

# BEGLEITURKUNDE

Allgemein auf Grund der Verordnung (EWG) Nr. 1038/71 vom 26. 7. 1971,  
geändert durch Verordnung (EWG) Nr. 1170/77 vom 17. 5. 1977.

## DEUTSCHER SIEGELHOPFEN

(ohne Samen)



SORTE

**Hersbrucker Spät**

GRUPPE:

NR. BALLEN/BALLOT

GEWICHT IN KG (BRUTTO)

Aufbereiter

ORT

DEN

19

Gleichmischer/Aufsicht

DEUTSCHER  
SIEGEL

DEUTSCHER  
SIEGEL



# Hersbrucker Spät

## Characteristics

### Bitter substances

alpha-acids	1.5 – 4.0 % *
beta-acids	2.5 – 6.0 % *
cohumulone	17 – 25 % <sup>x</sup>
colupulone	34 – 39 % <sup>x</sup>

### Polyphenols

total content	5.0 – 6.0 % *
xanthohumol	ca. 0.2 % *

### Aroma substances

total oil	0.5 – 1.0 % *
myrcene	15 – 30 % <sup>x</sup>
linalool	0.5 – 1.0 % <sup>x</sup>
beta-caryophyllene	8 – 13 % <sup>x</sup>
aromadendrene	2.0 – 4.0 % <sup>x</sup>
humulene	20 – 30 % <sup>x</sup>
farnesene	< 1 % <sup>x</sup>
beta-selinene	4.0 – 6.0 % <sup>x</sup>
alpha-selinene	4.0 – 6.0 % <sup>x</sup>

### Fine aroma variety

- low bitter value
- good aroma
- low storage stability

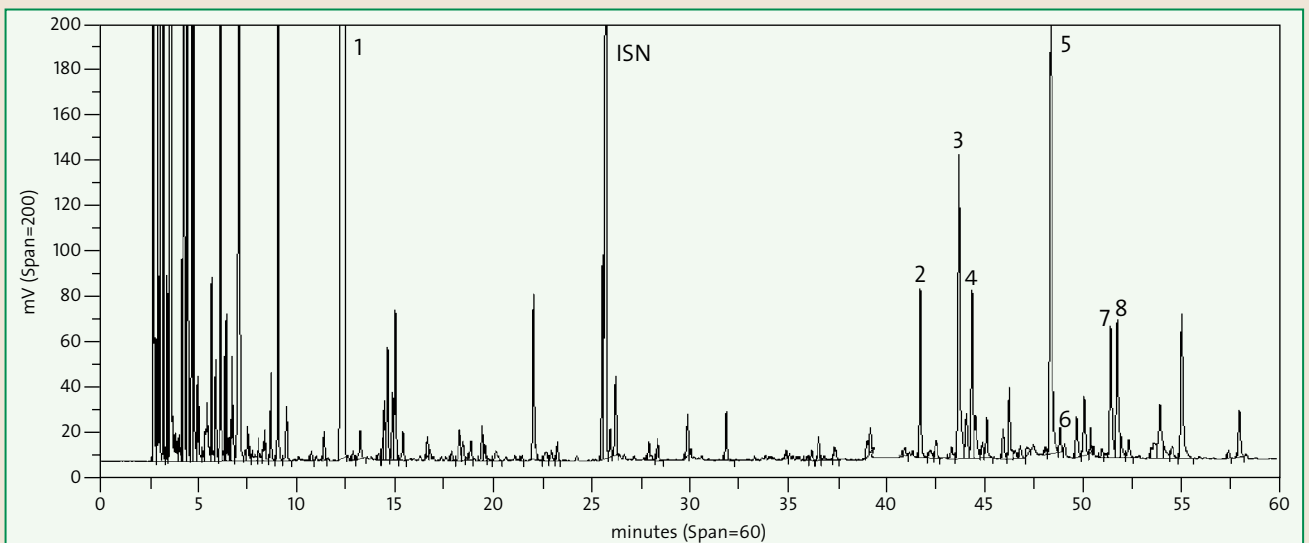
### Resistance to disease:

- wilt average
- downy mildew low to very low
- powdery mildew average to low

<b>Ripening time</b>	medium late to late
<b>Storage stability</b>	low
<b>Average yield</b>	1,700 kg/ha

