

VARIATIONS IN HOP AROMA DEPENDING ON CROP YEAR

| TECHNICAL SUPPORT |

As already shown before in previous years, we would like to demonstrate how the contribution of hop oils to beer can vary from one crop year to another.

Linalool is assessed to be the representative substance for late hop aroma as it correlates well with the sensory impression of hop aroma in beer. The concentration of alpha acids and linalool can vary independently from each other. For example, in a year with higher alpha acid concentrations, linalool concentrations do not necessarily increase proportionally. Consequently, we calculate the ratio of linalool / alpha acids to assess how much aroma is added without changing the bitterness. This is very significant to achieve a consistent late hop aroma in the beer.

For crop 2017, Tradition's ratio again increased slightly (Fig.1). This can result in a little more intense aroma in the beer, if hop dosage remains the same when changing from crop 2016 to 2017. The opposite (slightly less intense aroma) might happen for the varieties Select and Perle. Variety Saphir remained almost unchanged.

Ratio Linalool / Alpha Acids (ppm/alpha %)

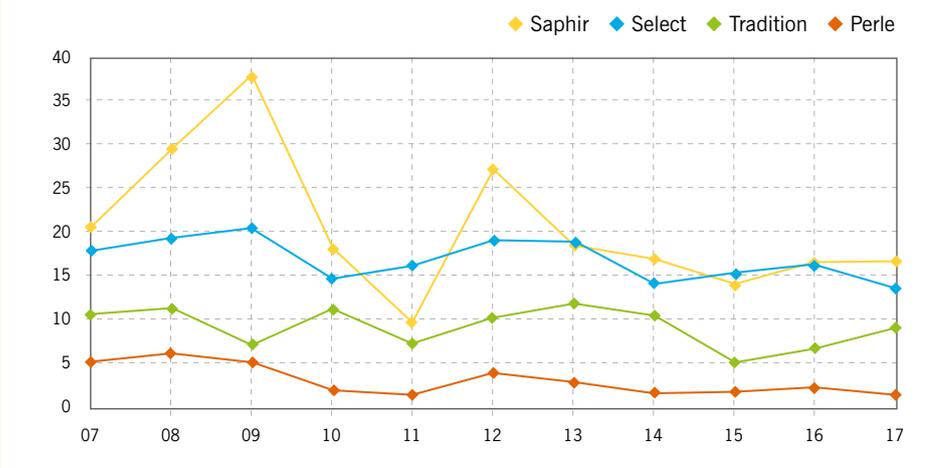


Fig.1: Ratio of linalool / alpha acids (acc. current EBC-Analyses) for the last 10 years

To adjust the late aroma hopping (if necessary), we have published a very convenient possibility already. Please follow this link to get more information about the possible adjustments in the brew house:

https://www.hopsteiner.com/wp-content/uploads/2017/06/Annual_fluctuations_in_hop_quality_-_options_for_adjustment_in_the_brewhouse_-_W._Mitter_-_BWI_2009.pdf

Please contact us in case you need information for other varieties as well!

Simon H. Steiner, Hopfen, GmbH *S.S. Steiner, Inc.*

Newsletter, December 2017

IMPRESSIONS

