

CO1970PRO04

WORLD PRODUCTION AND MARKETING OF RAPESEED

DISCUSSION PANEL ON RAPESEED PRODUCTION

Panel members:

Agronomist .....	Canada .....	Mr. A. L. D. Martin
Rapeseed Grower .....	Canada .....	Mr. K. Edie
Representative .....	France .....	M. M. Chanet
Representative .....	Poland .....	Dr. A. Rutkowski
Representative .....	Sweden .....	Mr. B. Loof

RAPESEED PRODUCTION IN CANADA

By A. L. D. Martin  
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Rapeseed production in Canada is a relatively new enterprise compared to the production of cereals. The production of rapeseed is confined primarily to the three Prairie provinces and began in 1943, more or less as a war-time effort to produce oil for industrial purposes. The value of the oil as an edible product, however, was well-known and the first oil extraction for edible purposes in Canada occurred in 1956.

Since that rather modest beginning in 1943, with some 3,200 acres, mostly in Saskatchewan which produced 44,400 bushels, rapeseed has become one of the most important cash crops on the Prairies. Canada has now become the world's largest exporter of rapeseed and since 1958, domestic consumption has increased 15 times. Not only is Canada the world's leading exporter of rapeseed but also in 1969 was second in the world in production, and according to preliminary estimates of the 1970 crop, she will undoubtedly take the lead in production this year.

Rapeseed production is centered almost exclusively in the Prairie Provinces with Saskatchewan leading in terms of acreage.

RAPSEED ACREAGE - CANADA

<u>Year</u>	<u>Acreage</u>	<u>Production</u> (bushels)
1943	3,200	44,400
1948	80,000	1,280,000
1955	138,000	1,558,200
1961	710,300	11,220,000
1967	1,726,000	26,500,000
1969	2,012,000	37,020,800
1970	3,950,000	79,500,000 (estimated at 20.1 bus./acre)

Source: Dominion Bureau of Statistics  
Ottawa

RAPSEED ACREAGE - PRAIRIE PROVINCES

	<u>1968</u>	<u>1969</u>	<u>1970</u>
Saskatchewan	511,000	1,000,000	2,000,000
Alberta	450,000	816,000	1,600,000
Manitoba	91,000	196,000	350,000

The areas most adapted to rapeseed production are mainly the north central parts of the Prairies and generally on the northern fringe of the cereal growing area. There is, of course, intermingling within the cereal crop area and this has become more pronounced in 1970. Because of the de-emphasis on wheat production, diversification to other crops, particularly rapeseed, has moved production into areas where very little, if any, rapeseed was produced in the past. This not only increased the total acreage devoted to this crop but perhaps has led to a tendency on the part of the new grower to employ a high level of technology in his first effort which will result in a better than average

There are two main types grown in Western Canada - Brassica napus, sometimes referred to as the Argentine type which usually matures in 90 to 100 days. Varieties of this type have been developed over the last ten years, and the Canadian varieties are characterized by very large seeds. One variety called Oro has no

erucic acid in the oil. The turnip rape (Brassica campestris) is an earlier maturing type, maturing in 75 to 80 days, and is grown on perhaps 80% of the rapeseed acreage of Western Canada. Its earlier maturity is a decided advantage in the northern rapeseed areas of Western Canada where early fall frosts can be a problem. Although varieties of the turnip rape are earlier maturing, yields are lower. A good average yield of turnip rape may range from 1,200 to 1,500 lbs. per acre while the Brassica napus will yield from 2,000 to 2,500 lbs. per acre.

Rapeseed is not a difficult crop to grow under Western Canadian farming conditions and fits extremely well in a rotation involving cereals. Recent research at the Research Station, Canada Department of Agriculture at Lethbridge, Alberta, however, indicated that there is a possibility that yields of crops such as wheat and oats may be suppressed where heavy rows of rapeseed residue were left behind after combining. This was not the case where the residue was chopped and spread uniformly behind the combine.

In Western Canada rapeseed responds well to high inputs of fertilizer compared to the fertilizer requirement of cereal crops. Rates of nitrogen application in the neighbourhood of 50 to 80 pounds per acre produce excellent yields depending on the rotation used. Rapeseed seeded into the stubble of a previous cereal crop generally requires the higher rate of application. Phosphate may be added up to rates of 20 to 30 lbs. per acre, but normally there is no need to apply potash to Western Canadian soils.

There are some pests, both diseases and insects, that attack rapeseed in Western Canada, but generally rapeseed has enjoyed relative freedom from serious losses from either. Good husbandry helps in most cases to reduce or even prevent the incidence of pests.

The most serious insect problem could be the flea beetle (Phyllotreta spp) but these can be adequately controlled by treating the seed with an insecticide formulation which gives good protection to the young seedlings. Unprotected crops will suffer damage to the extent that the plants may be eaten up as quickly as they emerge. If continued protection is required, field spray with an insecticide is practiced.

Probably the most serious disease of rapeseed is a fungus disease caused by Alternaria brassicae, which usually produces small black spots on the pods and may, on occasion, become serious. The subsequent invasion of the fungus into the pod

causes the seeds to become discolored and shrivelled, thereby causing a loss in yield.

Other diseases such as white rust - sometimes referred to as staghead and Downy Mildew (Peronospora parasitica) may occur together on a plant showing a complex of symptoms. Usually, when the disease is present, affected plants may be scattered throughout a field, and generally losses are not serious. Occasionally, a Sclerotinia spp of fungus may cause a stem rot or a Fusarium spp may cause a form of root rot, but generally both diseases can be kept under control by following a rotation whereby rapeseed does not follow a previous rapeseed crop too closely. Weather conditions, which are sometimes unpredictable in Western Canada, can have an effect on the incidence of disease.

Weed control in rapeseed is a problem if care is not taken to prevent early growth of the weeds. Chemicals are available to control weeds such as wild oats and other grassy types. There are also chemicals which will control some broad leaf weeds and more recently a chemical was licensed in Canada that is selective enough to control wild mustard in rapeseed.

Seeding and harvesting the crop can be done with traditional cereal grain handling machinery which helps to make it an attractive crop to grow in an area that is traditionally a grain producing area. Although a normal grain drill may be used, the best method is to use a grass seeder attachment. The crop is normally cut with a swather and management is important in determining the correct time to cut the crop. Because the crop shatters readily, it is important that it be swathed when much of the crop is approaching maturity and the maturation process is completed in the swath. The combine is used for threshing and care again must be taken to avoid loss from both damage to the seed and loss from passing through the machine.

Storage of seed is considered safe at a 10.5% moisture content. If the moisture content is higher, mechanical drying is usually done to avoid spoilage.

Rapeseed in Western Canada is marketed through similar channels as wheat, and it is accepted at the country elevator and shipped to either the West Coast destined for markets such as Japan, or more recently, to the terminal system at Thunder Bay. There are crushing facilities in Western as well as in Eastern Canada, and probably 30% of Canada's production is crushed for oil and meal used domestically.

Rapeseed production and marketing has come a long way since its

modest beginning in Western Canada in 1943. It has now achieved the status of being Canada's fourth most important annual crop, with the 1970 production of around 75 million bushels, this will be a challenge to the handling facilities for marketing and movement in Western Canada where wheat has been "king" for so long.

#### RAPSEED PRODUCTION

By K. Edie  
President, Manitoba Rapeseed Growers Association  
Dugald, Manitoba

Mr. Chairman; Ladies and Gentlemen:

As this is the Production Panel and the Marketing Panel is to follow, it would be wise for a farmer to limit his remarks strictly to production. Yet this is too limiting. At the risk of stepping on somebody's toes and of getting into unfamiliar territory, let us jump in. How else can you learn?

