

PHYSICAL-CHEMICAL CHARACTERISTICS OF BĂBEASCĂ NEAGRĂ ROSE WINES FROM IAȘI, DEALU BUJORULUI AND ODOBEȘTI VINEYARDS

CARACTERISTICI FIZICO-CHIMICE ALE VINURILOR ROZE DE BĂBEASCĂ NEAGRĂ DIN PODGORIILE IAȘI, DEALU BUJORULUI ȘI ODOBEȘTI

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Abstract. *This study aims at diversifying the wine assortment by using the oenological potential of Băbească neagră grape variety for rose wine production. Grapes of Băbească neagră, harvest of 2009, from Iași, Dealu Bujorului and Odobești have been processed. In order to obtain rose wines, a short maceration was applied, so that only part of the anthocyanins diffuse in the must. The rest of the technological process was the same with the one for white wine production. The physical-chemical parameters of obtained wines prove that Băbească neagră can be used in rose wine production.*

Key words: Băbească neagră, rose wine, maceration

Rezumat. *Lucrarea urmărește posibilitatea diversificării sortimentului de vinuri prin valorificarea potențialului oenologic al soiului Băbească neagră în direcția elaborării vinurilor roze. În acest scop s-au realizat vinuri din struguri ai soiului Băbească neagră din recolta 2009 din podgoriile Iași, Dealu Bujorului și Odobești. Pentru obținerea vinurilor roze s-a aplicat macerarea de scurtă durată, pentru ca doar o parte din pigmentii antocianici din piele să difuzeze în must, etapă continuată conform schemei tehnologice de obținere a vinurilor albe. Parametrii fizico-chimici a vinurilor obținute evidențiază preabilitatea soiului Băbească neagră la obținerea vinurilor roze.*

Cuvinte cheie: Băbească neagră, vin roze, macerare

INTRODUCTION

The local grape varieties (Fetească neagră, Băbească neagră) out of which competitive and typically world-class wines can be obtained, are a desired reach in the wine-making business.

Optimising the rose wine technology (Munteanu Camelia, 1997) from Băbească neagră grape variety is a necessary aim, as these wines are very much appreciated by consumers, being often light and not too full-bodied, as red wines.

The maceration-fermentation technology has been applied so as the polyphenolic compounds content is low and the wine's color remain rose (Cotea D.V., 2009).

MATERIAL AND METHOD

Băbească neagră grapes (Cotea, Victoria, 1996) were harvested in 2009 from Iași, Dealu Bujorului and Odobești vineyards (Cotea D.V. ș.a., 2000). The grapes were manually harvested and transported to Iași Pilot Research Station where they were processed. Table 1 shows the compositional characteristics of grapes at harvest.

Table 1

Compositional characteristics of grapes at harvest

No.	Vineyard	Harvest date	Reductive sugars (g/L)	Total acidity (g/L) C ₄ H ₆ O ₆
1.	Dealu-Bujorului	19.09.2009	239,83	6,85
2.	Iași	23.09.2009	246,21	7,12
3.	Odobești	19.09.2009	218,67	7,36

As a working method was used the technology for rosé wine production by short maceration (Cotea V.V., Cotea D.V., 2006). For obtaining rosé wines, the following processes are effectuated: the grapes are destemmed and crushed, marc homogenization is realized, selected yeasts of the *Saccharomyces cerevisiae* sort were added (25 g/100 kg), a short maceration takes place for 8 hours, at 12°C, in order to achieve a short maceration. After the short maceration (Macici M. ș.a., 1998), the marc was pressed by a hydraulic press. The obtained must has been kept in stainless steel tanks for finishing its alcoholic fermentation (Țârdea C, ș.a., 2000). After finishing its alcoholic fermentation, the wine was racked and conditioned. Bottling was done after filtering.

RESULTS AND DISCUSSIONS

Physical - chemical analyses were done according to international standards.

Alcoholic strength, reductive sugars, relative density, total acidity, volatile acidity, pH, non - reductive extract and total dry extract were registered.

