

Sensory characterization of Pink Port wines. CATPCA analysis, a strategy for sensory data treatment.

Bebiana Monteiro^a, José Sousa Soares^b, Alice Vilela^c, Elisete Correia^d

^a Master Student of Enology at Universidade de Trás-os-Montes de Alto-Douro, Apartado 1013, 5001 801 Vila Real

^b Gran Cruz - Sociedade Comercial de Vinhos Lda., 4400 195 Vila Nova de Gaia

^c Institute for Biotechnology and Bioengineering, Centre of Genomic and Biotechnology, (IBB/CGB-UTAD), 5001801 Vila Real

^d Centre for Mathematics (CM-UTAD), 5001 801 Vila Real

Port Wine takes its name from the city of Oporto located at the head of the river Douro in Portugal. The wine produced is fortified by the addition of a neutral grape spirit known as “*aguardente*” in order to stop the fermentation, leaving residual sugar in the wine, and to increase the alcohol content. Among European wines, Port Wine deserves special attention because of its history, integration in international markets and its major contribution to local economy. Pink Port is a very recent variation on the market, produced with the aim to bring the delights of Port Wine to a younger market (Croft 2012).

Sensory descriptive analysis or sensory profiling combined with multivariate statistical analysis has been used to describe different wines from different grape varieties and different origins. Although wines from DDR (Demarcated Douro Region) have a long history few works have been done concerning sensory profiling of this kind of wines, namely, Pink Port wines (Kontkanen *et al.* 2005; Koussissi *et al.* 2007; Etaio *et al.* 2008).

The main purposes of this study was to describe a specific sensory method, including chemical compounds reference development, to establish the most important descriptive and discriminative sensory attributes in this novel Port wine style, the Pink Port. Interpretation of the CATPCA (Categorical Principal Components Analysis) results enables the characterization of the Pink Port wines by their sensory attributes. The attribute ratings created a multidimensional space on which each wine could be positioned. Among all the attributes the appearance attribute related to color “*Pink*” was the best to differentiate all de wines. From the five brands studied (Cálem, Croft, Cruz, Dalva e Offley), three are very similar in terms of attributes, while the other two have different organoleptical characteristics and are also very distinct from each other.

* Corresponding author: bmonteiro@engenheiros.pt (e-mail address)

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Resumo

A designação de Vinho do Porto deve-se à cidade do Porto, em Portugal. O vinho do Porto é um vinho fortificado pela adição de aguardente com o intuito de parar a fermentação para obter um vinho naturalmente mais doce, bem como para aumentar o teor alcoólico. O vinho do Porto requer especial atenção, quer pela sua história quer pela internacionalização do mercado, contribui consideravelmente para a economia local. O Vinho do Porto Rosé, designado por Pink, é uma variação recente do mercado, produzido com o objetivo de atrair um público-alvo mais jovem para o consumo de Vinho do Porto (Croft, 2012).

Análise descritiva sensorial ou perfil sensorial combinado com análise estatística multivariada tem sido usada para descrever diferentes vinhos, diferentes castas e diferentes regiões vitivinícolas. Contudo, apesar dos vinhos da Região Demarcada do Douro (RDD) terem uma longa história, pouco tem sido estudado no que diz respeito ao perfil sensorial destes vinhos, designados por Vinho do Porto Pink (Kontkanen *et al.* 2005; Koussissi *et al.* 2007; Etaio *et al.* 2008).

Os objetivos deste estudo foram caracterizar os principais atributos sensoriais que descrevem e diferenciam este estilo de vinho do Porto Pink. Para tal recorreu-se à Análise em Componentes Principais Categórica (CATPCA). De todos os atributos, a cor “Pink” foi o descritor que melhor diferenciou os vinhos. Das cinco marcas estudadas (Cálem, Croft, Cruz, Dalva e Offley), três marcas são muito semelhantes em termos de descritores, enquanto outras duas têm características organolépticas diferentes e são igualmente muito distintas de todas as marcas de vinho do Porto Pink.

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Palavras-chave: Descritores de Vinhos do Porto Pink, avaliação sensorial, análise estatística CATPCA