In Mr. Martin's presentation we have had a complete resumé of production practices applicable to the Prairie region. Although Mr. Martin referred to all this as, "old hat to the Prairies", it should not be put down that lightly. Farmers are notorious for their desire to grow more per acre and then to ignore marketing. On the one side of the equation we have technology. This technology has been developed on the Prairies by agronomists over the last few years, and it works. Also, it is available to all farmers as the Provincial Governments have wisely seen fit to make it available not only through their regular extension networks; but also through special crops extension men.

We have a technology developed, waiting and available to the farmer, a technology that will give yields in excess of the present average yields. Add to this equation the sheer vastness of the Prairie region. Anyone who has ever driven by car from Winnipeg, through Saskatchewan and Alberta to the Peace River region knows the potential of this area, even if not always in yield per acre then in total production. A look at the map of the rapeseed producing area shows it just clinging to the northern parts of the agricultural regions. It is particularly disturbing to think of what would happen to rapeseed production if it were taken up seriously for instance, by the Regina plains?

The weather trends of the past couple of years indicate that this could happen. Let us hope it does not, but it is a possibility.

It then moves within the realm of possibility that the acreage could double again in 1971. Given an uncomplicated flow of rapeseed to consumers, and prices being maintained at their present level or above, then this could happen. The acres are available. The machinery is in the farmers' hands. All that is needed is for the farmer to decide that it is in his own best interest to do so. However, acreage could also be halved for the following reasons. It is not possible at the moment to assess the final results of the corn blight in the U.S.A. any further than to say that every time the estimated damage is raised by 1%, then forty-five million bushels of feed grain cease to exist. Since the most recent estimates indicate a reduction in corn crop exceeding the total Canadian feed grain production entering commercial channels, grains are becoming more attractive. If Canadian wheat sales measure up to recent indications, then the pressure on farmers to switch to oilseeds to an extent they really do not desire, and just in order to have something to sell, will be relieved. Farmers will be free to choose their crops on the basis of what looks most attractive. If the L.I.F.T. (Government wheat acreage reduction program) can be removed, some order can be restored to the farmer's decision-making process.

Never make predictions! If you are right, nobody ever remembers, and if you are wrong, nobody ever forgets. This axiom fits here very well. Therefore, we are reduced to another axiom of commodity marketing: the actual price received will be somewhere between the best imaginable and the worst possible. Taking this as a basic premise, we farmers need a somewhat more stable benchmark. What we do not need are euphemistic predictions or doom and gloom predictions. What would be much more advantageous is a forward pricing mechanism more closely related to spot prices and less subject to technical adjustments. It is almost non-existent now, but a method of delivering against short sales must be developed. The Thunder Bay delivery point is a step in the right direction. Some form of inland terminal space and cleaning are imperative.

When asked at what price will the farmer produce rapeseed, there is only one answer. The computer has not yet been developed that can figure it out. If the price was set one cent too high, over-production would take place. If the price was set one cent too low, under-production would result and some of our potential would be wasted. Therefore, the exercise is self-defeating. As an example, I remember growing rapeseed in 1955 and 1956 under contract. In 1955 the price was 4.5 cents per lb., and in 1956 4 cents per lb., and when in 1957 it was to be 3.5 cents per lb., we got out. This system leaves the farmer completely at the mercy of the contractor. He has no method of discovering the price at which his product will continue to move to market.

Under the present system a farmer can get some guidance from the most distant future contract, although, as I have already mentioned, there are a number of dangers here. There has been a continually inverted market which must be rectified before farmers can become short sellers in the future.

Perhaps I have overstepped my terms of reference on this Panel, but to me marketing is an important part of production. The integrated approach of the total industry is the basis for the existence of the Rapeseed Association of Canada. The gathering together of all segments of the industry will unleash a formidable force in keeping the rapeseed crop healthy.

