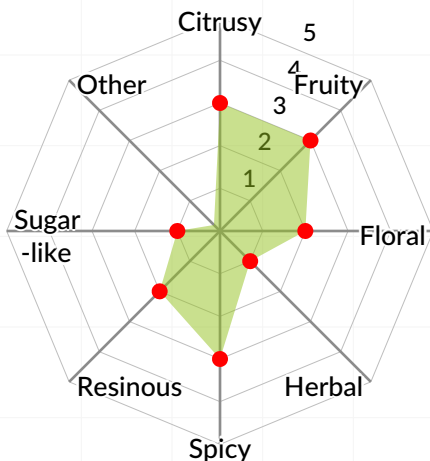


AROMA EVALUATION



VISUAL EVALUATION



AROMA SPECIFICATION

pepper, spicy, resinous, orange

GENETIC ORIGIN

A German high alpha cross variety, bred in Huell.

AGRONOMIC ASPECTS

GROWING

Yield (kg/ha)	2,500 - 2,700
Maturity	Very Late
Main Growing Country	Germany
Acreage (ha)	5759

RESISTANCE AGAINST DISEASES

Wilt diseases	Resistant
Downy mildew	Susceptible
Powdery mildew	Susceptible

CHEMICAL INGREDIENTS

BITTER COMPONENTS

Alpha-Acid %	13.0 - 17.0
Beta-Acid %	4.0 - 5.5
Co-Humulone % rel.	31 - 38
Hard Resins : Alpha-Acid	0.14 - 0.24

POLYPHENOLES

Total Polyphenoles	3.5
Xanthohumol (EBC 7.7)	0.6 - 0.8

AROMA COMPONENTS

Total Oils (ml/100g)	1.4 - 2.4
Beta-Caryophyllene: Humulene	0.28 - 0.30
Farnesene % of total Oil	0.00 - 1.00
Linalool % of total Oil	0.3 - 0.8
Linalool: Alpha-Acid	0.02 - 0.05

HOP ALTERNATIVES

BREWHOUSE

Hallertauer Taurus, Hallertauer Magnum, Hallertauer Merkur

HOPS HOTLINE

800.339.8710