



NEWSLETTER 12/2016

TECHNICAL SUPPORT

Variations in Hop Aroma Depending on Crop Year

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 2016, Tradition's ratio 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 2015 to 2016. The same can be seen for the variety Saphir, whereas the varieties Select and Perle remained almost unchanged.

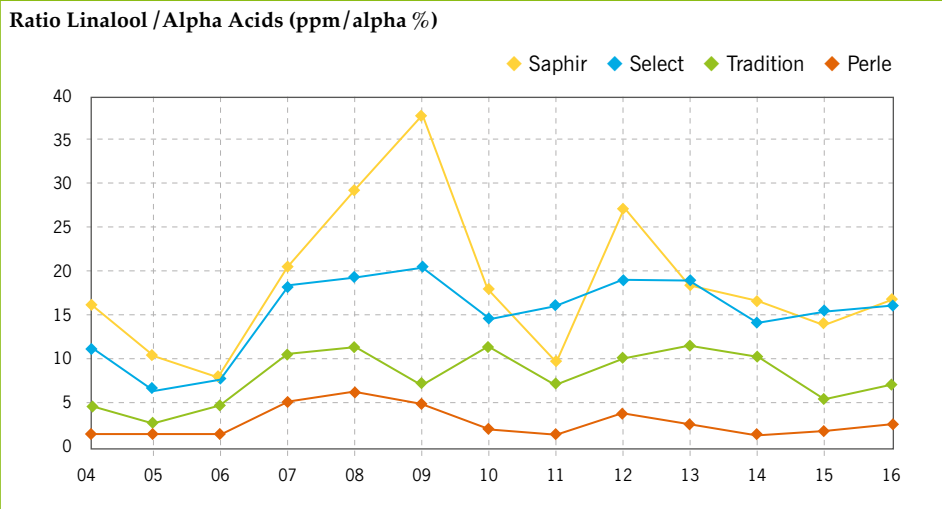


Fig.1 – Ratio Linalool / Alpha Acids (ppm/alpha %)

Last year we reported slightly lower hop oil concentrations for certain varieties. For crop 2016 we can summarise, that varieties reached their normal level again. As both, alpha acids and hop oils, increased in a similar proportion, the ratios from fig.1 seem to be hardly affected at all, although the aroma intensity of pellets made from crop 2016 is on a higher level again.

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

Simon H. Steiner, Hopfen, GmbH S.S. Steiner, Inc.
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Pictures by Martin Holzner