

**THE POSSIBILITIES OF GROWING TABLE GRAPES
WITH SUSTAINABLE SOIL CULTIVATION IN THE CARPATHIAN
BASIN**

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INTRODUCTION

Growing grapes is almost exclusively limited to wine grapes in Hungary. Table grapes of the best quality are imported for the consumers. Just like in the case of wine grapes, there are good conditions for growing table grapes in the Carpathian basin, applying a suitable technology for the production.

The sustainable cultivation means preserving the fertility of the soil, its water resources and its soil edaphon. Table grapes are in great demand on the market. There is a continuous demand for good quality grapes all over the year. Its price is the same as that of the tropical fruits.

THE TECHNOLOGY OF PRODUCTION AND ECONOMIC POSSIBILITIES

The cultivation technology of table grapes offers good possibilities for sustainable soil cultivation, in every respect. The most important components are: the varieties, manuring, plant protection and irrigation. Due to selection there is a great choice of varieties for sustainable soil cultivation.

Those varieties, which are winter hardy, resistant such as peronospora, grey mould, mildew are the most important varieties for growing grapes (figure 1). These varieties offer the possibility of an ecological production, provided environmentally compatible pesticides are applied. (table 1)

As growing table grapes require a lot of microelements, manuring is indispensable, even if the soil has abundant nutritive materials.

The sustainable soil cultivation is based on environmentally compatible plant protection. To this end, we must grow resistant varieties, and use environmentally compatible plant protection. (table 2) To combat fungus diseases in ecological production, Quadris and Shavit must be used, while regarding pesticides, Bacillus Thuringiensis product is effective.

To grow marketable table grapes of high quality, a permanent water supply is necessary. A water pump, driven by a wind engine, is environmentally friendly way of water supply.

The cost of table grapes plantation do not differ considerably from that of wine grapes. The yield of modern big berried and big clustered table grapes can amount to 30 t/ha yield compared to 8-12 t/ha yield of the wine grapes. Market prices are also different. Table grapes are easily marketed in unlimited quantities, the income is realised in autumn, unlike wine, which needs storing for years. The above mentioned advantages encourage the farmers to grow table grapes on the acid sandy soils of the Nyírség area.

Summary

The possibilities of table grapes growing in the sustainable soil cultivation are as follows:

- The ecological requirements of growing table grapes are given in the Carpathian basin.
- The most important technological components of the sustainable soil cultivation are: the varieties, nutritive material supply, plant protection and irrigation.
- The market position and profitability of growing table grapes, seem to be good on long term.

References

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Table 1. Characteristic of table grapes varieties

	Variety	Maturing tipe	Size and colour of the berry	Comment
1.	ESZTER /R-65/ fj.	The beginning of August.	medium blue	resistant, good yield
2.	ANITA	The end of August.	large blue	large grape, good taste
3.	FAVORIT	The beginning of August.	large yellowish	muscatel, good yield
4.	NARANCSÍZŰ	The middle of August.	medium greenish large	muscatel, very good yield
5.	ITÁLIA	He beginning of October.	very large white	durable, good taste muscatel
6.	PANNÓNIA KINCSE	The end of August.	large white	reliable, easy to produce
7.	NÉRÓ	The beginning of August	medium blue	resistant, frost resistance
8.	TERÉZ	The beginning of September.	medium large greenish	resistant, good yield

A succesful plant protection technology
in table grapes production
(Bányay László, Nyírszőlős 2002.)

Spraying in 2002.

Table 2

Spraying	Phenological phase	Date	Pesticide	Comment
1.	5-8 leaves	05.14.	Funguran 0.3% Flumite 0.05%	after hailstorm
2.	grape lengthening	05.23.	Melody F 0,3 Bi 58 0,1	
3.	flower formation	06.04.	Melody F 0,3 Kumulus 0,2	
4.	blossom time	01.13.	Melody F 0,3	
5.	after grape formation	06.28.	Fungurán 0,3 Kumulus 0,25 Fendona 10 0,02 Bio Film 0,05	
6.	pea size	07.06.	Melody F 0,3 Kumulus 0,2 Fendona 10 0,02 Bio Film 0,05	
7.	grape dosing	07.15.	Melody F 0,3 Fendona 0,02	
8.	the beginning of maturing	07.21.	Melody F 0,3	
9.	Maturing	08.03.	Melody F 0,3 Topsin-Metil 0,1	
10.	Maturing	08.10.	Fungurán 0,3 Topsin-Metil 0,2 Fytanon 0,1	
11.	Maturing	08.17.	Fungurán 0,25 Ortho Phaltan 0,3	The beginning of August 100 mm rainfall

Basically the grapes were sprayed with Quadris in 2001, in 2003 Shavit is planned.
The rate of infection was 0% over the last 2 years

New table grapes varieties with diseases resistance



Moldova



N-53



Eszter



Favorit