

BEGLEITURKUNDE

Allgemeine Lieferbedingungen der Vereinigung (EWS) Nr. 162/77 vom 20.7.1977,
geändert durch Verordnung (EWG) Nr. 1134/77 vom 10.5.1977.

DEUTSCHER SIEGELHOPFEN

(ein Stück)



SORTIE
Herkules

GRUPPE

NR. BALLEN/BKLOT

GEWICHT IN KG (BRUTTO)

Auflagerolle

ORT

GEN

19

BRUNNEN-VERSAND

BRUNNEN
VERSAND



Herkules

Characteristics

Bitter substances

alpha-acids	12.0 – 17.0 % *
beta-acids	4.0 – 5.5 % *
cohumulone	32 – 38 % ^x
colupulone	52 – 58 % ^x

Polyphenols

total content	3.0 – 4.0 % *
xanthohumol	ca. 0.7 % *

Aroma substances

total oil	1.6 – 2.4 % *
myrcene	30 – 50 % ^x
linalool	0.3 – 0.8 % ^x
beta-caryophyllene	7 – 12 % ^x
aromadendrene	< 0.2 % ^x
humulene	30 – 45 % ^x
farnesene	< 1 % ^x
beta-selinene	0.3 – 0.8 % ^x
alpha-selinene	0.3 – 0.8 % ^x

High-alpha variety

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

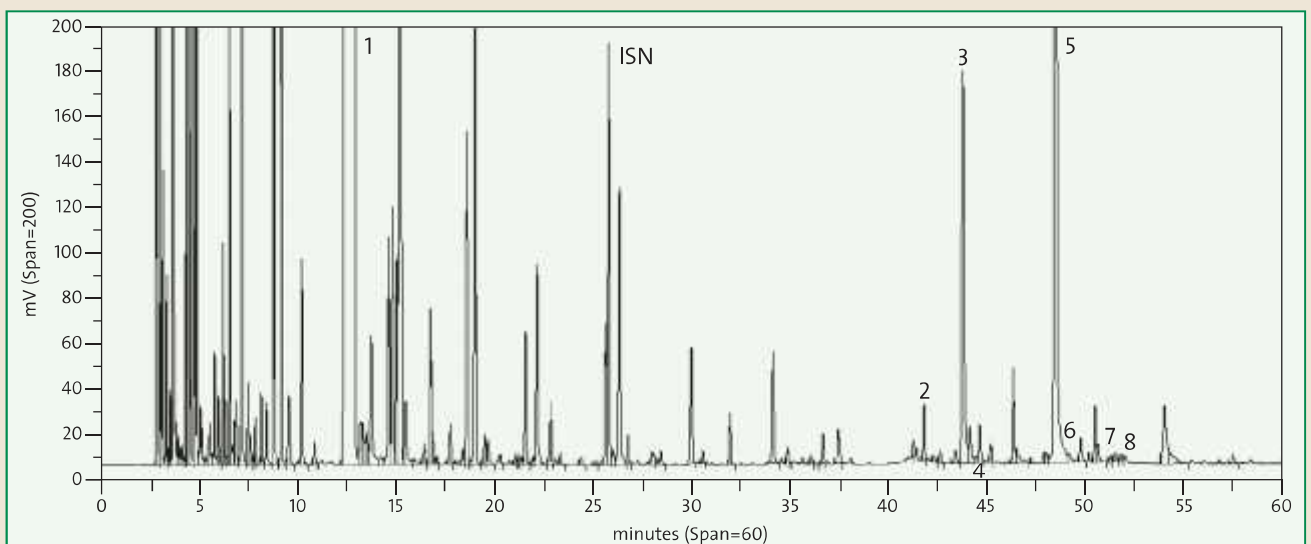
Resistance to disease:

