

Varieties and Seed Supply for Rape in the Czech Republic

Petr BARANYK

Czech University of Agriculture, Praha-Suchdol

Winter rape has become a very important crop in conditions of the Czech Republic. Compared with the season ten years ago, its harvest area is now more than twice as big (Fig. 1) and is bigger than areas of potatoes, sugar-beets and leguminous plants together. With the influence of the high increase in cereal prices last year, its attractiveness and competitiveness were strongly damaged (presently, the rape/wheat ratio price amounts to approximately 1,6/1), but we do not expect a significant decrease in rapeseed cultivation. Farmers appreciate its value as a pre-crop, particularly before wheat. However and in spite of its relatively low price (about 17 % lower than worldprice) and with the absence of any subsidy, rapeseed

counts among the little profitable crops of our agriculture.

As for other crops, the success of rapeseed cultivation is considerably limited by features of accessible varieties. In comparison with the past, their selection is highly variable (Fig.2). In 1997, 20 varieties of rapeseed were registered on the list of licensed varieties, as shown in Table 1.

Among these 20 varieties, only some are really cultivated : we shall mention LIRAJET, FALCON and IDOL, which corresponded to the variety structure of the Czech Republic in the last years (Fig. 3). Yet, with the registration of new varieties, their part has decreased and in the short term, they should be replaced by other more efficient varieties.

Figure 1 : Harvest area of rapeseed in CZ
1988-1997 (thousands ha)

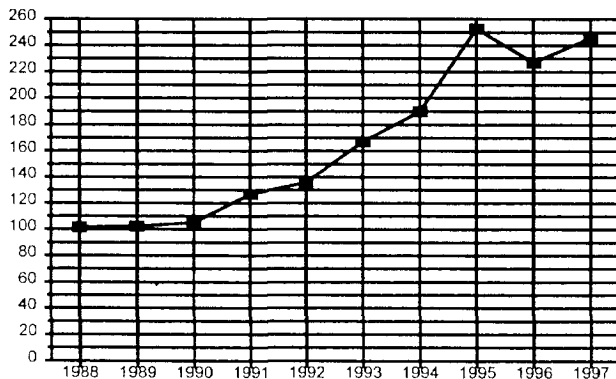


Figure 2 : Licensed varieties in CZ 1988-97

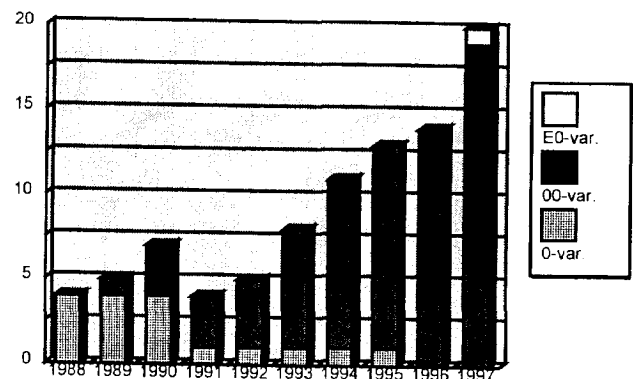
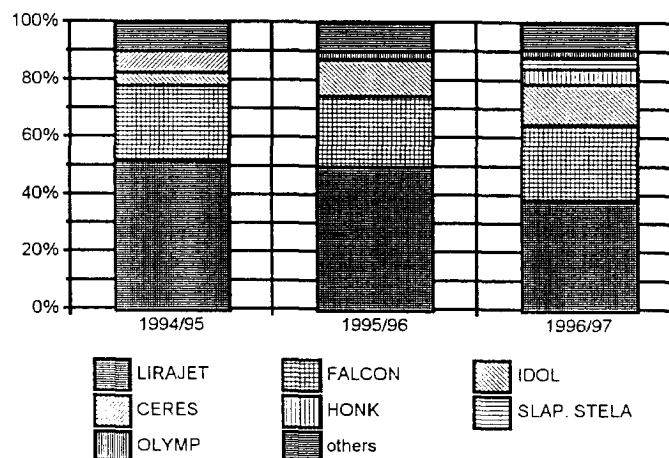


Table 1 : Winter rapeseed cultivars registered on the List of licensed Czech cultivars in 1997.

Variety	Type	Owner of variety	Country	Year of registration
DARMOR	00	1	France	1989
CERES	00	2	Germany	1990
ARABELLA	00	3	Germany	1992
AGLONA	00	4	Czech Republic	1993
FALCON	00	2	Germany	1993
LIBRAVO	00	5	Germany	1993
LIRAJET	00	5	Germany	1994
OLYMP	00	2	Germany	1994
ZEUS	00	2	Germany	1994
IDOL	00	6	France	1995
LIBERATOR	00	5	Germany	1995
ARTA	00	7	Czech Republic	1996
HONK	00	8	Netherland	1996
SLAPSKÁ STELA	00	9	Czech Republic	1996
APEX	00	7	Czech Republic	1997
BRISTOL	00	6	France	1997
RUFUS	00	7	Czech Republic	1997
VALESCA	00	10	Germany	1997
ZORRO	00	2	Germany	1997
OÁZA	E0	4	Czech Republic	1997

