## BECLEITURKUNDE

Aurgenteill auf Grund der Verordnung (EWG) Nr. 1698 7 f. vom 28 V. 1974, gelindert durch Verordnung (EV/G). Nr. 1170/77 vom 17, 5, 1977.

## DEUTSCHER SIEGELHOPFEN

(onne Samen



Saphir

THEF

NE EACLEN/BALLOT

CEWICHT IN KO (BRUTTO)

Aufbereite

110

Siephilmolater/Aufalcht

AVAMAN



## **Saphir Characteristics**

#### **Bitter substances**

alpha-acids	2.0 - 4.5 % *
beta-acids	4.0 - 7.0 % *
cohumulone	12 – 17 % <sup>×</sup>
colupulone	39 - 47 % <sup>×</sup>

#### **Polyphenols**

total content 4.0 - 5.0 % \* xanthohumol 0.3 - 0.4 % \*

#### **Aroma substances**

total oil	0.8 - 1.4 % •
myrcene	25 - 40 % <sup>×</sup>
linalool	0.8 $-$ 1.3 % $^{\times}$
beta-caryophyllene	9 – 14 % <sup>×</sup>
aromadendrene	0.5 - 1.0 % <sup>x</sup>
humulene	20 - 30 % <sup>x</sup>
farnesene	<1% <sup>×</sup>
beta-selinene	2.0 - 4.0 % *
alpha-selinene	2.0 - 4.0 % *

 $<sup>^{(*)}</sup>$ weight-% -  $^{(x)}$ % relative -  $^{(\cdot)}$ ml/100g hops

#### Very fine aroma variety

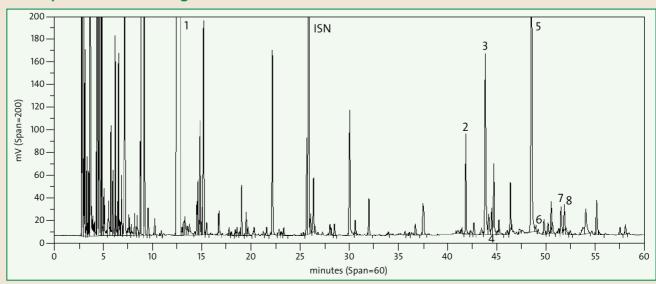
- average bitter value
- very good aroma
- average storage stability

#### **Resistance to disease:**

• wilt	good to very good
<ul> <li>downy mildew</li> </ul>	average to good
<ul> <li>powdery mildew</li> </ul>	good

**Ripening time** medium early **Storage stability** average **Average yield** 1,750 kg/ha

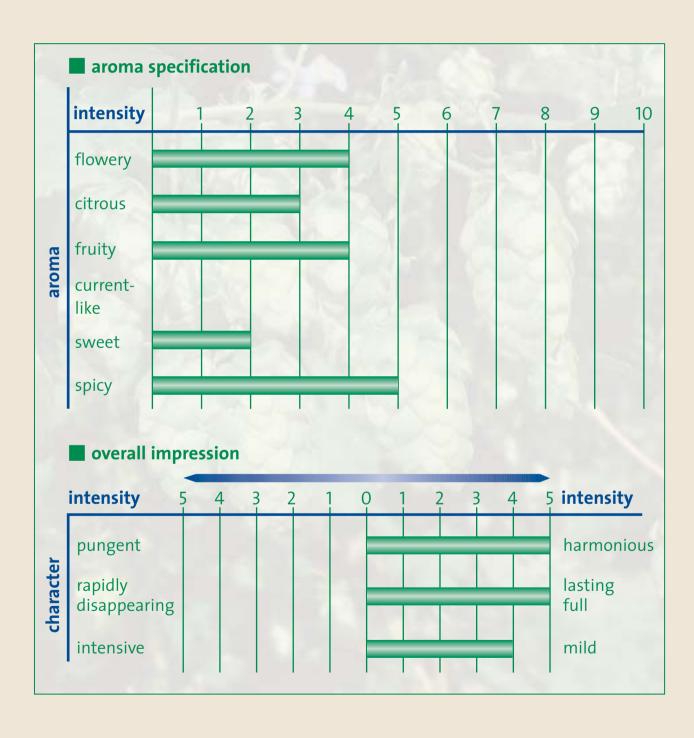
#### **Headspace Gaschromatogramme**



 $1 = myrcene \cdot ISN = internal standard \cdot 2 = linalool \cdot 3 = beta-caryophyllene \cdot 4 = aromadendrene \cdot 5 = humulene \cdot 6 = farnesene 7 = beta-selinene \cdot 8 = alpha-selinene$ 

### Saphir

#### **Evaluation**



Saphir is a product of the Hop Research Centre in Hüll with good resistance characteristics, average yields and very good production characteristics. This aroma variety was registered as a variety in 2002.



