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Colormasking of chocolate bars by a spectral tuning sensory booth

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Preconceptions created by the color or shade of a product can cause bias in sensory assessors during the sensory evaluation. Therefore, it is particularly important to provide assessing conditions in which the panelists receive analogous visual stimuli avoiding prior influence. Co-working with the Budapest University of Technology and Economics we created a spectral tuning sensory booth, which can effectively mask the color-differences among the products. The validation of this booth was performed by chocolate samples of different shades of color. During the production of these chocolate samples, we paid close attention, that the DeltaEab* values of the color differences between the samples were in the range of 0.5-1.5. The experiments showed that assessors could rank the darkness of the samples under D65 white light, but performed significantly worse under modified masking lights. In this way, we have successfully specified a color masking environment for milk chocolate bars. One of the most important advantages of the booth we develop is that it is not product-specific, since the masking light could easily be modified by computer. This research was supported by the János Bolyai research scholarship. The Project is supported by the European Union and cofinanced by the European Social Fund (grant agreement no. EFOP-3.6.3-VEKOP-16- 2017-00005). Ákos Nyitrai expresses his gratitude to the Doctoral School of Food Science of Szent István University. Supported by the ÚNKP-19-4 New National Excellence Program of the Ministry for Innovation and Technology.

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Color of table grape accessions influenced by the length of cold storage

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Color is one of the most important phenotypic characters of the table grape cultivars, which has high importance in the consumer's preference. This morphological trait is variable and not consistently uniform within a cultivar or even a bunch. Between harvest and consumption fruits are stored for several weeks which time is influencing the color of the berry. In this study 10 grapevine accessions ('Agaphante', 'KM98', 'Korai piros veltelini', 'Korona', 'Pinot gris', 'Pozsonyi', 'Ros de Minis', 'Tramini piros', 'T9', 'Zenit') collected from the germplasm collection of the Research Institute for Viticulture and Oenology of the National Agricultural Research and Innovation Centre of Kecskemét were investigated with the ColorLite Sph 850 spectrophotometer. The color 30 berries per accessions were measured in 3 replicates per berry. The aim of this study was to evaluate the color uniformity and the effect of cold storage. L*, a*, b* values of each accessions were evaluated after the sampling and until a visible reduction in the quality of the grapes, at most 4 weeks with 1-week intervals from the harvest. Results showed that there is a significant difference among the cultivars in the L*, a*, b* values. The length of cold storage also has a significant effect on the color of the accessions as the values are changing in some cases of the 1-week storage period.