(\*) weight-% – (<sup>x</sup>) % relative – (<sup>l</sup>) ml/100g hops

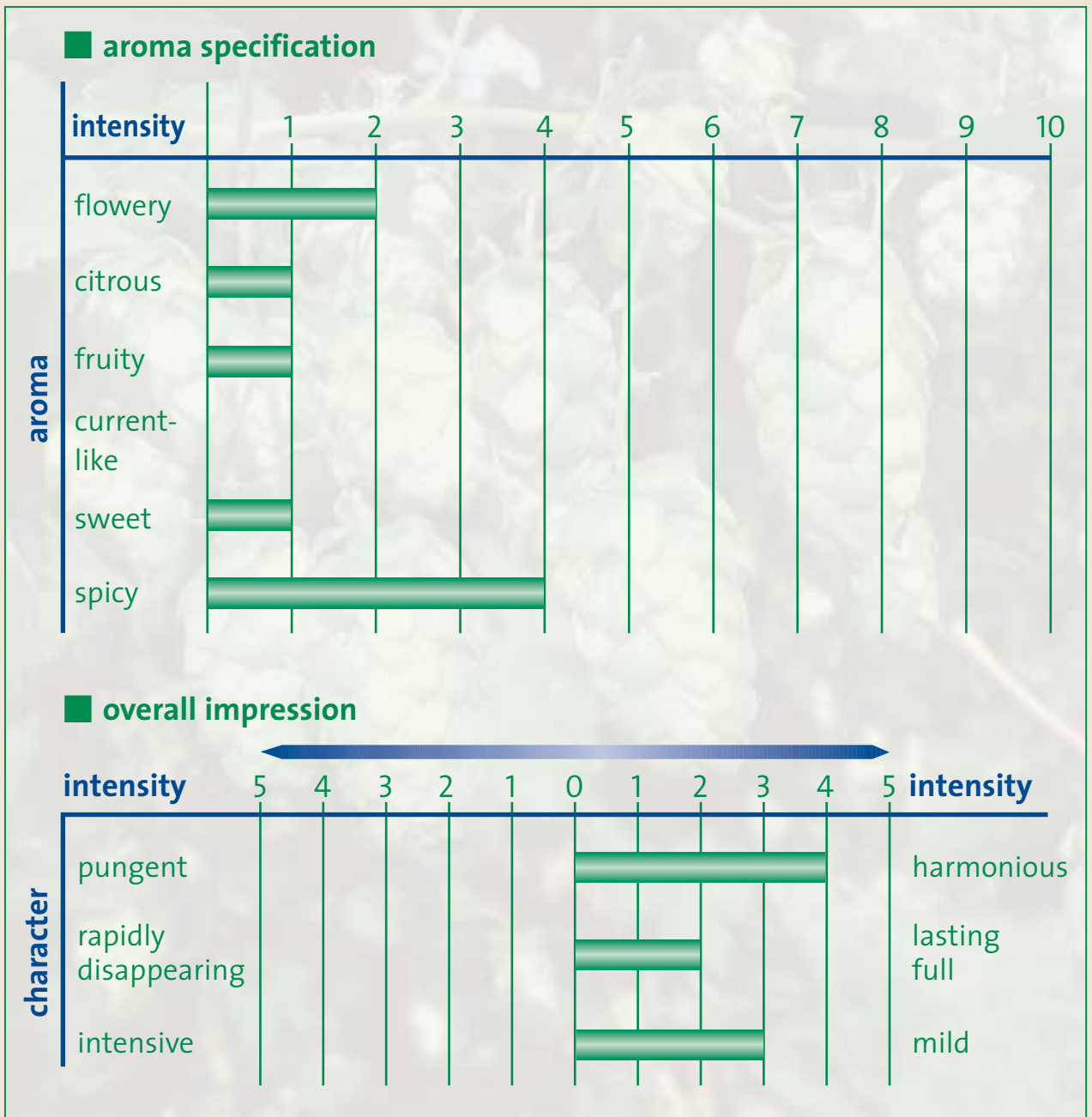
### Headspace Gaschromatogramme



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

# Hersbrucker Spät

## Evaluation



The local variety Hersbrucker Spät is vigorous and robust, but somewhat susceptible to downy mildew.



