties that performed better than the "Span" and "Zephyr" varieties grown in 1971 and 1972. The Campestris variety known as "Torch" was released in 1972 and for the most part, it has regained the yield and oil content of the old high erucic varieties. It has also out-performed "Span" during the past three years. A new Brassica napus variety, known as "Midas" was grown commercially on a good scale in 1973 and will probably account for a substantial part of the 1974 crop seeded in two of our three producing provinces. Another new variety of the Napus type was licensed this year under the name of "Tower", and seed will be multiplied during 1974 to provide a substantial quantity of commercial seed availability in 1975. Both "Midas" and "Tower" varieties are very low in erucic acid content, while " Tower" is the first of our "Double-Zero" varieties of rapeseed; that is low erucic in the oil and low glucosinolate in the meal.

It is apparent then that in Canada, the industry is forging ahead to bring about a complete change-over, if not this year, certainly by 1975, and that some very important and far-reaching changes are close at hand in the quality and characteristics of Canadian rapeseed. The "Double-Zero"

with its low erucic, low glucosinolate is a major step forward. It will meet the requirements in rapeseed oil and will certainly enhance the use of rapeseed meal in livestock and poultry rations. Lowering of the fibre content, and the raising of the protein content of the meal, are other developments that are just around the corner.

Similar developments are taking place in some European countries. The first "Double-Zero" variety of rapeseed in West Germany was licensed under the name "Erglu", last December and will undergo, I understand official testing during the 1973/74 crop year. Sweden, Poland, and France, leading producers of rapeseed in Europe, have also embarked on programs to lower the erucic acid content of rapeseed oil and improve the general quality of both the oil and the meal.

The era of the "Double-Zero" which has now been entered into both in Europe and in Canada, spells promise for rapeseed, not only as the source of high quality edible oil, but also of protein meal that will remove the restrictions on the amounts that can be fed to poultry and hogs. Marketing experience has shown clearly that in the past, the restraints placed on rapeseed meal by feed formulators and producers of hogs and poultry, have been a very real barrier to the development of markets for rapeseed.

In Canada, intensive research, funded by our Central Government and administered by the Rapeseed Association of Canada, has produced real dividends in terms of discovering drawbacks and finding solutions. Periodic reports of the work being undertaken at various universities in Canada, and the results of findings of the scientists involved, are published and distributed by the Rapeseed Association of Canada. We place a high priority on the development of quality in rapeseed oil and rapeseed meal that will get all-round acceptability for both products in the market places throughout the world. In addition, plant breeders are ever mindful of the need to concentrate on increasing yield per acre potential of the newer varieties. This should, in turn, react to the benefit of rapeseed producers and encourage them to keep growing the crop in sufficient volume to meet the growing market demand.

In my report to the Annual Meeting of the Rapeseed Association of Canada in February, I stated, that the industry in Canada, at its current rate of growth, is capable of digesting 150,000,000 million bushels, or 3.4 million metric tons of rapeseed within the forseeable future.

Why Not? The rapeseed crushing industry in Canada, is one of our fastest growing industries, having achieved an annual growth rate of 25.2 % in each of the last eight years. Statistics for the crop year 1965/66, show total crush of only 3.7 million bushels, while in 1972/73, the volume processed was 15.6 million bushels. Utilization of rapeseed oil in the manufacture of food items in Canada has increased impressively. Figures for the calendar year 1973 show that rapeseed oil accounted for 40.5 % of the vegetable oils used for the processing of margarine, shortening, and salad oil. Its nearest competitor was soybean oil with 29.5 % of the market. As we try

to measure the potential for rapeseed and the oil and meal products of the seed, we in Canada are very much encouraged by the trend that is steadily developing both at home and abroad. It is to be noted that in international statistics, although the gains have not been as great, nevertheless the trend is there and is likely to accelerate as the quality factors in rapeseed oil and rapeseed meal improve. World export data for the calendar year 1972, indicates the export of 5.7 million metric tons of oilseeds and vegetable oils, expressed in terms of oil equivalent of soft oils, from primary producing countries. Of this total, soybeans accounted for 50.4 % and rapeseed 12.2 %, this was a gain in the case of rapeseed of 4 % compared with figures for 1970, and a loss of 1.6 % for soybeans.

It is against this background of market development for rapeseed and its products, that farmers in Canada are being asked to maintain their production of the crop. We do not know at this time, what the total seeded acreage in rapeseed will be in Canada in 1974. Planting is still in progress in some areas and the first official estimate of acreage seeded will not become available until July 11th. The producers have been urged to plant up to 4.5 million acreas (1.82 million hectares) but in view of the competition for available acreage, likely to come from wheat, this target may not be obtainable. In fact, the estimate of planting intentions released in March by Statistics Canada stated the planting intentions to be 3.2 million acreas. Canada, it must be remembered, has no artificial or government control on Canadian farmer's crop productions. Price will be the major determining factor in how quickly Canadian farmers increase rapeseed production.

In summary, considering all the aspects, such as new and better varieties, "Double-Zero" types, and in the not too distant future, the yellow seed coat type, one has to be optimistic about the future of rapeseed in the world market. New varieties will bring with them higher levels of protein, higher oil content and lower fibre, which in turn has led one of Canada's leading plant breeders to describe the new upcoming yellow seed color type as the "three-plus factor" in rapeseed of the future.

The Food and Agricultural Organization of the United Nations, in its predictions made in 1971, forecast a 57 % increase in rapeseed production between 1970 and 1980, indicating that this size of increase will be required to meet the needs of a growing population and a generally higher living standard. World production in 1973 has been estimated at approximately 7.0 million metric tons or within about 1.0 million tons of FAO's 8,027,000 target for 1980.

All the signs point to a bright future for rapeseed.