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Evaluation of physicochemical characteristics of 'Chenin Blanc' wines in two vintages produced in the São Francisco Valley, Brazil

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The predominant grapes in the São Francisco Valley (SFV) are from European origin (*Vitis Vinífera L.*). According to Pereira (2011) the tropical viticulture developed in this region differs from the traditional areas due to the capacity of a vine to produce more than one crop per year. Chenin Blanc is one of the main cultivar used to elaborate white wines, presenting a good adaptation to the soils and climatic conditions of the SFV area, and typical characteristics in the region. Climate changes according to the years and can influence wine characteristics (PEYNAUD, 1997). In this way, to evaluate effects of different vintages on physical-chemical characteristics of Chenin Blanc white tropical wines from SFV, this study was carried out. Wines used in this study were elaborated by traditional process to obtain dry white wines (PEYNAUD, 1997), at Embrapa Semi-arid, evaluating two seasons, the first one in July 2014 and the second one in September 2015. Vines were planted in a partner winery, cultivated in pergola, grafted onto IAC 572, and drip irrigated, in Santa Maria da Boa Vista, Pernambuco state, Brazil. There were performed classical physical-chemical analysis to determine density, alcohol content, dry extract, pH, total acidity, volatile acidity, free SO_2 and Total SO_2 in triplicate, thirty days after bottling, according to the official methods (OIV, 1990). The results showed that data were similar in both harvests 2014 and 2015 for density, pH, dry extract, free SO_2 and total SO_2. For both vintages, volatile acidity was low, indicating good control for winemaking process. Significant differences according in relation to the alcohol content and total acidity of the two harvests (10.9 ºGL and 11.2 g L^{-1} of tartaric acid in 2014, and 11.4 °GL and 8.2 g L^{-1} of tartaric acid in 2015, respectively). Differences can be justified by the grape ripeness, expressed in total acidity, which Chenin Blanc grapes were less ripen in 2014 than in 2015 (11.3 g L^{-1} in 2014 and 8.2 g L^{-1} in 2015, respectively). Wines showed different sensorial profiles (data not shown), more fruity and floral for 2015 vintage, as compared to 2014 vintage. Climate factor, even in tropical conditions, can play an important role on wine typicality in the Northeast of Brazil.

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