Growth for the sake of growth is the philosophy of the cancer cell. The Growers' Associations were not formed to encourage farmers to grow one acre more or one acre less than what they see fit according to their judgment of the circumstances and of the alternatives. To the extent that we farmers understand the problems of rapeseed after it runs out of our truck box, we will be able to affect beneficial changes. Beneficial not only to ourselves but to the entire industry. We have gone the full circle. Let us keep it rolling.

#### THE PRODUCTION OF RAPESEED IN FRANCE

By M. Chanet  
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It is yet too early to advance a figure for the yield for the present season, however, the rapeseed harvest in France is estimated at 540,000 tons against 80,000 tons ten years ago.

273,000 ha of winter rape and 38,000 ha of summer rape have been sown, a total of 14% more than in 1969.

The average yields of winter rape in recent years have been equal to or in excess of 18 quintals. As for summer rape, they have been equal to or in excess of 19 quintals.

We grow mainly Brassica napus. The most frequently grown varieties are Sarepta, Tonus, Titus, Oléor, Marcus and Ramses; and for summer rape, Janetzki, Cresus, Regina II, Zollerngold and Janus. The oil contents fluctuate between 45% and 48% for winter varieties, and between 40% and 42% for summer varieties.

Winter rapeseed is sown between August 25th and September 10th in the North and East regions, between September 1st and Sept-

ember 15th in the Centre and South-East regions, and between September 20th and October 10th in the South-West region.

Rapeseed is a demanding crop, therefore, according to the types of soils, we add 120 to 200 units of nitrogen per hectare, 80 to 130 units of phosphoric acid, and 100 to 120 units of potash.

Generally, the harvest takes place at the beginning of July. The drying is not always sufficient. The crop may have a moisture content of 8% to 15%; therefore, we dry most of the seed at the time of harvesting.

The summer rapeseed crop is not as large as the winter rapeseed crop. It is more risky to grow and its oil content is much lower. However, it succeeds quite well in the areas having mild and moist springs, more particularly in the coastal regions. This type of rapeseed has the advantage of being in the field for a shorter period of time; 5 months instead of 10. It requires less fertilizer: 100 to 150 units of nitrogen, 50 to 80 units of phosphoric acid, and 100 to 150 units of potash are sufficient. Growing quickly, it chokes off weeds, and since the attacks of parasites occur at the same periods, the treatments are not so numerous. Seeding takes place from mid-March to mid-April. The yields are variable, they fluctuate between 15 and 25 quintals.

The development of rapeseed in France is closely linked to the occurrence of parasites and of diseases. During recent years, as a consequence of attacks by blight a reduction of this crop took place in certain areas, therefore, new varieties, resistant to this fungus, have had to be developed.

Since rapeseed is excellent in a crop rotation system, it is in the farmer's interest to intensify its production from a technical point of view. This applies all the more since rapeseed has been showing a deficit within the framework of the Community.

The production of rapeseed in France will represent only 17% of the liquid edible oils consumed by the Community, and will only cover 8.5% of the total needs in fats. This presents to the French producers the opportunity of increasing their production, while it also keeps the doors wide open to the importation of other oilseeds.



PRODUCTION OF RAPESEED IN POLAND

By Antoni Rutkowski  
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The large-scale cultivation of rapeseed in Poland started about 40 years ago.

During 1930-1939 the annual production of rapeseed amounted to approximately 50,000 tons, at an average yield of under 1,000Kg/ha. At that time rapeseed accounted for only 25% of the area cultivated to oilseeds and for approximately 35% of the seed yield (Table I). Rapeseed was processed into edible

TABLE I

AREA, YIELD AND PRODUCTION OF MAJOR OILSEEDS IN POLAND  
DURING 1934-1938, AND IN 1968

	Area		Production		Yield q/ha(1)
	thousand ha	%	thousand tons	%	
Flaxseed	131.2	60	68.3	49	5.2
Hempseed	33.6	15	19.0	14	5.7
Rapeseed	54.9	25	50.8	37	9.3
Total (Aver. 1934/8)	219.7	100	138.1	100	-
Rapeseed 1968	361.1	93	712.0	96	19.7

(1) q=quintal, 100Kg

oil by batch pressing in small oil mills. Rapeseed as such was only occasionally sold on the international market. For example, in 1938 about 1,000 tons of seed were exported.

