Sensory profile of tropical ‘Syrah’ wines from different clones and rootstocks

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In oenology, sensory evaluation is an important tool that enologists have to assess the quality of the wines. Consists in evaluate wines aiming to identify its defects and describe the qualitative attributes, regarding visual, olfactive and gustative characteristics (Rizzon, 2010). There are many factors affecting composition and quality of wines. Among them, soil, climate, vine management and winemaking process (Sánchez and Dokoozlian, 2005). Through chemical and sensory analyses, wines can be characterized by explaining their qualities and typicality. In this way, this study aimed to evaluate the effects of rootstocks, clones and harvest date on sensory characteristics of ‘Syrah’ wines, from grapes cultivated in a partner winery, in Lagoa Grande, Pernambuco state, Brazil, from 2009 and 2010 vintages. Vines were planted in 2003 and grafted onto two rootstocks (Paulsen 1103 and IAC 313), with five Syrah clones (100, 174, 300, 470 and 525). Grapes were harvested at optimal maturity for red wines and elaborated at Embrapa by traditional red winemaking (Peynaud, 1997). Twenty wines were tasted by a trained panel of enologists to describe sensory characteristics, as visual, aromatic and gustative parameters. Data assessment from a non-parametric scale with 17 sensory parameters allowed discriminating different wines by variance test (factorial and F test) and principal component analysis (PCA). The most of the parameters, the interaction between clone, rootstock and harvest factors were significant. Graphic obtained from PCA (principal component-PC 1 x PC 2) explained 71.8% of total variability and it was possible to discriminate as the most important factor harvest date, followed by rootstock and the last one and less important was the clone of the cultivar. As conclusion, the hierarchy of the factors influencing wine sensory characteristics in the São Francisco Valley was climate, rootstock and clone of Syrah grapes.

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References