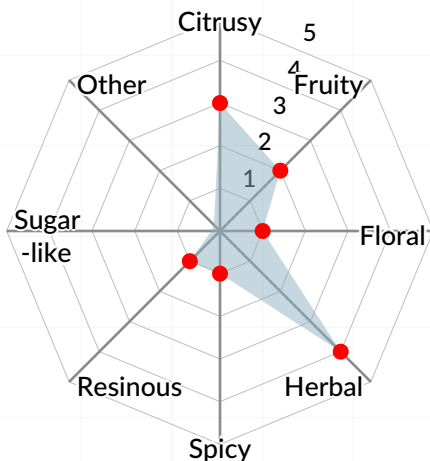


AROMA EVALUATION



VISUAL EVALUATION



AROMA SPECIFICATION

tea, spicy, orange, lavender

GENETIC ORIGIN

A cross between Hallertauer Gold and 75/15/106M originating in Germany, released in 1993.

AGRONOMIC ASPECTS

GROWING

Yield (kg/ha)	1,750 - 2,000
Maturity	Medium Early
Main Growing Country	Germany
Acreage (ha)	2914

RESISTANCE AGAINST DISEASES

Wilt diseases	Resistant
Downy mildew	Resistant
Powdery mildew	Resistant
Aphid	Susceptible

CHEMICAL INGREDIENTS

BITTER COMPONENTS

Alpha-Acid %	4.0 - 7.0
Beta-Acid %	3.0 - 6.0
Co-Humulone % rel.	24 - 30
Hard Resins : Alpha-Acid	0.20 - 0.54

POLYPHENOLES

Total Polyphenoles	4.3
Xanthohumol (EBC 7.7)	0.3 - 0.5

AROMA COMPONENTS

Total Oils (ml/100g)	0.3 - 0.7
Beta-Caryophyllene: Humulene	0.28 - 0.30
Farnesene % of total Oil	0.00 - 1.00
Linalool % of total Oil	0.7 - 1.3
Linalool: Alpha-Acid	0.17 - 0.18

HOP ALTERNATIVES

BREWHOUSE

Hallertauer Mittelfrueh, Styrian Golding (Celeia)

HOPS HOTLINE

800.339.8710