

## **Bavarian State Research Center for Agriculture**

Institute for Crop Science and Plant Breeding Hop Research Center Hüll



# The Right Time to Harvest Optimal Quality and Yield in Hops

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#### Introduction

Hop is harvested at a time when reaching the highest brewing value (technical ripeness, not the physiological ripeness). Each variety has its specific genetically fixed optimal picking time which varies depending on weather conditions, location and pruning time The harvest time is crucial to alpha acid content, yield and aroma (aroma intensity, oil content and composition) as well as to the outward appearance and quality (color, shine, pest and disease infestation, shattering). In addition, the vigor and vitality of the plant in the next season is affected.

Results from trials
concerning the harvest time
➢ trials over 3 – 4 years (climate conditions, health,

vitality)

> 5 – 8 harvest dates

(2 dates / week) in 4 replications with 20 bines each

> information on yield,  $\alpha$ -acids, aroma, outward quality and



deficiencies	Huell Melon														
deficiencies	Herkules														
	Ariana														
	Nugget														
economic interest	Mandarina Bav														
	optimal period for harvest line harvest period with limitations														

### **Studies on the Biogenesis**

Single bines of the most important hop cultivars are harvested from 10 different commercial hop yards and from the Huell breeding yard each week starting in the mid of August till the end of September. Cone samples are chemically analyzed and data on cone compounds, aroma, yield and dry substance are monitored and assessed.



#### Improved Recommendations Based on the results conerning the alpha acid content and dry substance content the optimal

harvest period of each cultivar is adapted each year to the specific weather conditions. Recommendations concerning the best time of picking are forwarded to growers, hop traders and brewers weekly.

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