- Note: 1 - SERASEM
 2 - Norddeutsche Pflanzenzucht Hans-Georg Lembke KG
 3 - Semundo Saatzucht GmbH
 4 - OSEVA PRO s.r.o.
 5 - Deutsche Saatveredelung Lippstadt-Bremen GmbH
 6 - Semences Cargill
 7 - Hillesehg NK s.r.o.
 8 - Scheemda Zaden
 9 - SEMPRA Praha a.s.
 10 - P. H. Petersen Saatzucht Lundsgaard

Figure 3 : Varieties on the market



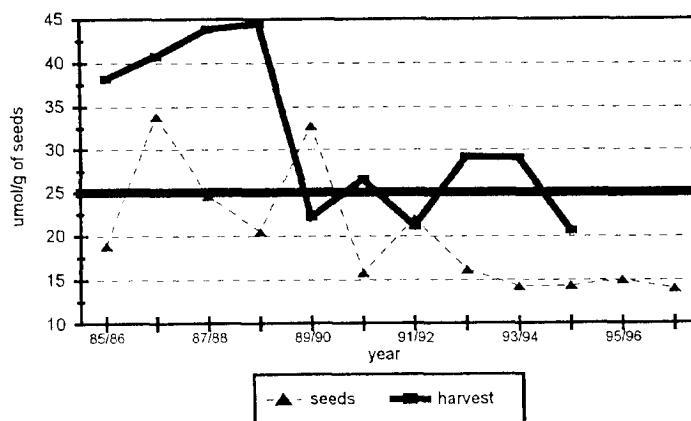
Also SLAPSKA STELA will probably belong to these new varieties. It offers very good yield and qualitative results. Our results from last year trials and also first experiments under farmer's practical conditions could show that SLAPSKA STELA has been particularly successful as Czech variety for many years and is even comparable with the best foreign varieties.

The development in the range of varieties shows not only quantitative, but also substantial

quality changes. The transition to 0-rapeseed varieties ended in CZ in 1980, while 00-varieties appeared in the main areas in 1992.

The generation of 00-varieties controls the seed market practically exclusively. Although we grow varieties which are identical to or very similar to those of the European Community and although they have similar low glucosinolate contents (Fig.4), the use of extracted rape meal for production of feed mixture is much lower.

Figure 4 : Glucosinolate content in seeds and harvest



Besides the pure line varieties, it is obvious that hybrids will get shortly into the praxis. They are intensively examined in registration trials of the Central Checking and Testing Institute. For some of them, we also have some experience from semi-operational varietal trials carried out by the Rapeseed Growers' and Processors' Union (next Union). All these indicate that even after the restructuring of a high productive Czech agriculture, there will be a bigger hope of enforcing the restoration hybrids, which excel in high production of seeds and an excellent yield stability.

With respect to our future entry into the EC, we accept the inevitable increase in rapeseed prices. It is true that compared with foreign prices, ours are relatively low (approx. 45 CZK/kg, 1 DM = 18 CZK), but on the other side with the professional influence of Union, we are led to a relatively low amount of overcropping (5 to 10 %). A speedy increase in prices could mean a considerable decrease in seed exchanges. Therefore this problem needs careful attention.

Last year and in the present year, a specific phenomenon has been a relatively considerable area increase in spring rape, which can be explained by an unusually high over-ploughing of winter rapeseed in the spring of 1996, when it was necessary to over-plough 68.000 out of the 275.000 ha of winter rapeseed. Spring rapeseed was sown in this area (on about 23.000 ha).

Because of unfavourable weather conditions (frequent rainfalls) at the time of winter rapeseed sowings in August and early September 1996, many farmers did not sow as much rapeseed as they wanted. Therefore (and on the base of sold seeds), we estimate that in 1997, the area of spring rapeseed will amount to about 20.000 ha. In spite of this spring rapeseed, it would only give about 60-70 % yield of winter rape.

The seed market has been considerably different in comparison with the period until 1989, when the political and economic conditions were basically changed in the Czech Republic. The main differences can be summed up as follows :

a) In the past, the monopoly organisation provided practically all areas with supplies of crop seeds -OSEVA-. Its disintegration led to several independent firms with more or less local influence. Some of them start to connect and find a possibility of mutual cooperations (for example, NATAL a.s.). But most of the market is however considerably disintegrated.

b) The Czech Republic is member of UPOV, acknowledged PBR, and the increase in expenses and inflation has brought about increases in prices. For rapeseed, for example, the price of 1 kg certified seeds went from approximately 9 CZK to about 45 CZK now (untreated seeds).

c) Seed production firms heavily balance the relatively high interests of credit on store (12%). Therefore, they only allow very low amounts of seeds between years and most of them are produced by the harvest of the year. In the years with late harvest of multiplication fields, we encountered problems with early modification, certification and delivery of seeds to farmers.

Despite all the present problems met by the Czech agriculture, we can suppose that the rapeseed area will be maintained on about 200/250.000 ha. Together with about 100.000 ha in the Slovak Republic, we reach 300 to 350.000 ha for rapeseed, an important market which is really interesting.