# **Brewing trial: Saphir**

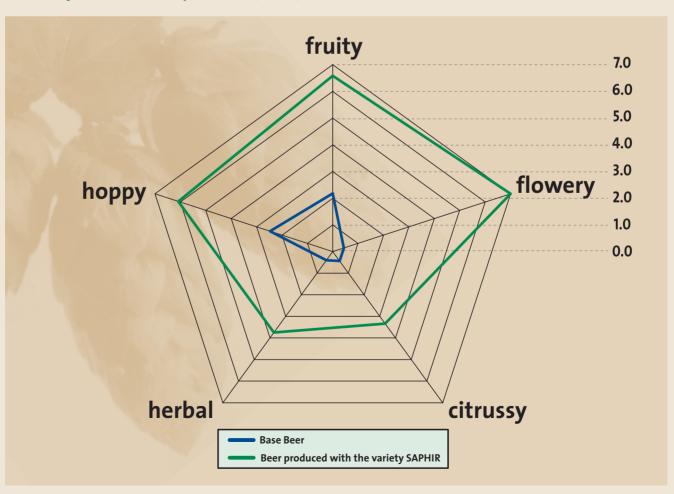


#### 1. Beer Analysis

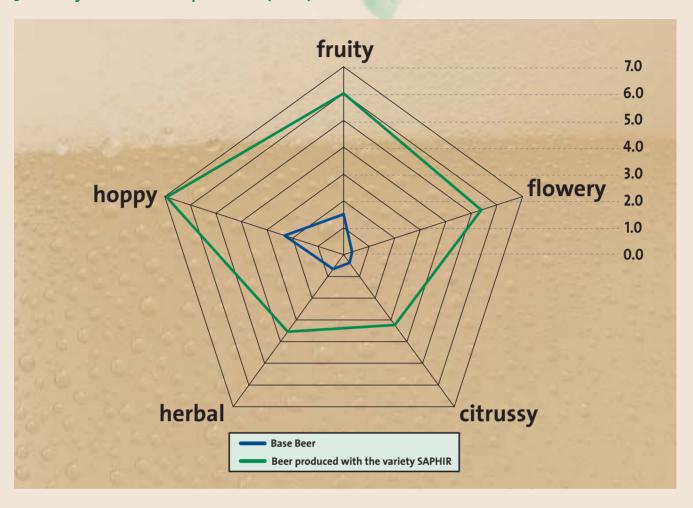
co-isohumulone	4.6 mg/l	iso-xanthohumol	0.85 mg/l
n-isohumulone	13.9 mg/l	xanthohumol	nd*
ad-isohumulone	2.5 mg/l	linalool	108 µg/l
$\Sigma$ isohumulones	21.0 mg/l	total polyphenols	283 mg/l
bitterness	28 EBC-BU		

<sup>\*</sup>nd: not detectable

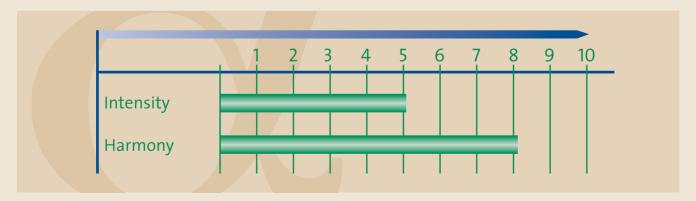
#### 2. Sensory Evaluation "Hop Aroma" (Smell)



#### 3. Sensory Evaluation "Hop Flavour" (Taste)



#### 4. Sensory Evaluation of the Bitterness



Beers of the variety Saphir are marked by a distinct harmonic bitterness of medium intensity. In smell the distinct aroma is defined by flowery and fruity impressions, in taste also by a hoppy tang.