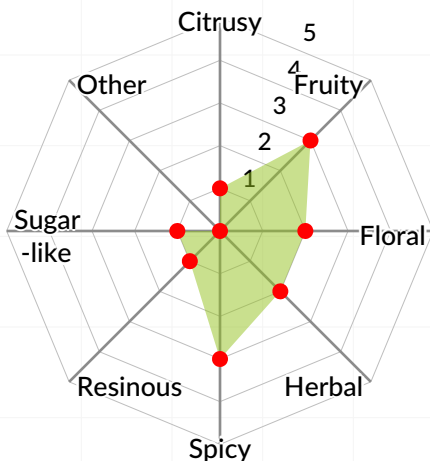


AROMA EVALUATION



VISUAL EVALUATION



AROMA SPECIFICATION

tea, spicy, green fruit, pepper

GENETIC ORIGIN

A German variety bred in Huell resulting from a cross between Northern Brewer and 63/5/27M.

AGRONOMIC ASPECTS

GROWING

| | |
|----------------------|----------------|
| Yield (kg/ha) | 1,550 - 1,950 |
| Maturity | Medium to Late |
| Main Growing Country | Germany |
| Acreage (ha) | 2966 |

RESISTANCE AGAINST DISEASES

| | |
|----------------|-------------|
| Wilt diseases | Resistant |
| Downy mildew | Resistant |
| Powdery mildew | Susceptible |
| Aphid | Susceptible |

CHEMICAL INGREDIENTS

BITTER COMPONENTS

| | |
|--------------------------|-------------|
| Alpha-Acid % | 4.0 - 9.0 |
| Beta-Acid % | 2.5 - 4.5 |
| Co-Humulone % rel. | 29 - 35 |
| Hard Resins : Alpha-Acid | 0.15 - 0.70 |

POLYPHENOLES

| | |
|-----------------------|-----------|
| Total Polyphenoles | 4.1 |
| Xanthohumol (EBC 7.7) | 0.4 - 0.6 |

AROMA COMPONENTS

| | |
|------------------------------|-------------|
| Total Oils (ml/100g) | 0.5 - 1.3 |
| Beta-Caryophyllene: Humulene | 0.30 - 0.33 |
| Farnesene % of total Oil | 0.00 - 1.00 |
| Linalool % of total Oil | 0.2 - 0.6 |
| Linalool: Alpha-Acid | 0.05 - 0.07 |

HOP ALTERNATIVES

BREWHOUSE

Hallertauer Tradition, Northern Brewer, Aurora

DRY HOPPING

Northern Brewer, Aurora, Spalter Select

HOPS HOTLINE
800.339.8710