• wilt	good
• downy mildew	good
• powdery mildew	good

Ripening time	very late
Storage stability	good
Average yield	2,300 kg/ha

(*) weight-% – (x) % relative – (°) ml/100g hops

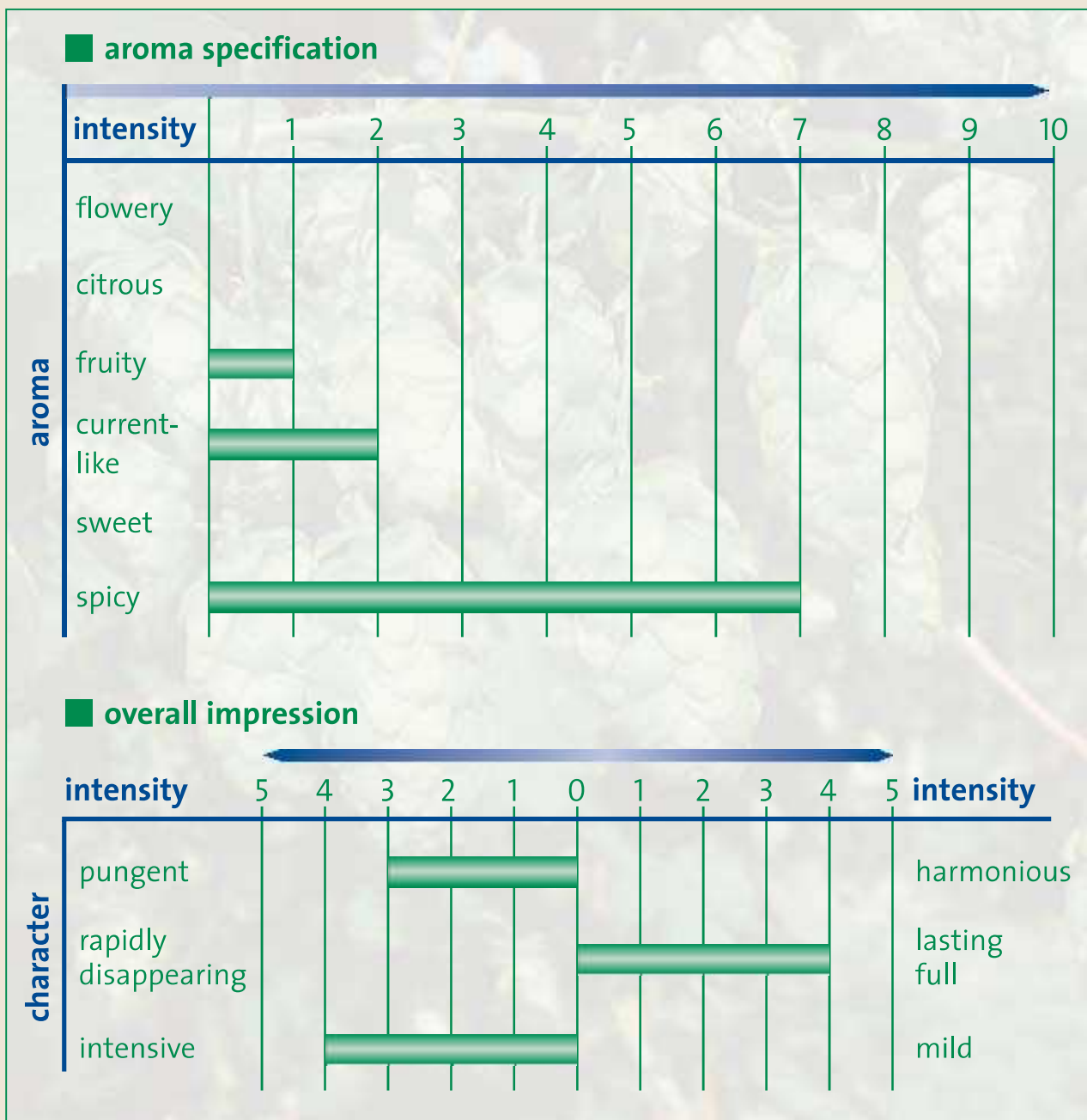
Headspace Gaschromatogramme



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

Herkules

Evaluation



Herkules is a very high-yielding breeding line from the Hop Research Centre in Hüll with very high alpha-acid content.

