

SENSORY DIFFERENCES OF PINOT NOIR WINES FROM WILLAMETTE VALLEY SUB-REGIONS

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Abstract

Wines from different regions or AVAs have been found to have sensory differences, as these areas are typically located quite far apart and have dramatically different climates, soils and other terroir factors. However it is unclear if wines from different areas (sub-regions) within an AVA also show distinctive sensory characteristics. There is the thought that these areas are geographical closer and many terroir factors are more similar. The sub-regions in the Willamette Valley have some distinct differences due to soil, climate and topography. Anecdotally it is thought that wines from these sub-regions were distinctive, but differences had not been defined. Commercially available Pinot noir wines from the 2012 & 2013 vintages were evaluated for aroma and mouthfeel. Five to six wines from each of the regions were used; Chehalem mountains, Ribbon Ridge, McMinnville, Yamhill-Carlton, Eola-Amity Hills, Dundee Hills, Heart of the Willamette and overall Willamette Valley. Wines were chosen as follows; (1) 100% of the grapes were from that sub-region, (2) wines were identified as sub-regional on the label and (3) wines were considered good examples through preliminary discussions and tastings. Experienced tasters (Pinot noir winemakers from the Willamette Valley) participated in the sensory analysis. Citation of frequency method was used to identify those sensory descriptors most important for each wine. Sensory results were analyzed using multidimensional scaling and correspondence analysis. Wines from the sub-regions were found to have sensory differences. Specifically some aromas that characterized the sub-regional wines included blackberry, vanilla, red jam, earthy, blueberry and fig. Mouthfeel differences were also found although descriptors used were conflicting, which may be due to some of the difficulties involved with mouthfeel characterization. The sub-regional differences from the 2 vintages varied, as the weather from 2012 and 2013 were quite different. While an overall definition of terroir differences have not yet been determined, it is quite clear from the wines in this study that sub-regional sensory differences do exist for Pinot noir in the Willamette Valley. This information is important as it helps define quality parameters for each area and can be utilized for marketing and tourism.

Keywords: Terroir, wine, viticulture, Pinot Noir, Oregon, sensory analytics, aroma compounds