

INVESTIGATING THE CONCEPTUALIZATION AND PRACTICES LINKED TO PEPPERY NOTES IN SYRAH RED WINES BY FRENCH WINEMAKERS FROM DIFFERENT REGIONS

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Abstract:

Context and purpose of the study - The peppery attribute is often used to describe the aroma of Syrah wines. Rotundone was identified as the main aroma compound responsible for these notes. A significant percentage of anosmic respondents to this molecule was reported in previous studies. However, in most cases, these anosmic respondents, formally tested through three-alternative forced choice (3AFC), frequently declare being able to perceive peppery notes in wines. The main objective of this study was to investigate how anosmic French producers from two different regions conceptualize the peppery notes in Syrah red wines, and how they link it to production practices in comparison with non-anosmic producers. The first hypothesis was that anosmic and non-anosmic producers differently conceptualize the peppery perception and consequently, their practices are differently oriented to produce or avoid these notes. The second hypothesis was that this conceptualization may differ according to the studied region.

Material and methods – A total of 101 experts from two French wine regions involved in the winemaking of Syrah wines (n = 54 for the Northern Rhone valley (NRV), n = 48 for Languedoc-Roussillon (LR)) conducted two tasks. In the first task, experts were evaluated for their ability to detect rotundone using two consecutive 3AFC tests. Then, they participated in individual face-to-face semi-structured interviews consisting in three main parts. Firstly, they were asked to describe the last peppery wine they tasted, and they further had to provide technical information about it; secondly, they had to indicate the producing practices enhancing peppery notes in Syrah red; finally, they provided information about the positive or negative role played by this sensory on overall wine quality. Terms were lemmatized and grouped in categories and subcategories using a triangulation procedure, then the frequency of citation for each category was calculated.

Results – The proportion of anosmic respondents who failed in both 3AFC tests were 45 % and 44 % for NRV and LR, respectively. Differences in the conceptualization of peppery notes were observed among anosmic and non-anosmic experts from NRV, but the region effect was greater. “Spicy,” “freshness” and “length/aftertaste” were among the most frequently cited terms in the description task. The wine described by experts was in most cases made from Syrah grapes produced in specific regions (i.e., Rhone valley) or during particular seasons (i.e., 2021). In both regions, these notes were related to cool and wet conditions of climate. In most cases, experts from LR positively perceived peppery notes and associate them with high maturity grapes while for NRV, the perception was more mitigated as these notes were frequently related to a lack of maturity.

Keywords: peppery notes, conceptualization, Syrah wines, French winemakers, practices.