After the war the socialization of the economic system in Poland started together with the development of a modern fat-processing industry. At the same time the consumption of edible oils and margarine increased from 1.2 to 4.8 kg per capita. This increase stimulated a rapid increase of oilseed cultivation in Poland.

Special attention was paid to rapeseed as a plant having the best opportunity for a rapid crop increase, and suitable for mechanical cultivation. The remaining Polish oilseeds, such as flax and hemp do not meet edible oil requirements, and they are not intensively cultivated. The cultivation of oil hemp has disappeared almost completely in Poland during the last 30 years. Flaxseed production is rather small (approximately 5,000 tons) and is a by-product of linen (Table II).

TABLE II  
OILSEED AREA IN POLAND 1946-69  
(THOUSAND HECTARES)

Year	Winter and summer Rapeseed	Other oilseeds	Total	Rapeseed % of total
1946	22.5			
1950	140.2	16.9	157.1	89
1955	146.4	58.0	204.4	72
1960	107.5	35.3	142.8	75
1965	273.6	15.0	288.6	95
1967	314.8	32.6	347.4	91
1968	361.1	28.4	389.5	93
1969	148.3	29.5	177.8	83

Most of the rapeseed cultivated in Poland belongs to the *Brassica napus* species but also small quantities of turnip rapeseed (*Brassica campestris*) are grown. However, winter rapeseed

represents the bulk of the crop, having a larger seed production and consequently a larger oil yield. Rapeseed traded in Poland has the following characteristics:

moisture:	max. 9%
oil:	min. 43%
impurities:	max. 1%

Polish climatic conditions are relatively favorable for winter rapeseed production. In the western and northern region of Poland rapeseed cultivation is safe due to the mild climate, and it represents about 3-7% of cultivated acreage (Figure I). But in the south-eastern part of Poland, where winters are long and severe, rapeseed cultivation depends on the course of the winter. Thus, the annual production of rapeseed varies quite considerably. However, Polish agriculture follows the principle, that sufficient raw material must be provided for the demands of the oil and margarine industries, even in the case of moderate crop yields.

The systematic development of agricultural production and favorable conditions for the improvement of rapeseed production in Poland, increased the share of world production from 3.5% in 1950 to 12.8% in 1968, and among European producers from 12.8% to 34.3%. As a result of this progress, Poland joined the front rank of European rapeseed producers and took the third place in the world.

Currently it is planned that Poland should produce 500,000 - 600,000 tons of rapeseed annually, however, depending on climatic conditions, the crop may be larger or smaller (Table III). It was possible to achieve such high production levels within a short time only through increases in rapeseed acreage and particularly through higher yields. High-quality seed material, chemicals for plant protection as well as intensive fertilization contributed greatly to achieve these aims. At the present time, average yields for winter rapeseed in Poland exceed 2,000 Kg/ha, a rather high yield for the domestic climatic conditions.

Attempts of Polish farmers, similar to those of other countries, are directed towards the development of varieties low in erucic acid as well as free from glucosinolates. Crosses of the spring Bronowski variety with regular winter rapeseed have shown that a suitable selection of the components used for crossing results in winter rapeseed varieties of sufficient seed capacity, which are low in erucic acid and extremely low in glucosinolate content of the meal.

