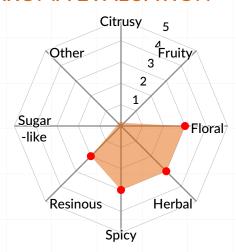
Hopsteiner NORTHDOWN

AROMA EVALUATION



AROMA SPECIFICATION

spicy, floral, pine

GENETIC ORIGIN

Bred at Wye College from a Northern Brewer and a downy mildew-resistant male cross; closely related to both Target and Challenger; released for commercial planting in the early 1970's.

AGRONOMIC ASPECTS

GROWING

Yield (kg/ha) 1,500 - 1,750 Maturity Medium Early

Main Growing Country UK

RESISTANCE AGAINST DISEASES

Wilt diseases Susceptible
Downy mildew Tolerant
Powdery mildew Susceptible

CHEMICAL INGREDIENTS

BITTER COMPONENTS

Alpha-Acid % 6.0 - 10.0

Beta-Acid % 4.5 - 6.5

Co-Humulone % rel. 30 - 32

Hard Resins : Alpha-Acid 0.51 - 0.62

POLYPHENOLES

Xanthohumol (EBC 7.7) 0.3 - 0.4

AROMA COMPONENTS

Total Oils (ml/100g) 1.2 - 2.2
Beta-Caryophyllene: Humulene 0.30
Farnesene % of total Oil 1.00 - 2.00

VISUAL EVALUATION



HOP ALTERNATIVES

BREWHOUSE

Challenger, Northern Brewer, Admiral

DRY HOPPING

Challenger, Northern Brewer, Admiral

HOPS HOTLINE

800.339.8710