47th Annual Meeting of the American Society for Enology and Viticulture, Reno, Nevada, 26-28 June, 1996

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Sensory Evaluation of Wines With Controlled Appellation of Origin Vinho Verde Treated with Enzymes.

The contribution of glycosidic precursors to wine flavor is now well known. The liberation of this bound aroma by enzymatic hydrolysis is possible, but the depriving of the characterization of the wines may occur. The wines from the North Littoral Region of Portugal, Vinhos Verdes, arising from non-floral varieties are very appreciated for freshness and delicate aroma. We studied the effect of two industrial enzymatic preparations with glycosidase activity on wines of two Portuguese varieties (Loureiro and Trajadura). The must was fermented in 1500-L vats, and the wine divided into three portions. One of these served as control. Both preparations were added to the wine after the end of fermentation. The contact time was 15, 30, 45, and 60 days at an average temperature of 15°C. Twenty wines were tasted by 12 judges familiar with the definition of Vinhos Verdes characteristics, rating the intensity of nine attributes referring the taste and the odor sensations. The attribute's range was 0 to 8. All samples were presented at least on three occasions through the study and the statistical analysis were performed using software SPSS. The homogeneity of tasters group, in relation to the several attributes under evaluation, was determined through statistical methods in particularly analysis of variance. Those whose answers were significantly different from the average were removed from the panel; the final group consisted of 11 tasters. The statistical analysis allowed the ranking of the wines and the selection of the best one. At the cellar temperature (15°C), the application of enzymes improves the aroma of Trajadura wines for all the contact times of the enzymes. The best wine came from Loureiro variety treated with A enzyme for 30 days. The quality of these wines decreased with the contact time of the enzyme due to the depriving of its characteristics.