FIGURE I

CULTIVATION OF RAPESEED IN POLAND.  
WINTER AND SUMMER RAPESEED IN PERCENT  
CULTIVATED ACREAGE

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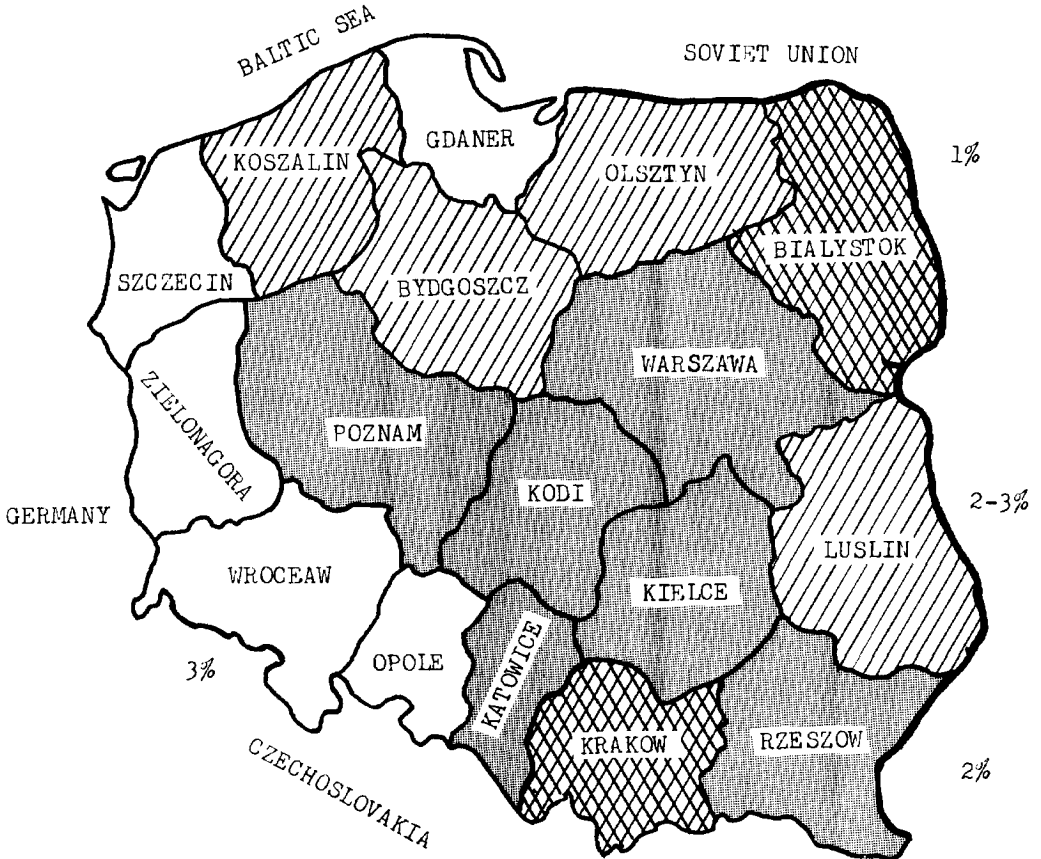


TABLE III  
 PRODUCTION AND YIELD OF OILSEEDS IN POLAND  
 (THOUSAND TONS, q/ha)

Year	Oilseeds total production	Rapeseed					
		Production		Winter		Summer	
		total	%	Production	Yield	Production	Yield
1950	110	101	89	53	8.1	48	6.4
1955	181	152	81	139	11.1	13	6.1
1960	170	147	86	134	14.5	13	8.4
1961	275	257	93	244	16.3	13	9.1
1962	378	361	95	340	15.1	21	9.0
1963	240	227	95	212	12.2	15	8.1
1964	275	267	97	260	15.5	7	7.2
1965	517	504	98	498	18.6	6	10.6
1966	475	448	94	441	16.6	7	10.5
1967	683	651	95	644	20.8	7	13.4
1968	740	712	96	706	19.8	6	12.8
1969	220	199	90	194	13.5	5	10.1

Note: q=quintal (100Kg)

The development of a rapeseed crop to meet the demands of industry was accompanied by exports (Table IV). Polish rapeseed exports started in 1965 with 60,000 tons and increased to 175,000 tons in 1968. Rapeseed is mainly exported to European countries such as Italy, West Germany and to a lesser extent to Holland and to Great Britain. The dynamic increase of rapeseed exports during 1965-1968 reflected favorable growing conditions, where the total crop exceeded the demand of the domestic industry.

