



## Sensory Evaluation of Tropical Grape Juices Elaborated in Northeast Brazil

Gildeilza Gomes Silva<sup>1</sup>, Juliane Barreto de Oliveira<sup>1</sup>, Vanessa de Souza Oliveira<sup>1</sup>, Ana Júlia de Brito Araújo<sup>1</sup>, Russaika Lírio Nascimento<sup>1</sup>, Aline Camarão Telles Biasoto<sup>1</sup>, Rita Mércia Estigarribia Borges<sup>1</sup> and Giuliano Elias Pereira<sup>2\*</sup>

<sup>1</sup>Embrapa Semiárido, Petrolina, PE, Brazil.

<sup>2</sup>Embrapa Uva e Vinho/Semiárido, BR 428, km 152, CP 23, CEP 56.300-000, Petrolina, PE, Brazil.

E-mail: [gpereira@cpatsa.embrapa.br](mailto:gpereira@cpatsa.embrapa.br)

### Abstract

The elaboration of grape juices in the sub-middle Sao Francisco River Valley is beginning and the adaptation of grape varieties are still being tested. The *Vitis labrusca* grape 'Isabel Precoce' (or Isabella) and the hybrid grape 'BRS Cora' (Muscat Belly A x H. 65.9.14) have presented good agronomic and enological potential to be used for grape juice in the region.

The purpose of this study was to evaluate by sensory analyses the consumer acceptance of tropical grape juices made with the cultivars 'BRS Cora' and 'Isabel Precoce' and their blends. The grapes were harvested in September 2010 in an experimental area of the Embrapa Tropical Semi-arid (09° 09' South, 40° 22' West, 365.5 m above sea level), localized in Petrolina, Pernambuco State, Brazil. The varietal grape juices were elaborated by using water vapor extraction, with temperature and extraction time controlled, at 75-85°C and 60 minutes respectively. The blends were prepared in the moment of the sensory analysis. Thus, in total, the consumer acceptance of four juice samples were analyzed: two varietal juices (100%) 'Isabel Precoce' and 'BRS Cora'; and two blends, the mixtures of 80% Isabel Precoce and 20% BRS Cora, and Isabel Precoce 40% and 60% BRS Cora. Ninety six consumers of grape juice (54% females and 46% males) evaluated the acceptance of the appearance, aroma, flavour and the overall impression using the traditional nine point's hedonic scale of the samples. In the same test, the purchase intention of the grape juices were also evaluated. All the tropical juices, '100% Isabel Precoce', BRS Cora and the blends, showed good acceptance and purchase intention by consumers, especially the juice made with 100% Isabel Precoce. Only 3% of consumers disliked this juice and more than 83% affirmed that they definitely or probably buy it.

**Keywords:** *Vitis labrusca*; grape juices; sensory analysis, consumer acceptance.