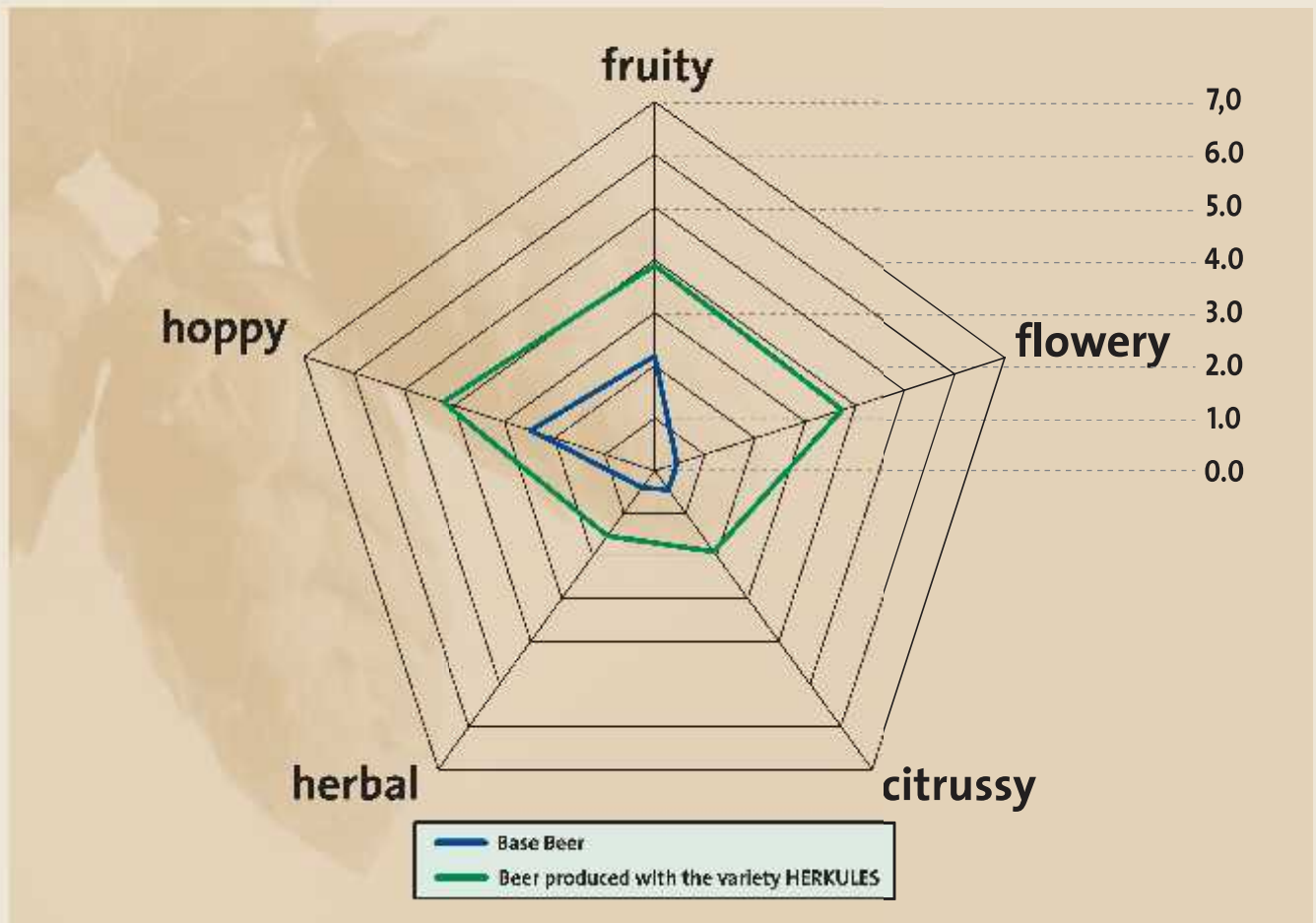


Brewing trial: Herkules

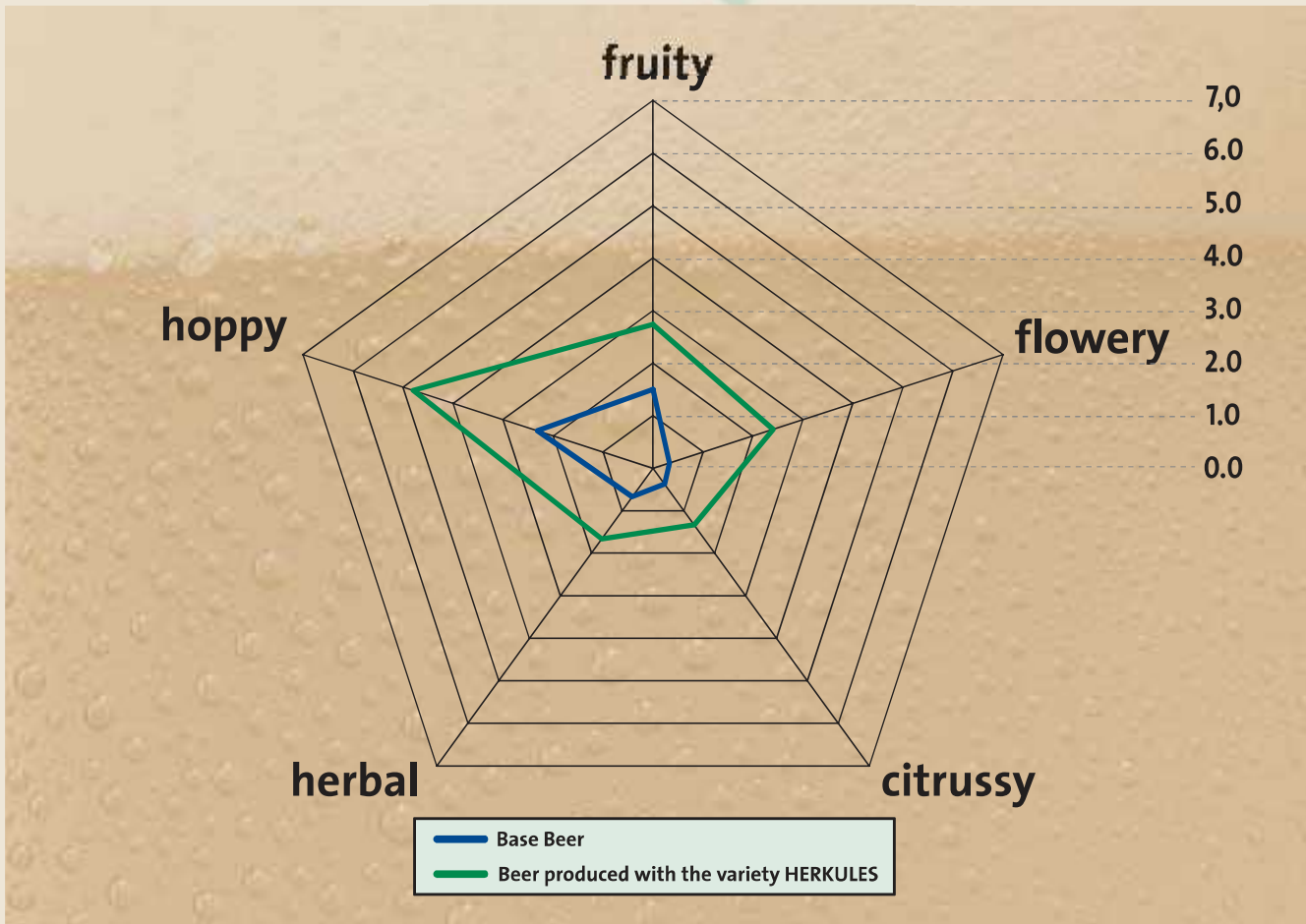
1. Beer Analysis

co-isohumulone	9.0 mg/l	iso-xanthohumol	0.49 mg/l
n-isohumulone	9.8 mg/l	xanthohumol	0.03 mg/l
ad-isohumulone	2.6 mg/l	linalool	23 µg/l
∑ isohumulones	21.4 mg/l	total polyphenols	165 mg/l
bitterness	22 EBC-BU		

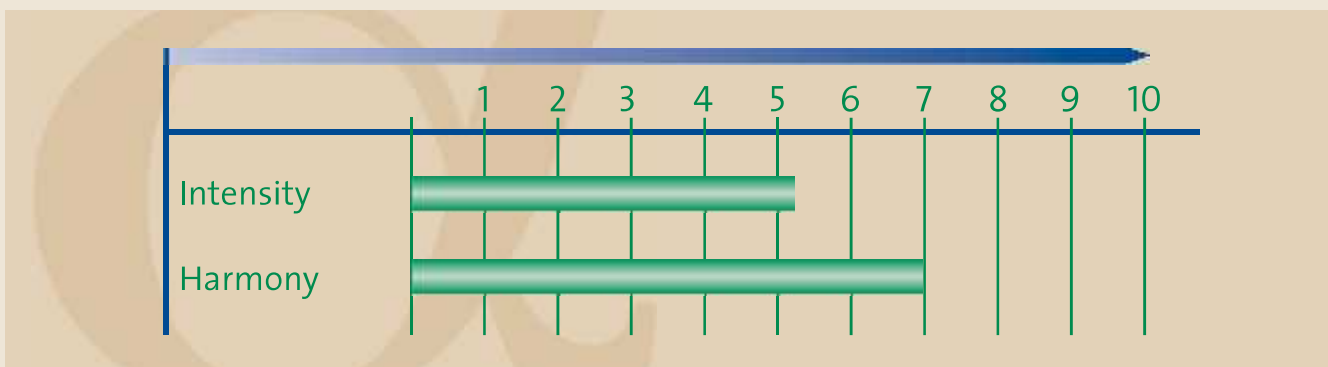
2. Sensory Evaluation "Hop Aroma" (Smell)



3. Sensory Evaluation “Hop Flavour” (Taste)



4. Sensory Evaluation of the Bitterness



The variety Herkules gives the beer a harmonic, not too strong bitterness. It imparts the various aroma impressions evenly and not too distinctly. Only in the taste the hoppy tang slightly prevails compared with the other impressions.