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## **Enological Potential of Chenin Blanc to Produce Tropical White Wines in Northeast Brazil**

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## Abstract

The sub-middle São Francisco River Valley, located between 8 and 9° latitude of the Southern Hemisphere, in the Northeast of Brazil and the area has been producing fine wines for over twenty five years. The region is characterized by a tropical semi-arid climate, with an annual average temperature of 26.5°C, rainfall around 550 mm per year, concentrated between January and April, and is at an altitude of 350 m in a flat landscape. In this region, due to the winter absence, water is in abundance for irrigation and with the combination of high temperatures and solar radiation, vines can produce two or three harvests per year, depending on the cycle of each cultivar. The wineries can echelon the crops between May and December, and the quality of the wines depend on the harvest date for winemaking.

This study aimed to evaluate the enological potential of the cultivar Chenin Blanc for winemaking in the Northeast of Brazil in two harvests in 2009, June and November. Wines were elaborated following the traditional methods, with control of the temperature during the alcoholic fermentation, at 18°C. After stabilization of the wines at 0°C for 30 days, they were bottled and analyzed after sixty days. Climate variability among the harvests in June and November influenced significantly the physical-chemical composition of the wines. Wines elaborated in June and December presented different aroma profiles, with the highest value of alcohol degree and lowest acidity being obtained in December. Chenin Blanc is well adapted in the region offering great potential to produce tropical white wines in Brazil. Other studies are being carried out to determine the organic acids and flavonols present in Chenin wines from Northeast Brazil.

Keywords: Vitis vinifera L.; white grapes; flavonols; typicity.