

Enological potential of Carmenere wines elaborated in a tropical region of Brazil

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ABSTRACT

The cv. Carmenere was recently implanted in the semi-arid region of the Lower-middle São Francisco River Valley, Northeast of Brazil, where it's possible to have two or three harvests per year. This study had the objective to evaluate the enological potential of Carmenere wines elaborated from grapes harvested in the second semester of 2010. Vines were planted in different rootstocks and the grapes were vinified according to the traditional methods. The variables analyzed were pH, total and volatile acidity, alcohol content, density, dry extract, total polyphenols, tonality, color intensity and total anthocyanins. All analyses were performed in triplicate and submitted to the Tukey test at 5% of significance. According to the results significant differences were found for all variables. For dry extract and total polyphenols, the wines elaborated from grapes of vines grafted on Paulsen 1103 had the highest values. For color intensity and total anthocyanins, wines from grapes of vines on rootstock IAC-313 (*Golia* x *Vitis caribaea*) were highest. Wines elaborated from Carmenere grapes presented different enological potential according to the phenolics in different rootstocks and results are discussed.

Keywords: *Vitis vinifera* L., rootstock, tropical wines, phenolic compounds.