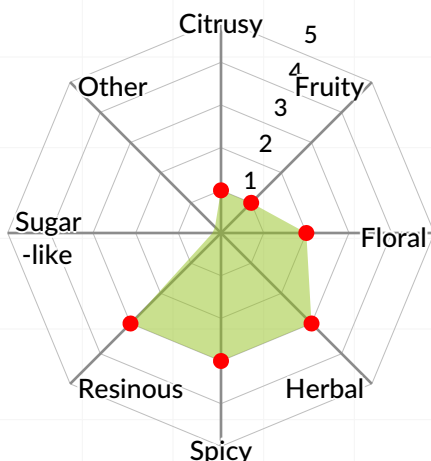


AROMA EVALUATION



VISUAL EVALUATION



AROMA SPECIFICATION

spicy, floral, pepper, black tea

GENETIC ORIGIN

An landrace variety bred in Germany.

AGRONOMIC ASPECTS

GROWING

| | |
|----------------------|---------------|
| Yield (kg/ha) | 1,150 - 1,400 |
| Maturity | Medium Early |
| Main Growing Country | Germany |
| Acreage (ha) | 66 |

RESISTANCE AGAINST DISEASES

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

CHEMICAL INGREDIENTS

BITTER COMPONENTS

| | |
|--------------------------|-------------|
| Alpha-Acid % | 2.5 - 5.5 |
| Beta-Acid % | 3.0 - 5.0 |
| Co-Humulone % rel. | 22 - 28 |
| Hard Resins : Alpha-Acid | 0.24 - 1.11 |

POLYPHENOLS

| | |
|-----------------------|-----------|
| Total Polyphenoles | > 5.2 |
| Xanthohumol (EBC 7.7) | 0.3 - 0.4 |

AROMA COMPONENTS

| | |
|------------------------------|---------------|
| Total Oils (ml/100g) | 0.4 - 0.9 |
| Beta-Caryophyllene: Humulene | 0.28 - 0.30 |
| Farnesene % of total Oil | 14.00 - 24.00 |
| Linalool % of total Oil | 0.4 - 0.9 |
| Linalool: Alpha-Acid | 0.15 - 0.16 |

HOP ALTERNATIVES

BREWHOUSE

Spalter, Saazer, Lubelski (Lublin)

DRY HOPPING

Spalter, Saazer, Lubelski (Lublin)

HOPS HOTLINE
800.339.8710