Table 2

Compositional characteristics of rosé wines from Băbească neagră grapes

VINEYARD	Relative density at 20°C	Reductive sugars (g/L)	Volatile acidity g/L C ₂ H ₄ O ₂	SO ₂ free (mg/L)	SO ₂ total (mg/L)
Dealu-Bujorului	0,9921	5,86	0,36	22,37	78,27
Iași	0,9922	2,56	0,42	18,56	69,31
Odobești	0,9917	1,23	0,38	19,81	62,45

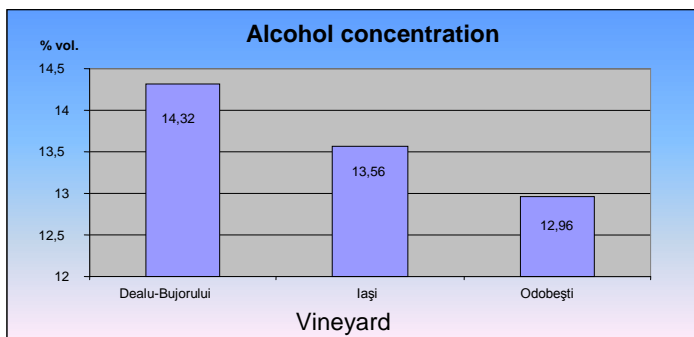


Fig. 1. Alcoholic concentration of Băbească neagră rosé wines

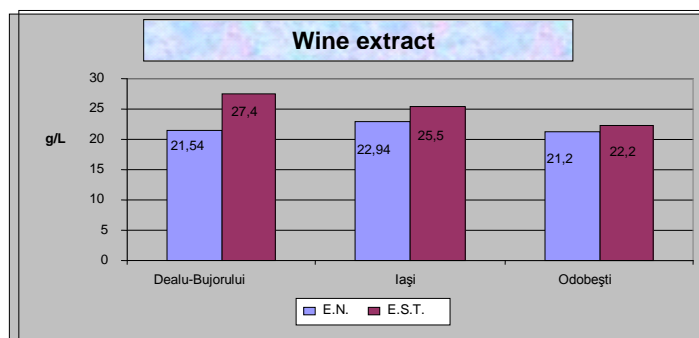


Fig. 2. Non-reductive extract and total dry extract of Băbească neagră rosé wines

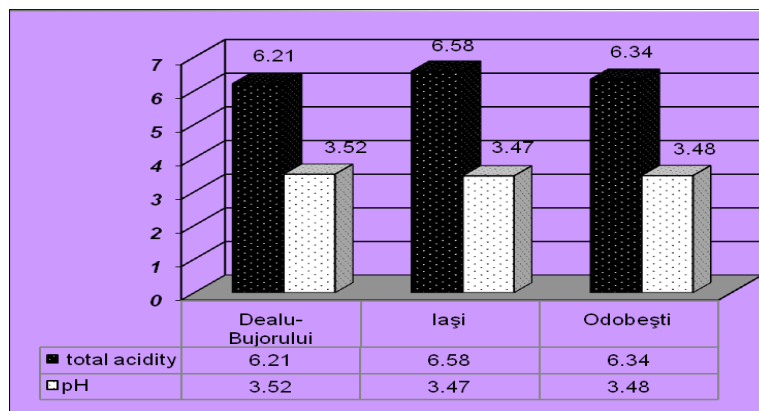


Fig. 3. Total acidity and pH of Băbească neagră rosé wines

The alcoholic concentration (fig. 1) varies from 14,32 % vol.in Dealu Bujorului vineyard up to 12,96 % vol. in

Regarding the values of reductive sugars (tab. 2) of studied wines it can be concluded, that the obtained wines are dry, with a content of maximum 4g/L, for example rosé wine of grape sort- Iași vineyard 2,56 g/L reductive sugars, and the roze wine from Odobești vineyard. Rosé wine Băbească neagră exception is from Dealu-Bujorului vineyard, where was obtained semi-dry wine (5,86 g/L).

The rose wines have relatively high total acidity values that, together with the pH values lead to the conclusions that the wines did not undergo malo-lactic fermentation (fig.3), thus keeping their freshness and fruitiness.

Analyzing the obtained wines in terms of non - reductive extract one can observe that the values varies from 21,2 g/L - Odobești vineyard up to 22,94 g/L Iași vineyard. (fig. 2). This values show that by working in compliance with technology and the quality of raw material led to the obtaining of full bodied and extractive wines.

CONCLUSIONS

The compositional characteristics of Băbească neagră wines obtained through black grapes' maceration over a short period of time can improve the wines' assortment from the Moldovian Hills' region.

All the wines obtained in 2009 from the black grapes of Băbească neagră harvested from Iași, Dealu Bujorului and Odobești vineyards are registered in the quality category of D.O.C.-C.T.

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