What conclusions can be drawn from the development of rapeseed production in Poland?

1. Rapeseed will represent in future, i.e. for approximately 30 years, the basic raw material on which edible oil production in Poland will be based. Polish agriculture produces about 500,000 to 600,000 tons of rapeseed, but this volume may vary by  $\pm 20\%$  due to climatic conditions.
2. It is the aim of Polish rapeseed production to meet the demand of the domestic oil industry. Uncertainty of growing conditions due to climatic changes require reserve acreage. Consequently there will be varying quantities of surplus rapeseed available for export.
3. The quality of Polish rapeseed meets the high standards needed for world trade. Further quality improvements will result from a lowering of the glucosinolate content of the seed and the erucic acid content of the oil.



RAPSEED PRODUCTION IN SWEDEN

By B. Loof,  
Swedish Seed Association,  
Svalof, Sweden.

I am not planning to give data for Sweden corresponding to those given for France, Poland and Canada, because Mr. Tingnell will include them in his speech which will follow later. What I will say now, you may regard as a contribution to the discussion. We had not been here for more than a quarter of an hour, that we realized that most people talking about the food deficiency in the world, also realized that the surplus production of these small seeds in this country was the real problem. So, I think even if we will have much light thrown upon the problems connected with rapeseed, we will find after this Conference that we will have more problems than we had before. I don't think we can solve them by tossing the marketing people of different countries upon each other.

I think we had better collaborate on a world-wide scale. In fact, I think the problem may be more serious than was expressed by the Canadian speaker, and as you will hear from Mr. Tingnell later.

We have doubled the acreage yield of oilseed in Sweden in 20 years, and that is nothing unique. I think the same thing is going on in other countries or will be achieved in other countries, and if you have a production potential in area which is 10 times as big as you have in Canada, you can double this figure. I think in Sweden, even if we have the highest yield in the world now we could increase our yields and the production potential six times what they produce, and I think France could also produce at least six times what they produce, and also the same in Poland. So, this surplus production is really a big problem, and as I said, I think maybe you could solve all these problems here in Canada, of course, but we will be very glad to collaborate with you in all questions concerning rapeseed.

PRODUCTION PANEL: QUESTIONS AND ANSWERS:

- 1) QUESTION: I understand that some yellow mustard is crushed for oil in Sweden. How do you dispose of the meal?



PRODUCTION PANEL: QUESTIONS AND ANSWERS: (Cont'd.)

ANSWER: (Dr. J. Dahlen)

Well, I would say that I can not give a good answer. It is no big problem for us, because last year we had a quantity of around 5,000 tons of mustard seed and this does not give much meal as you will understand. There is a demand from those who produce compound cattle feeds. They want more than we can produce.

- 2) QUESTION: What is a reasonable price delivered at the crushing plant in Canada for seed, 100% basis, over the next three years?

ANSWER: (Mr. A.L.D. Martin)

I think it is safe to say, Mr. Chairman, if the farmer can get \$2.00 a bushel for his rapeseed he will be happy. And right now it is not that far off.

- 3) QUESTION: What percentage of European production is winter type and what is the percentage of erucic acid in winter type rapeseed?

ANSWER: (Professor A. Rutkowski)

This question I can only answer about Poland and about similar conditions in Czechoslovakia and Eastern Germany. In Poland the production of winter rapeseed amounts to about 94 to 96 percent, and summer rape amounts to only 4 to 6 percent of our production. The erucic acid content is about 50% in our oils.

- 4) QUESTION: What were the reasons that the 1969 crop in Poland was only 1/3 of the 1968 crop?

