Drinkability and hops
Hops can play different roles when it comes to drinkability of beer. Quality and harmony of hop aroma and taste substances are important for the drinkability of beer. But the beer matrix plays a key role in terms of the sensory impact of hops in beer and keeps asking us riddles. Also uncharacterized soft resins may play a role in this regard. For further studies, a definition of drinkability is indispensable.1

Another approach to hops and drinkability at the recent EBC symposium underlined the possibilities of different hop components in terms of drinkability. The wide choice of hop products allows the application of polyphenols, bitter substances and aroma components of hops specifically in different concentrations to influence and/or increase drinkability.2

Which method to use to assess bitterness in beer
Two methods, both used to assess bitterness in beer, have been compared to investigate their reliability: EBC 9.8 (Spectrometric method) and EBC 7.8 (HPLC method). The HPLC method is not considered a commonly used standardized method for analysing bitter substances in beer but for analysing bitter substances in hop extracts. A collaborative test with five participating laboratories revealed that EBC 9.8, with a mean R of 1.94, produces more consistent results than HPLC analysis and fell within the limits indicated in the EBC method. However, adding increasing concentrations of an iso-alpha-acid standard to unhopped beer, the EBC 9.8 yields lower values than the HPLC for identical samples. Although with its shortcomings, the HPLC method is still better than the spectrometric method if accuracy is important. But the results indicate the necessity for the optimization of the HPLC analysis as a method for measuring iso-alpha acids in beer.3

Reducing beer loss
Recovery of barm beer from excess yeast is a good option to reduce internal beer loss. Development of suitable recovery plants in recent years was mainly influenced by stricter quality standards implemented by brewers. For this purpose, various separations techniques can be used, whereas the determination of yield has proven itself in breweries as an indication of economical viability. Chamber filter presses are mostly replaced by centrifuging or filtration techniques due to quality advantages. Various designs of these alternatives where described and compared.4

Achoo – bless you, need some hop water extract?
Allergic maladies such as hay fever, atopic dermatitis, food allergy and bronchial asthma are increasing in prevalence. The antiallergic properties of hop water extract were studied by evaluating histamine release from human basophilic cells which causes the allergic reaction. The antiallergic effect is attributed to the content of flavonoids and flavonoid glycosides present in hops water extract. Hop water extract significantly inhibited histamine release, but boiling water extract and chloroform-methanol extract did not show any inhibitory effect. Quercetin glycosides and kaempherol glycosides were identified in the hop water extract.5

Did you know that .... ?
...the year of Mozart was 2006 but the year of the hops will be 2007. The hop was voted as „Medicinal Plant 2007“ from the Research Committee for Medicinal Plants of the University of Würzburg due to its unique and exceptional history. The history of hops is rather young compared to other medicinal plants which are known for more than 2000 years. Whereas hops can only be traced back to the early middle age were they were used for their sedating and digesting and preserving benefits.

Did you have any questions ? Ask us !