Physical-chemical characterization of integral grape juices elaborated with cv. Concord in the Sub-middle São Francisco Valley

Santos, S. F.[1], Silva, G. G.[1], Nascimento, A. M. S.[1], Souza, J. F.[2], Padilha, C.[3], Pereira, G. E.[4]

1Enology Laboratory, University of Bahia Estate. Zip Code 48.900-000, Juazeiro-BA, Brazil. 2 Drinks and Waters Laboratory, Federal Institute of Sertão Pernambucano, Zipcode 56314-520, Petrolina, PE, Brazil; 3Laboratory of Food Biochemistry, Federal University of Santa Catarina. Zipcode 88034-001, Florianópolis, Brazil l, 4Enology Laboratory, Embrapa Grape & Wine/Tropical Semiarid, Zipcode 56302-970, Petrolina, PE, Brazil. E-mail: sabrinaf23@hotmail.com and giuliano.pereira@embrapa.br.

Grape juices consumption has presented an increasing in the last years in Brazilian market. In Brazil, about 10% of total grapes is used to juice production, highlighting Rio Grande do Sul Estate as the most important region producing. In the São Francisco Valley, grape juices have been produced, but the activity is just beginning, whose enterprises are testing varieties to define the commercial product. But in the North-East, vines can produce twice a year, and this characteristic can provide high productions as compared with the South, where vines produce once per year. In the North-East are the producers that decide when prune and when harvest vines, so, there is a specific control of the harvest. The major variety actually used in about 80 hectares of *Vitis labrusca* used for juice production is 'Isabel Precoce', followed by BRS Violeta and BRS Cora. 'Concord' is used in the South of Brazil to elaborate grape juices, presenting typical flavors and color. The objective of this study was to evaluate the physical-chemical characteristics of grape juices elaborated with cv. Concord, grafted onto IAC 572, cultivated on pergola, and irrigated by drip, planted a partner enterprise, in one season in the São Francisco Valley. Juices were elaborated in triplicate by steam juice extractor cooker for 1.5 hours at 75±3 °C to each 20 kg of berries, getting 12 liters juice. Three bottles were analized, and the parameters used were total soluble sugars (°Brix), total titratable acidity (expressed in g L^{-1} of tartaric acid), volatile acidity (expressed in g L^{-1} of acetic acid), tonality, color intensity (420, 520, and 620 nm), and total anthocyanins (mg L^{-1}). Results showed that grape juices presented all parameters within those required by Brazilian legislation, presenting 15.5 °Brix, 7.10 g L^{-1} of tartaric acid, 0.37 g L^{-1} of acetic acid, 0.88 of tonality, 11.95 of color intensity, and 941.55 mg L^{-1} of total anthocyanins. As conclusion, cv. Concord presented interesting parameters and could be used to grape juice production in the São Francisco Valley, in blends with other cultivars, providing high amounts of acidity and color.

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