

ZONING OF VITICULTURE IN YUGOSLAVIA

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ABSTRACT

The last official zoning of Viticulture in Yugoslavia was performed 1978. year, when (according to recommendation of OIV and European Economical Community), regions, subregions and vineyards districts were established supposing that the varieties which will be exhibit all the positive agrobiological and technological characteristics. Taking into account relief, climate, soil, tradition, agroecological and agroeconomical conditions for grape production, in Yugoslavia were postulated the next viticultural areas:

1. **Viticultural region.** Region is defined as wider Viticultural area which has similar climate, soil and another properties which are necessary for successful growing of vine.
2. **Viticultural subregion.** Subregion is a narrow area which belong to the region but exhibit some of the ecological componente is completely different which leads to the stronger differentiation in grape yield and in a quality of wine.
3. **Vineyard district.** Present fundamental territorial unit which taking into account agroecological properties can be defined as a compact homogenous vineyard totality.

Agroecological selectivity of vine varieties

Taking into account zonal criteria, vine varieties are selected in next three groups:

1. Recommended varieties.
2. Permitted varieties,
3. Forbidden varieties.

In Yugoslavia legitimately permitted the production of the next quality categories of wine:

1. Top wines with geographical origine.
2. Quality wines with geographical origine.
3. Table wines with geographical origine.
4. Table wines without geographical origine.

For all produced categories of wine the legitimate law conditions must be respected in order to be consumed or domestic or foreign market.

INTRODUCTION

According to official statistica data in 1996th year in F.R. Yugoslavia was 85.682 ha.

According to historical data in Yugoslav territory Viticulture existed in VI centure before our Epoch. About that we have many monuments from I, II and III century and into their surfaces is carved vine. Monuments are also founded in different areas of our country.

ZONING OF VITICULTURE TERRITORIES

Official zoning of Viticulture on territories of Yugoslavia is done 1978. year. Until this time during the centuries existed vineyards which are mentioned in the literature in middle century.

This viticultural regions have not been topographically limited an their borders were frequently changed by administration. According to recommendations of OIV as well as EEC, the new zoning is established which was performed respecting the law regulations.

In order to do united zoning the Government formed Union commission for zoning and viticultural catastar of Yugoslavia which proposed next methodical procedures:

1. Method for practice of the zoning of Viticulture.
2. Method of the protection of geographical origin of top wines, quality wines and table wines.
3. Method for designation of quality categories of wine with the protected geographical origin.

On the basis of the method of work, Republic and Province Commissions for the zoning of Viticulture were treated republic and province method of work for the zoning of Viticulture.

On the basis of relief, climate, orographic, soil, agrobiological and agroeconomical conditions for the grape production as well as for wine production in Yugoslavia, commissione and working groups are consisted of representatives of different profiles are postulated the next Viticultural territories:

- a) **Viticultural region**, which represents wider Viticultural area and which exhibits similar climate, soil, orographic, hydrographic, agrobiological, agroeconomical and another characteristics.

In R. Serbia it was established 5. Viticultural regions, in Autonomous province Voivodina 3. in Autonomous province Kosovo and Metohia I. and in R. Monte Negro 1. region.

- b) **Viticultural subregion**, which represents narrow geographical territory under the wider territory of region in which some of the ecological factor can differ in great extend and can cause stronger differences in grape yield and in quality of wine.

In R. Serbia was established 14. subregions, in Autonomous province Voivodina 3. in Autonomous province Kosovo and Metohia I. and in R. Monte Negro were not postulated.

- c) **Viticultural district** is fundamental territorial unit which by agroecological definition represents homogenous Viticultural totality.

In R. Serbia is postulated 51. Viticultural districts, in A. province Voivodina 6. in A. province Kosovo and Metohia 7. and in R. Monte Negro 2.

AGROECOLOGICAL CLASSIFICATION OF WINE VARIETIES

On the basis of the climate, soil and another characteristics of regions, subregions and viticultural districts, and on the basis of investigations and experience with growed, introduced and perspective varieties and fundaments of vine, the varieties are classified in the next three groups:

I. Recommended varieties. This group includes the varieties which exhibit good behaviour in examined Vineyard districts taking into account production of quality categories of wine.

II. Permitted varieties. This group includes varieties which in some viticultural units do not disturb quality of wine of recommended varieties and in some cases could improve the quality of wine.

III. Forbidden varieties. This group include varieties which give not minimum of the quality of produced wine which must be respected for wines with protected geographical origin. Old, interspecific hybrids are specially forbidden.

QUALITY CATEGORIES OF WINE PERSCRIBED BY LAW

Starting from agroecological and another conditions which are properties of vineyard territories in Yugoslavia, the production of next quality categories of wine is permitted:

- a) Top wine with geographical origine.
- b) Quality wine with geographical origine.
- c) Table wine with geographical origin.

