

RHEOLOGICAL CHARACTERISTICS OF BETA-GLUCANS OBTAINED FROM WINE LEES OF WINES FROM LOCAL GRAPES VARIETIES

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Abstract:

Beta-glucan is a biologically active substance with a wide range of physiological effects: it is used to lower blood cholesterol, to stimulate the health of the digestive system and immune system. A large amount of beta-glucan is found in yeast. The aim of the study was to characterize some rheological parameters of beta-glucan isolated by two methods from the wine lees obtained after the manufacture of three red wines: Feteasca Neagra, Rara Neagra and Craft wine.

The results of the analysis of the viscosity of the liquid phase of the suspensions obtained after centrifugation did not give impressive results, the viscosity of all analyzed suspensions ranged from 0.9044 (Craft wine) to 0.9108 (Rara Neagra) at 60 degrees and from 0.9072 (Craft wine) to 0.9318 (Rara Neagra) at 80 degrees, these indicators practically do not differ from the viscosity of water. The results of the analysis of the surface tension of the liquid phase of the suspensions obtained after centrifugation showed the difference between suspensions with the addition of beta-glucans obtained by the first and second methods. The surface tension of suspensions with the addition of beta-glucans isolated by the first method ranges from 70.14 (Feteasca Neagra) to 72.64 (Craft wine), while the results of the surface tension of suspensions with the addition of beta-glucans isolated by the second method range from 40.45 (Feteasca Neagra) to 54.33 (Craft wine).

Key words: *β-glucans, extraction, suspension, surface tension, viscosity, wine, yeast.*