

HOPSTEINER

HOPSTEINER – NEWSLETTER

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- Technical Support -



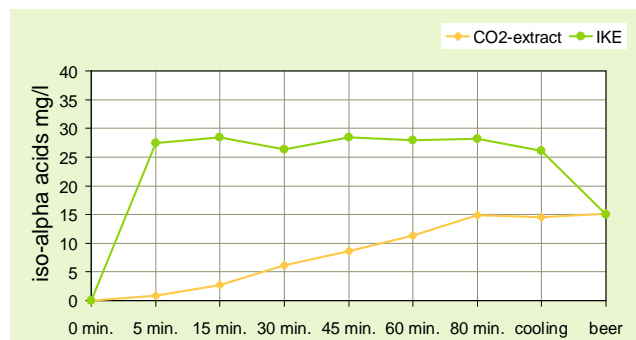
Successful Results Using Isomerized Kettle Extract

Due to a shortage of hops in crop 2008, many breweries used Isomerized Kettle Extract instead of regular CO₂ extracts to save alpha acids. This worked very well and most of the brewers who used IKE for crop 2008 plan to continue doing so for crop 2009, even though hops are again available in larger quantities.

The main advantage of IKE is its better utilization. The example in figure 1 shows that iso-alpha in IKE dissolves much faster than the process required to dissolve alpha acids and convert them into iso-alpha acids. Compared to regular CO₂ extract, **25% less** iso-alpha of IKE was added to achieve the same degree of bitterness.

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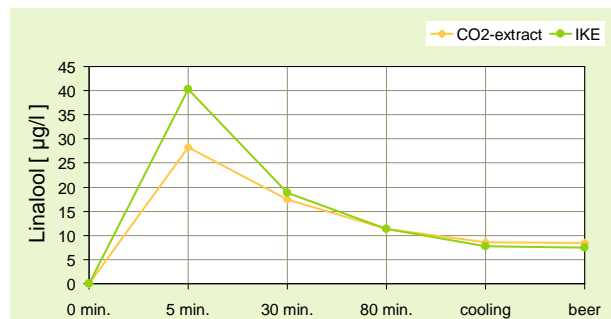
Fig. 1: Bitter substances (HPLC) during boiling of different types of hop extract



IKE is fully comparable to a regular CO₂ extract, and it therefore has a similar aroma profile. This is demonstrated in figure 2 for linalool. Due to the better dissolution of IKE, the concentration of linalool is higher immediately after addition, however it also evaporates faster producing the same result at the end of the boiling process and in the final beer.

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Fig.2: Linalool during boiling of different types of hop extracts



The tasting panel did not detect any significant differences between the beer brewed with IKE and with regular CO₂ extract.