

Appendix D

Selection of wines with marked mouthfeel differences

Figure D1 shows the HCA calculated with the 23 wines described by RATA. Six clusters of wines are identified and thus six different profiles of wines with different mouthfeel.

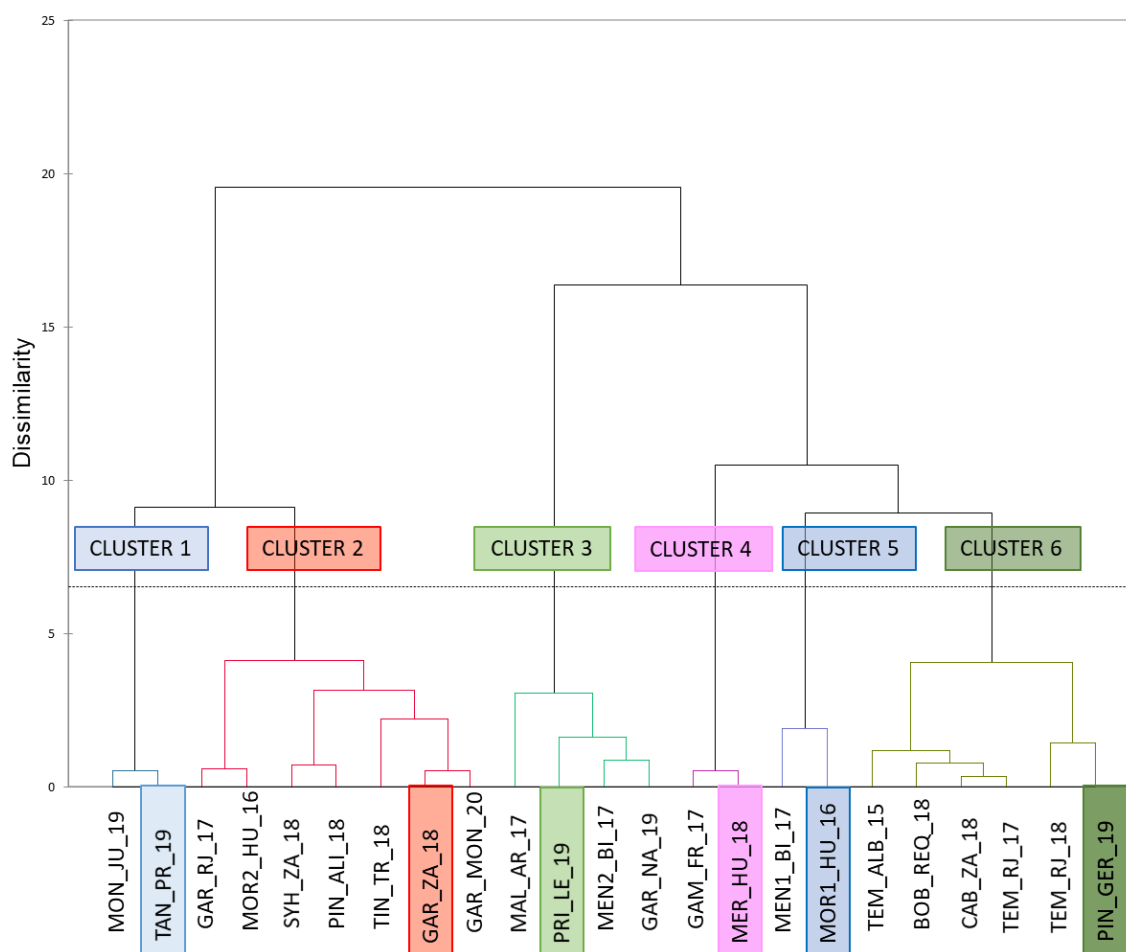


Figure D1. HCA tree calculated on the scores of the 13 significant terms rated by RATA descriptive task and the 23 red wines.

Based on the attributes employed in the RATA description, wines of Cluster 1 are mainly oily, burning and persistent and those of Cluster 2 are characterised as prickly and burning. Interestingly, both clusters show significantly higher levels of ethanol together with cluster 4 (14% (v/v)) in comparison with the 13% of clusters 3, 5, 6 (see appendix C, Table S1). Wines of Cluster 3 (includes three Garnacha Tinta out of the four included in the study) are the least persistent, prickly and puckering and show lowest scores for drying and coarse as Cluster 5, which is also the most watery. Cluster 4 is the most drying, coarse, puckering and persistent, while Cluster 6 (includes the three Tempranillo Tinto included in the study) shows intermediate scores for most attributes and among the highest scores for puckering. This is consistent with the significantly higher content in polyphenols (measured by the $\text{abs } 280 = 81.2$) of wines in Cluster 4, in contrast with Cluster 6 (TPI = 48.0) and Cluster 5 (TPI = 48.9), that show the lowest polyphenol content.

For each cluster, one wine was selected (marked in Figure D1). They are elaborated with 6 different varieties: Tannat, Garnacha Tinta, Pioto Picudo, Merlot, Moristel and Pinot Noir, and have diverse origin: Peru (South America), Germany and three different regions in North Spain: Huesca (close to Pyrenees), Zaragoza (North East) and León (North West). Besides, they show great variability in terms of chemical composition (see Appendix C, Table S1). These wines are deemed to capture maximal variability in terms of mouthfeel among the sample set selected.