ANSWER: (Professor A. Rutkowski)

Unfortunately, in 1969 we had very poor climatic conditions, and this was a typical example for the difficulties encountered when rapeseed was introduced in Poland under our climatic conditions. This year our production will be up again to about 400,000 to 500,000 tons.

PRODUCTION PANEL: QUESTIONS AND ANSWERS: (Cont'd.)

- 5) QUESTION: What method of harvesting is used in each country? What is the acreage loss, if any, of direct heading versus swathing?

ANSWER: (Mr. K. Edie and Mr. A.L.D. Martin)

In the Eastern Prairies all rapeseed is swathed. I do not think there is very much done at all with straight header, and it is just done with a regular combine which is used for wheat, oats, barley, flax and rapeseed. There are practically no adjustments whatsoever. Certainly you change cylinder speed, concave settings and winds and all that. A regular combine that works for wheat will do rapeseed.

As far as swathing is concerned, the important and very critical thing is that of timing. If you leave that crop stand too long, you are going to get a lot of shattering and loss. It has to be harvested slightly on the green side, when the kernels are beginning to change colour. They will finish the maturity in the swath and then can be harvested with traditional grain machinery.

- 6) QUESTION: Mr. Martin mentioned the fact that to reduce the instances of disease, rape must not be grown too often on the same fields. What would he suggest would be the minimum break?

ANSWER: (Mr. A.L.D. Martin)

We would like to see rape following rape no sooner than at five-year intervals. This does not happen in Western Canada, and we are a little bit concerned that disease and insects are building up because of this. But in direct answer to your question, I think the most satisfactory arrangement would be one in five years.

- 7) QUESTION: Is the sharp increase of production in Canada this year encouraged by the Government in view of a much brighter outlook for usage for both domestic and export, or is it just happening in view of the wheat production control?

ANSWER: (Mr. A.L.D. Martin)

I think both, there has been a tremendous interest in the production of edible oils. There has been an interest in the domestic crush in Canada, and there has been an interest

PRODUCTION PANEL: QUESTIONS AND ANSWERS: (Cont'd.)

ANSWER: (Mr. A.L.D. Martin) (Cont'd.)

in world supply of edible oils. Canada has been very fortunate in maintaining a good market overseas, particularly to Japan and the price has been good. This has encouraged farmers to increase their production of rapeseed in Western Canada. But in addition to that, and as mentioned in the question, there has been a de-emphasis on the production of wheat in Western Canada, and in fact, if you looked at the figures you will see, that our production is about half of the normal volume this year. In order for farmers to have some cash crop, they have been turning more to crops such as rapeseed because the market has been good. One of the problems though, that is going to be encountered, I think, and there is no question about this, is the physical handling of all this extra rapeseed that is being produced and getting it into position for export. This is going to be a problem but the main reason for the increase in production is the de-emphasis on wheat and the reasonably good market that Canada has enjoyed overseas.

8) QUESTION: Can a farmer produce a bushel of rapeseed as cheaply as a bushel of wheat?

ANSWER: (Mr. A.L.D. Martin) and (Mr. K. Edie)

- a) I think he can. There are a number of reasons for this, the first is that rapeseed responds better to a per unit application of fertilizer than any other crop. Secondly, the cost of seed is very, very small. Five to six pounds per acre of seed are used and this, of course, minimizes the cost as far as seed is concerned. The fact that rapeseed does not require specialized machinery, and that the same machinery used for grain production is used for rapeseed, means that, there is no extra outlay. So, I would say he can produce a pound of rapeseed just as readily as he can a pound of grain.
- b) I think you are going to find a little variation when you are talking as to where it can be produced. Probably it does better in the North, where rapeseed grows traditionally a little more readily. You have a different situation around Regina, where it does not grow as well and wheat grows better. As I often indicated, because of the size of the Prairies, it changes from place to place.