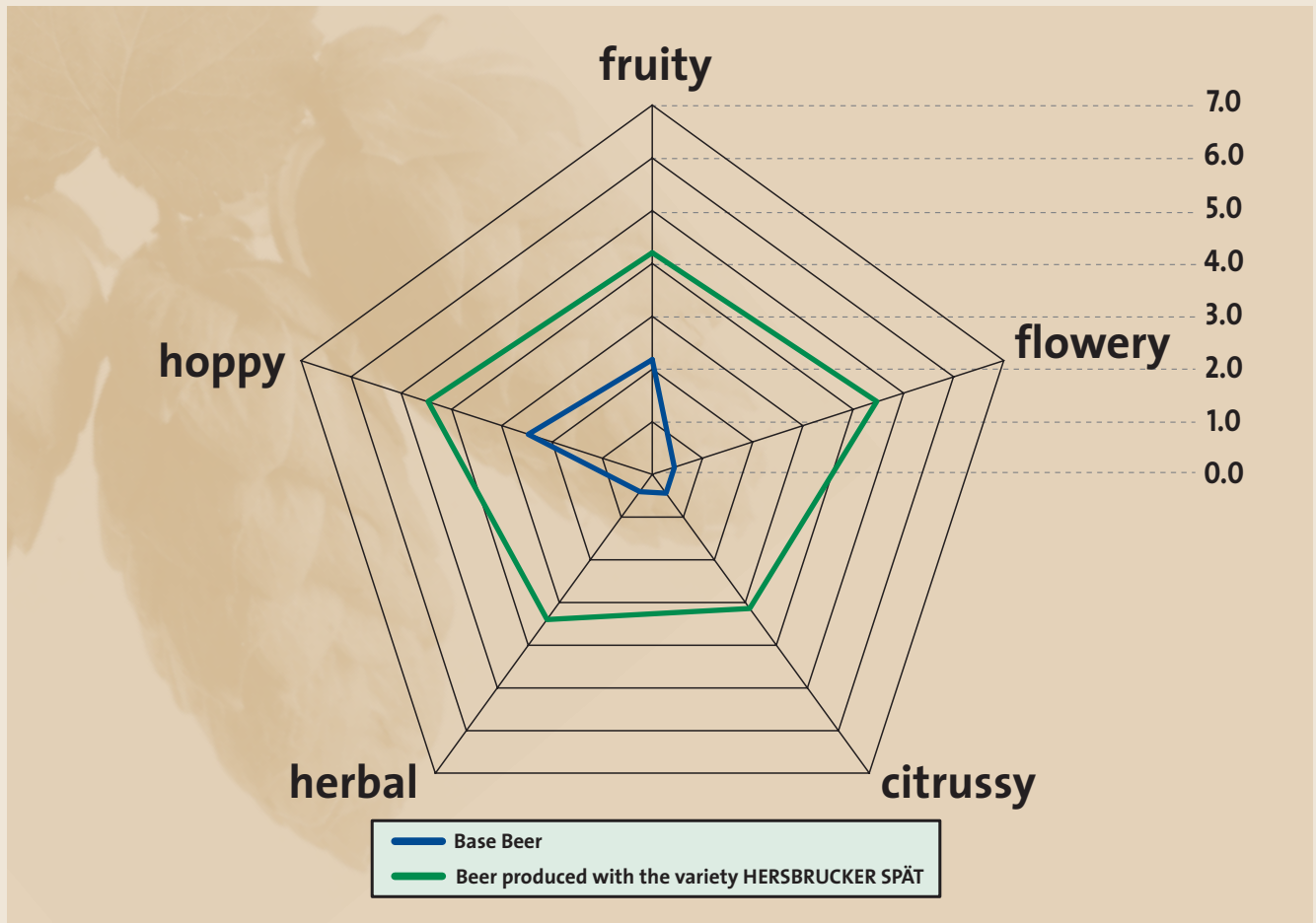
# Brewing trial: Hersbrucker Spät

## 1. Beer Analysis

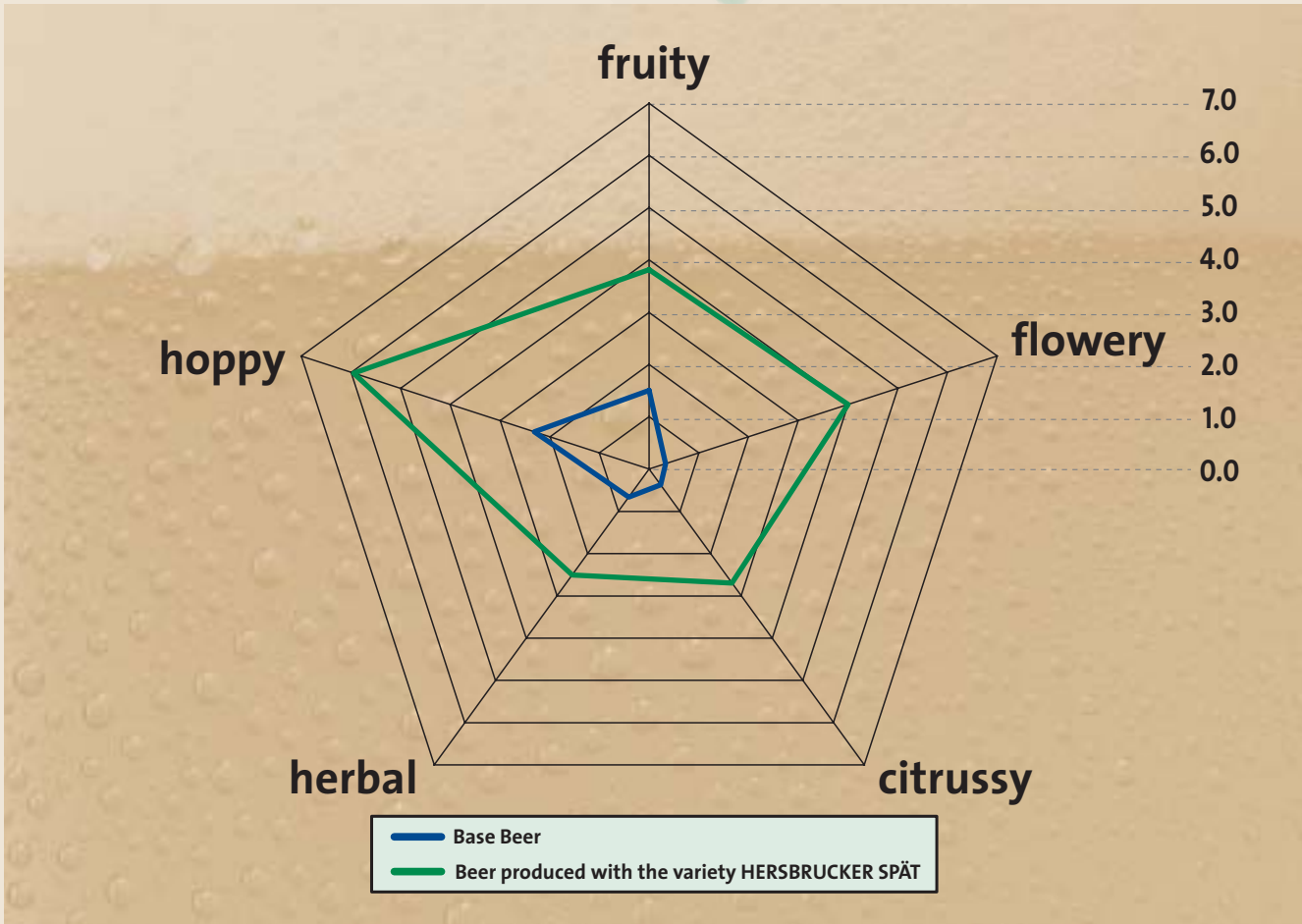
co-isohumulone	5.6 mg/l	iso-xanthohumol	0.49 mg/l
n-isohumulone	13.0 mg/l	xanthohumol	nd*
ad-isohumulone	3.2 mg/l	linalool	104 µg/l
Σ isohumulones	21.8 mg/l	total polyphenols	272 mg/l
bitterness	26 EBC-BU		

\*nd: not detectable

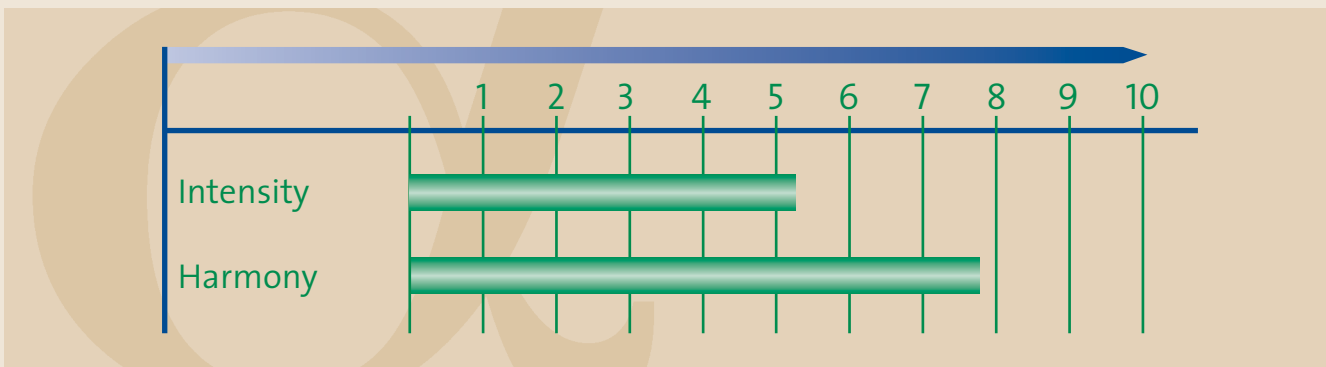
## 2. Sensory Evaluation “Hop Aroma” (Smell)



### 3. Sensory Evaluation “Hop Flavour” (Taste)



### 4. Sensory Evaluation of the Bitterness



The variety Hersbrucker Spät imparts the beer a very harmonic bitterness of medium intensity. The smell is characterized by all the aroma impressions, whereby the flowery, hoppy and fruity impressions are a little stronger. In taste the hoppy aroma is prevalent.