

Spring Turnip Rape Dominates Oilseed Cultivation in Finland

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Since mid-1970s the production of rapeseed in Finland has concentrated on spring turnip rape (*Brassica campestris*). In addition, between 2 000 and 3 000 hectares are annually under spring rape (*Brassica napus*) cultivation in the coastal regions. In 1992 turnip rape and rape were harvested from 70 000 and 2 500 hectares of fields, respectively (Figure 1). Although May and June were extremely dry months in the main cultivation area the growers of turnip rape harvested record yield averaging 1 825 kg/ha (Figure 2).

Seed yield and quality

In 1992 the total production of rapeseed of turnip rape origin was 127.8 million kg and of rape origin 4.8 million kg, calculated with an estimated water content of 9 %. The price paid to the farmer depends generally on the chlorophyll and moisture contents and the purity of the rapeseed harvest. At the basic price level the oil contains between 30 and 40 mg/kg chlorophyll and 9 % moisture, the seed purity being 98 %. According to the oil milling industry the chlorophyll content of the total yield averaged 15.1 mg/kg in 1991 and 11.6 mg/kg in 1992, the seed impurity averaging 3.2 % and 4.2 %, respectively. The total glucosinolate content of the harvest delivered to the oil mills varied from 12 to 25 $\mu\text{mol/g}$ oilseed. The erucic acid content of the oil extracted from oilseed has decreased in recent years being 0.5 % in 1990, 0.4 % in 1991 and 0.3 % in 1992.

Varieties

In 1992 the whole area under oilseed cultivation in Finland was sown with "double low" cultivars bred in Finland and Sweden. The most widely grown cultivar was "Kulta", with which the highest yields have been obtained in trials, followed by "Kova" and "Kelta". The fields under rape cultivation were sown with the cultivars "Topas" and "Kunto".

Utilisation of rapeseed

The rapeseed produced in Finland are processed at the oil mills of two companies, i.e., the Oil Milling Division of Raisio Group and Öljynpuristamo Oy. All the oil extracted goes to domestic consumption, 72 % being used by the food processing industry, 25 % as animal feeds, and the remaining 3 % for non-food purposes as lubricants and fuel for large scale biodiesel experiments. Rapeseed meal is used mainly as cattle feed.

Table 1. Oilseed varieties in Finland. Official trials of Agricultural Research Centre 1984 - 1991.

Type	Yield kg/ha			Growing days	Oil %	Protein %	Chlorophyll mg/kg	
	Coastal areas	South, inland	Central Finland					
B. campestris								
Kova, Sv	00	1960=100	2050=100	1750=100	106	44.6	21.8	15
Kulta, Jo	00	107	108	109	105	45.1	21.7	12
Kelta, Hja	00	103	101	102	105	45.6	21.6	14
Valtti, Hja	00	100	95	96	105	45.7	21.6	14
Number of trials		34	26	16	76	74	76	50
B. napus								
Topas, Sv	00	1920=100	-	-	118	46.0	22.6	38
Bounty, WW	00	109	-	-	114	45.2	21.9	16
Kunto, Sv	00	110	-	-	117	46.0	23.1	32
Number of trials		27			27	26	27	17

Figure 1. Oilseed cultivation in Finland in 1985-92.

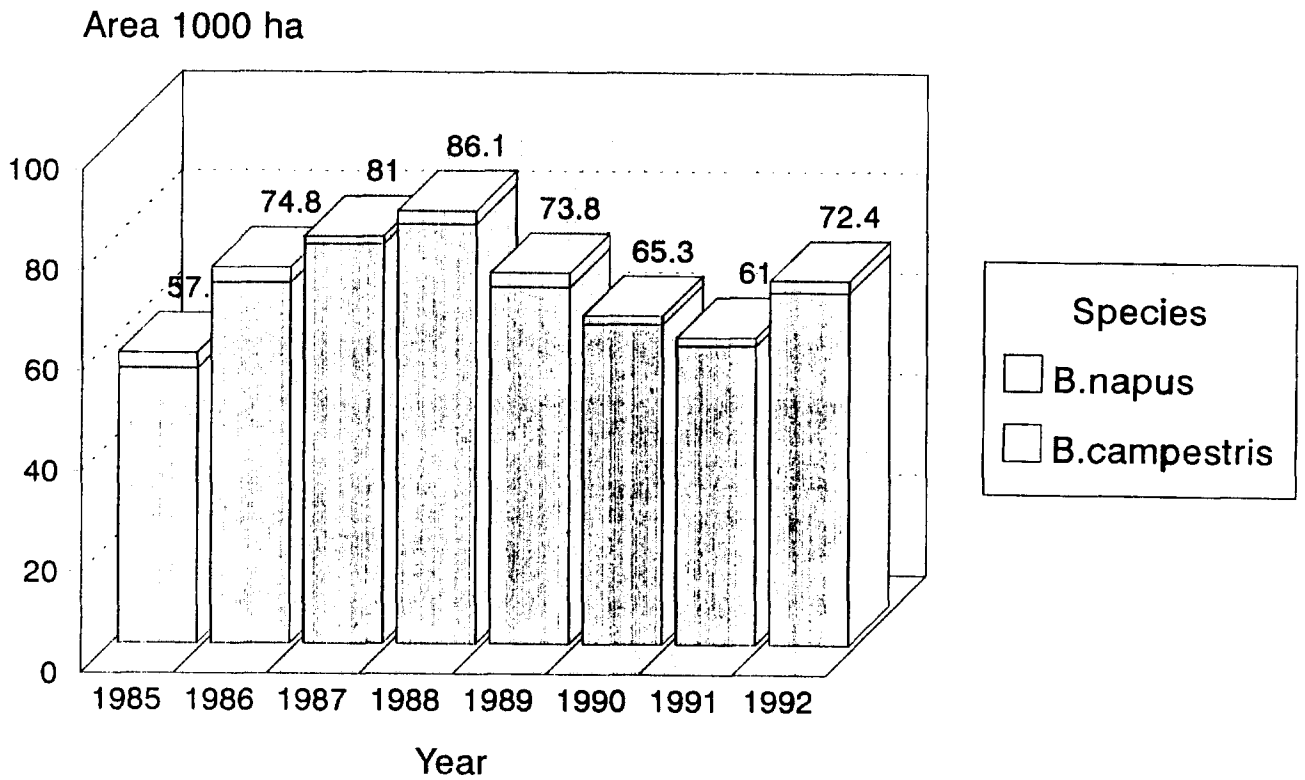


Figure 2. Oilseed yield in Finland in 1985-92.

