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HOP SCIENCE

KNOWLEDGE FOR YOUR SUCCESS

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WHERE IS THE LEMON IN THE HOPS?

Citrus is a character that is present in many hop varieties, especially in the so-called flavour varieties. These British researchers were hunting for components in hop oil responsible for the citrus note. They used a SPE (solid phase extraction) protocol working with different eluting mobile phases. With this technique they found that when using a mixture of 70:30 ethanol:water, the strongest citrus notes of different hop varieties were captured. Also, it was found that geraniol plays a major role citrus characters in hops.¹

CAN YOU TALK HOP AROMA?

With the presence of so many very hoppy beers in different craft markets, the sensory assessment of beer has become challenging. To describe the various hoppy characters in a dry-hopped beer is much more difficult than in a standard lager. In order to be able to compare sensory assessments, a uniform hoppy language is beneficial. Alicia Munoz, from our Barth Innovations team, presented the hop aroma categorization that we at Barth-Haas use to assess hop varieties and hoppy beers. Working with the hop aroma categories presented, it is possible for trained and untrained tasters to effectively describe hoppiness in beer. So let's start talking one hoppy language.²

DON'T LET THE HOP AROMA GET AWAY WITH THAT!

For years, brewing researchers have been investigating if hop aroma components are absorbed in beer crown liners and if so, does this explain the decrease of hop aroma in bottled beer? This team from Berlin looked into the question. They measured a group of hop aroma compounds: myrcene, limonene, geraniol, alpha-terpineol, humulene and caryophyllene. In the course of 55 days all compounds increased in the liner and decreased in the beer with the exception of linalool and alpha-terpineol. Hydrocarbons increased to a higher extent. The stable content of linalool can be explained with racemization whereas in the case of terpineol, isomerization probably takes place. The migration pattern proved to follow Fick's Second Law of Diffusion. So enjoy your beer fresh before the aroma starts to hide in the liner!³

USE A SIEVE TO MINIMIZE THE BEER LOSS

The amount of beer losses in context with dry-hopping cannot be neglected and solutions to minimize those losses are of importance. This German research team proposes the installation of a sieve in a tank that separates the hop particles from the beer. Examples of how this sieve can be implemented in the brewing process are given.⁴

REFERENCES:

1. Wilson, C.: Characterisation of the Citrus Character in hops, April 2016, Ghent. <http://www.trendsinsinbrewing.org/program.html>
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3. Wietstock, P.: Scalping of hop volatiles from beer into crown cork, oral presentation at the Trends in Brewing Conference, April 2016, Ghent. <http://www.trendsinsinbrewing.org/program.html>
4. Mitter, W.: reduction of beer losses after dry hopping, poster presentation at the Trends in Brewing Conference, April 2016, Ghent. <http://www.trendsinsinbrewing.org/program.html>



The New Barth Haas Website

Real life is already changing rapidly but more so is the online world. This is why we decided to launch a new website that will go online on June 10th.

What will be different:

- Navigation will be much easier.
- All relevant Information will be easy to find will very few clicks.
- You will have easy access to all information about our varieties and products.
- You will have access to all market reports from the different growing areas.
- You can register online for all Hops Academy events.
- You can play some hoppy games on our website!

June 10th, go online at www.barthhaasgroup.com