Si Yu Li et al., J Food Process Technol 2016, 7:10(Suppl)
http://dx.doi.org/10.4172/2157-7110.C1.051

Wine visual evaluator: A comprehensive database used for visual evaluation and phenolic explanation on visual characteristics of dry red wines worldwide

Si Yu Li, Li Jun Li, Fei He, Bao Qing Zhu, Qiu Hong Pan, Ying Shi and **Chang Qing Duan**
China Agricultural University, China

Dry red wines' visual characteristics are the first features perceived by consumers which can greatly influence their commercial acceptance, and are always paid great attention by scientists and enologists all over the world. However, up to present, no such comprehensive database is specially focused on overall visual evaluation for wines worldwide. By the use of HPLC-QqQ-MS/MS method capable of detecting and quantifying 125 phenolic compounds, together with traditional wine visual parameters detecting methods (CIELab and Glories), we detected the phenolic profiles and visual parameters (L*, a*, b*, Hue, Red%, Yellow%, Blue%, dA%) of 227 dry red wines of different regions (10 countries), varieties (14 varieties) and vintages (2002-2015), and used these data to establish a comprehensive database. On the basis of these wines' phenolic profiles, wines of different levels of each visual parameter were successfully differentiated by using orthogonal partial least squares-discriminant analysis (OPLS-DA). This database can be further updated in the future, with numerous wines detected. By establishing this comprehensive database, we hope to help scientists and enologists worldwide achieve an effective and overall comparison of wines from different backgrounds, and also provide the phenolic explanation on wines' visual characteristics.

Biography

Si Yu Li is a Doctoral candidate majoring in Wine Flavor Chemistry, at Center for Viticulture & Enology, College of Food Science and Nutritional Engineering, China Agricultural University. He has published 3 papers in *Journal of food science*, *Molecules*, *Rapid Communications in Mass Spectrometry*, respectively, and has been listed as co-author in other 2 papers published in *Journal of agricultural and food chemistry* and *Molecules*.

mnblsy@163.com

Notes: