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# INFLUENCE OF THE SEPAJ METHOD ON THE QUALITY OF PINK WINE SAMPLES

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## KEYWORDS

Sepaj, Sort, Madrasa, Bayanshira, White Grapes, Red Grapes, Pink Wine Sample.

## ABSTRACT

Quality composition of pink wine samples made from sepaj of grape harvest obtained from Madrasa and Bayanshira varieties was analyzed. Sepaj 80:20; 60:40; 40:60; 20:80 obtained from mixing red grapes with white grapes in proportion. Samples of pink wine "Al wine" made from Tavkveri grape variety were in a superior position in terms of composition and organoleptic quality. Among the samples, the 60:40 sepaj sample was rated higher for the optimality and organoleptic quality of the composition indicators. So, it differed from other analogs in that it was 0.3-0.5 points ahead.

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## 1. Introduction.

It is reported that pink wines were discovered by rinsing red wines in very ancient years and originated in Greece. It is indicated that the first pink wine production was carried out in the French regions of Tabel, Loire and Provence. Later, the production of pink wine began in Italy and other regions.

Young pink wines with a bright-pink raspberry tone, aroma and fresh are valued higher. It can be found in varieties of red grapes (Kaberne-Sovignon, Merlo, Madrasa, etc.), whose juice is not colored short-term storage in a crush, or juice-colored grape varieties (Saperavi, Calita, Odessa black, etc.) with intact compaction of the cluster, they also receive by special technology, which is also a kupage way.

The second group of wines is released in France under the name "Cleret". The color of these wines is almost white. The third group is attributed to the most atypical, oxidized, no less valuable pink sour wines.

## 2. Research materials and methods.

Research materials include: Aboriginal and introduced white and red grape varieties; mash, juice and table wine materials obtained in accordance with the general rules of winemaking in conditions of micro-winemaking and production, biotechnological methods and means used; wine samples in the process of cultivation, retainers with different conditions, reagent, devices, containers and equipment.

Madrasa and Xindogni varieties → selectively harvested → separated from the sick and damaged parts → separated from the comb and crushed the berries → maceration at different times in the crush → squeezed and separated from the CECA → fermentation is carried out to the end → transferred with the addition of SO<sub>2</sub>, separated from the sediment and stored in full containers.

Bayanshire variety → selectively harvested → separated from diseased and damaged parts and used for sepaj.

Samples are thoroughly studied. In suitable cases, samples of pink wine are made by sepage of grapes. Prepared wine samples are studied by storing them in conditions close to cellar (18-24<sup>0</sup>C) and room conditions (8-24<sup>0</sup>C).

So, in the organization of advertising texts these needs are always taken into account.

### 3. Discussion of the results obtained.

Numerous studies have been conducted on the role that the method of obtaining plays in the quality of wine. The results obtained were variable depending on the specific circumstances, while striking in their diversity and diversity. Therefore, a special place was given to the study of this issue during the study.

At present, certain restrictions have been imposed on the technology of making pink wines by the European Union. These were envisaged at the time of the research. Red and white grape varieties, the use of juices from them in the production of pink wines by sepaj and kupaj technology can give a different quality. Taking them into account, wine samples were prepared by mixing the product obtained from Madrasa and Bayanshira grape varieties in the following proportions (Table 1).

1. Example I-Madrasah 80%+Bayanshir 20%
2. Example II-Madrasah 60%+ Bayanshir 40%
3. Example III-Madrasah 40%+Bayanshir 60%
4. Example IV-Madrasah 20%+ Bayanshir 80%

Table 1. Quality indicators of pink wine samples depending on Sepaj proportions.

Proportions in sepaj	Alcohol, h. %	Phenol compounds, mg/dm <sup>3</sup>	Color items, mg/dm <sup>3</sup>	Total nitroge, mg/dm <sup>3</sup>	SO <sub>2</sub>		Tasting price, honey
					General	Free	
Example I	11,4	420	41,2	195	55	9,0	7,8
Example II	11,2	280	25,1	176	51	11,2	8,0
Example III	11,5	190	18,4	185	60	8,6	7,7
Example IV	11,3	160	12,0	166	57	10,4	7,5

The application of various technological methods is reflected in the physico-chemical composition of wines from white and red grape varieties (Table 2). The alcohol content was noticeable by fluctuating between 11,10-12,3 h% on samples, mainly due to their proximity to each other. The amount of sugar in indyrgen was between 1.34-2.00 g/l, depending on the variants. If in the 80: 20 sepaj its amount was 1.92 g/l, then in the next two samples it decreased, and in the fourth sample it was the highest, that is, 2.00, and in the last-1.8 g/l.

