

[P1.1.110]

Sensory characteristics of Brazilian red varietal wines

A. Miele*, M.C. Zanus, L.A. Rizzon

Embrapa Uva e Vinho, Brazil

Brazilian wine production is concentrated in the Serra Gaúcha region, which is located in Rio Grande do Sul, the southern state of the country. White wines predominated until few years ago, but red ones took their place now. As the southern Hemisphere does not have any native grape variety, wines are made from cultivars originated from other viticultural areas, such as those from the European countries. In this way, Merlot, Cabernet Sauvignon, Barbera, and Pinot Noir are varieties grown in the Serra Gaúcha from decades, but others were introduced more recently, such as Ancellotta, Arinarnoa, Carmenère, Malbec, Marselan, Ruby Cabernet, Sangiovese, Syrah, Tannat, Tempranillo, Teroldego, and Touriga Nacional.

However, the basic sensory characteristics of these varietal wines are not known yet. This was accomplished by a sensory panel formed by professional and trained enologists that evaluated the wines according to their smelling and tasting characteristics. Some basic descriptors of the wine industry interest were prior established with the knowledge acquired during the 2008 Wine National Evaluation. A 9 cm unstructured scale was used to quantify the intensity of 26 descriptors, which were analysed by the Principal Component Analysis.

The PCA showed that the three most important components represented 74.51% of the total variation: PC 1 discriminated Marselan and Tempranillo wines, the first one being characterized by its equilibrium, quality, fruity, spicy, oak, harmony, persistence, and structure; the second one, by vegetal, oak, and salty; PC 2 discriminated Pinot Noir wine, characterized by its floral flavor; PC 3 mainly discriminated Malbec wine, which had a very weak floral character. The other varietal wines did not show any important discriminant effect. These results mean that most varietal wines were closely related regarding their sensory characteristics, which were probably due to the climatic and soil conditions and the technologies used during winemaking.

Keywords: Varietal Wine, Brazil, ACP, Sensory Characteristics