The production of the top wine with geographical origin is predicted in one Vineyard district.

The production of quality wine with geographical origin is predicted in one or more neighbourhood vineyard in one viticultural subregion.

- Production of table wines with geographical origin is predicted in one viticultural region.
- The production of table wines without geographical origin proceeds with grape from different regions of Yugoslavia.

Grape for the production of top wines, quality and table wines must be manufactured in territorial unit in which grape is produced.

For top, quality and table wines with geographical origin, according to Law, one project is required for the production as well as for the protection of wine with the sign of geographical origin of vane produced in this vineyard territorial unit.

For the all categories of wine, the Law conditions are predicted which must be fulfilled in order for the respectation of market which is necessary for domestic as well as for the foreign market.

CONTENT OF SUGAR AND TOTAL ACID AS THE BASE FOR THE ZONING OF WINE VARIETIES IN POSTULATED VINEYARD TERRITORIAL UNITS

Except the large number of factors which affect the zoning of varieties in postulated territorial units, the special attention was payes on many years content of sugar and total acids in grape juice growed vine. For example in tab. 1 are given the data for some varieties for red and white wines growed in some regions. Taking into account the presented analysis of the content of sugar as well as of the total acids in grape juice of different varieties for the production of red and white wines in Yugoslavia, one can conclude that examined growing varieties and other zoning varieties under agrobiological conditions of territorial units exhibited very good quality taking into account content of sugar and total acids as well as essential chemical and sensorial characteristics of red and white wines.

Tab. 1. Result of investigations of content of sugar and total acids in some varieties for the production of red and white wines in some Viticultural regions.

No. Name of variety	Region	Period of investigations (Average)	Content of sugar (%)	Content of total acids (%) (g/l)
1 - Varieties for red wines				
1.1. Black Burgundy	1. R. of Timok	1942-1975	22,3	7,4
1.2. Gamay black	--	1964-1975	20,8	6,1
1.3. Merlot	--	1965-1975	21,5	7,0
1.4. Prokupatz	--	1942-1975	21,1	6,9
2.1. Black Bargundy	2. R. of Sauth Morava	1958-1975	2-3,7	7,0
2.2. Gamay biack	--	1950-1975	22,3	6,2
2.3. Cabernet franc	--	1945-1975	22,0	7,4
2.4. Cabernet sauvignon	--	1958-1975	23,4	6,9
2.5. Merlot	--	1958-1975	22,4	6,9
2.6. Prokupatz	--	1945-1975	20,1	6,0
3.1. Black Burgundy	3. R. of West Morava	1970-1975	21,8	6,4
3.2. Gamay black	--	1970-1975	20,9	7,7
3.3. Merlot	--	1969-1975	20,6	6,4
3.4. Prokupatz	--	1959-1975	20,3	6,7
4.1. Black Burgundy	4. R. of North Morava	1934-1974	22,5	6,3
4.2. Gamay black	--	1935-1974	21,9	7,0
4.3. Cabernet franc	--	1964-1974	21,4	6,0
4.4. Cabernet sauvignon	--	1964-1974	22,5	6,1
4.5. Merlot	--	1964-1974	21,8	6,7
4.6. Prokupatz	--	1934-1974	18,1	6,8

No. Name of variety	Region	Period of investigations (Average)	Content of sugar (%)	Content of total acids (%) (g/l)
2 - Varieties for white wines				
1.1. Riesling italian	I. R. of Timok	1964-1974	20,2	6,6
1.2. Semillon	--	1964-1974	20,7	5,8
1.3. Sauvignon	--	1964-1974	24,5	8,3
1.4. Smederevka	--	1964-1974	17,3	7,7
2.1. Riesling italian	2. R. of South Morava	1945-1975	22,5	6,0
2.2. Semillon	--	1945-1975	22,4	6,2
2.3. Sauvignon	--	1945-1975	23,0	6,4
2.4. Shardonay	--	1958-1972	22,3	7,6
2.5. Smederevka	--	1945-1972	18,3	7,4
3.1. Riesling italian	3. R. of West Morava	1937-1975	20,7	7,7
3.2. Semillon	--	1947-1975	23,6	7,9
3.3. Sauvignon	--	1971-1975	20,6	6,0
3.4. Smederevka	--	1949-1966	18,6	6,8
4.1. Riesling italian	4. R. of North Morava	1934-1975	21,0	6,5
4.2. Semillon	--	1934-1974	22,7	6,4
4.3. Sauvignon	--	1935-1974	22,3	6,4
4.4. Smederevka	--	1934-1975	17,8	7,4

LITERATURE

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