Table 2. Physico-chemical composition indicators of sepaj wine samples.

Ingredient indicators	Composition of Sepaj				
	80:20	60:40	40:60	20:80	10:90
Alcohol, h %	11,8	12,3	11,2	11,10	11,15
Indergen Sugar, g/l	1,92	1,55	1,34	2,0	1,8
pH	3,61	3,57	3,50	3,20	3,45
Volatile acids, g/l	0,35	0,41	0,52	0,25	0,58
Titrating acidity, g/l	4,60	4,55	4,22	4,65	4,32
SO <sub>2</sub> , kg /l	71,4	60,3	77,3	55,0	48,7
General	22,3	20,1	25,4	8,1	5,3
Free	19,2	21,3	23,2	21,4	21,1
Dry ingredients, g/l	0,17	0,21	0,23	0,45	0,16
Mineral substances	7,85	7,90	7,60	7,75	7,55

The total SO<sub>2</sub> content of the samples is 48.7-77.3 mg/l at the initial stage, while the free SO<sub>2</sub> is between 5.3-25.4 mg/l, but it is expected that it will decrease in subsequent processes, especially in transfers.

The highest amount of dry matter was found in the third sample, i.e. 40:60 sepaj (23.2 g/l). In other samples, this indicator ranged from 19.2 to 21.4 G/l, being close to each other. From the results of the organoleptic analysis of wine samples, it is clear that in the second, i.e. sepaj 60:40 sample, the average score of the tasting grade was 7.90, which differed from other samples by 0.05-0.35 points more.

The latter option is far behind, receiving a lower price than other samples. The color of wine samples is also considered as an important factor in the process. It is known that in order to come to a certain opinion about the color of wines, an important criterion is the use of color shades and color density indicators. Color density is usually calculated at wavelengths of 420 nm and 520 nm absorbed into pure water. In wine samples, color standings are measured by color density (D 420+D 520) and color hue (OS 420/520). The results of wine samples according to varieties, color shades are given (Table 3).

Table 3. Color and antioxidant properties of wine samples.

Indicators	Quantity by composition of Sepaj				
	80:20	60:40	40:60	20:80	10:90
Color shades	0,67	0,92	0,73	0,64	0,58
Color density	4,11	4,25	2,41	1,11	0,02
Antioxidant activity ABTS (mg Trolox / l)	91,12	71,36	67,85	58,61	32,41
Antioxidant activity D + pH (mg Trolox / l)	146,80	147,91	137,92	135,80	131,67
Common phenol compounds (mg GAF / l)	2117,76	2067,45	1746,03	791,34	431,83

Apparently, in the sepaj samples, the color range varied from 0.67 to 0.98 and the color density from 0.02 to 4.25. With an increase in the share of white grapes in sepaj, a decrease in color density was observed. At the same time, accordingly, there was a decrease in color shades and antioxidant activity.

Madrasa and Bayanshira grape varieties in various sepaj schemes (80:20; 60:40; 40:60; and 20:80) an organoleptic assessment of the prepared pink wine samples was carried out. The results of the prices are given below (table 4).

Table 4. Results of evaluation of Sepaj wine samples on a 20-point system.

Organoleptic properties	Ball	Composition of Sepaj			
		80:20	60:40	40:60	20:80
Transparency	(0-2)	1,7	1,8	1,7	1,7
Color	(0-2)	1,6	1,9	1,4	1,3
Perfume and bouquet	(0-6)	3,6	4,7	3,5	3,1
Acidity	(0-2)	1,8	1,7	1,8	1,6
Taste	(0-1)	0,8	0,9	0,7	0,7
Taste balance	(0-2)	1,4	1,9	1,3	1,2
General observation	(0-5)	3,6	4,3	3,2	3,0
Final	20	14,0	17,2	13,6	12,6

Apparently, the assessment was carried out on 7 Quality Indicators. Those indicators are transparency, color, aroma and bouquet, acidity, taste, taste balance and general observations.

It turned out that in the ratio of 60: 40 sepaj, the wine sample was estimated at 17.2 points, significantly exceeding its analogues. The 80:20 sepaji was rated 3.2 points lower than it, the wine material made 40:60 was rated 3.6 points, and the 20: 80 sample was rated 4.6 points lower.

### Conclusion.

The composition and quality of Sepaj samples changed depending on the applied technological methods. Sepaji was studied in different variants of grape harvest from Madrasa and Bayanshira varieties, and the ratio of sepaj (60:40) to be the best example was substantiated experimentally.

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