

HOP STORAGE INDEX – INDICATOR OF A BREWING QUALITY

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ABSTRACT

Hop Storage Index (HSI) could be used as an indicator of 'hop freshness' and therefore gives the user of hop (the brewer) a more accurate insight and confirmation on appropriate handling of hops during picking, storage and processing.

In our laboratory we tested an influence of late hop-picking and storage on hop freshness on four Slovenian and one foreign hop varieties. Immediately after hop picking (time of technological ripeness) we determined the HSI by using the ASBC H-6,12 method and the α - acids contents after the EBC 7.4 method. The samples of raw hops picked up at the time of the technological ripeness were then stored at temperatures 0°C and +20°C and the analyses were performed again after one, two, three and six months. To determine changes of α - acids contents and HIS in time of physiological ripeness, 30 plants of each variety were left on the field and were picked and analysed in same time intervals (after one, two and three months), last samples were picked by the end of November. The results show that in time of physiological ripeness oxidation processes run slower when compared to storing of hops at +20°C for one, two, three and six months of storing as was demonstrated by a higher HIS in stored hops at +20°C. Hops picked in time of physiological ripeness has the HSI in terms of A275/325 the quality of 'fresh hops'.

INTRODUCTION

Storage stability and Hop Storage Index (HSI) are well known characteristics of hop cultivars which can be influenced by proper handling during storage, processing and production /1/. When the situation on the hop market is unfavourable and changing it has become an important issue and financial concern for the producer (hopgrower) to maintain hop quality. With storage and delayed sale, these two parameters are very important in determining brewing value of hops /2/.

The chemical composition of hops depends on hop variety, growing district, growing conditions, crop, harvesting time and on drying and storage conditions. Hops are picked when fully ripe, i.e. in the time of its 'technological ripeness'. The contents of bittering substances as

