

HOPSTEINER – NEWSLETTER  
OCTOBER 2009

TECHNICAL SUPPORT



**Hopsteiner**<sup>®</sup>

COMMITTED TO THE BREWER.

## Hopsteiner Tasting

At the Drinktec 2009 we invited visitors to taste two Pilsner type beers. About 300 people assessed our beers, brewed using 50 % each of the new aroma varieties Saphir and Smaragd. Hop dosage, based on alpha-acid content, was as follows:

	B12	B14
%-Alpha dosage during wort boiling	70% / 30%	30% / 20% / 20% / 30%
1. Hop addition - start of boiling	Smaragd and Saphir	Smaragd
2. Hop addition - after 22 min	-	Smaragd
3. Hop addition - after 44 min	-	Saphir
4. Hop addition - after 67 min	Saphir	Saphir
Total boiling time 70 min		

Other than the different times of hop addition both beers were brewed with pellets type 90, using the same raw materials under the same conditions. In order to achieve a similar perceived bitterness we increased the total alpha dosage of B14 by approximately 15% compared to B12.

## Analytical Results

Chart 1 shows the results of the analyses of hop aroma and hop intensity. Further standard beer analyses (not shown here) gave very similar results for B12 and B14.

	B12	B14
Bitter units BU	30,3	27,0
Iso-alpha acids mg / l	27,0	22,5
Linalool $\mu\text{g} / \text{l}$	64,0	95,4

Chart 1: Analytical results of B12 and B14

## Tasting Results

The average bitterness of beer B12 was estimated to be 27,8 BU, one BU higher than the estimate for beer B14. The exclusive use of aroma hops with a high content of non-specific bitter compounds results in excellent bitter quality. 59% and 64% of all tasters gave beers B12 and B14 at least 7 out of 10 points respectively.

Surprisingly, no significant difference in hop aroma intensity was detected. More than 55% of all tasters gave both beers at least 7 points (out of 10) for hop aroma quality. This underlines the very good results already experienced when using Saphir for late addition to achieve an hoppy aroma.

A total of 56% of those who participated in our tasting preferred beer B14.

Thanks to everybody for taking part!

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