

## NORTHERN BREWER:

## Brewer's notes:

Northern Brewer (GR) has a pleasant European aroma profile and its moderate bittering (which is still relatively high for German lagers and pilsners) makes it a nice, dual-use hop. It is very important in the European hops industry due to its verticulum wilt resistance. It has very good storage stability, up to 80% retention after 6 months at 20° Celsius. Widely grown in Germany, even in the Hallertau region.

## Technical data:

Purpose: Bittering & Aroma

Alpha Acid Composition: 7% - 10%

Beta Acid Composition: 3.5% - 5%

Co-Humulone Composition: 28% - 33%

Country: Germany

Cone Size: Medium

Cone Density: Loose to Moderate

Seasonal Maturity: Early to Mid

Yield Amount: 1600-2150 kg/hectare (1420-1910 lbs/are)

Growth Rate: Very High

Storability: Retains 70%-80% alpha acid after 6 months storage at 20

degrees C

Total Oil Composition: 1.6 - 2.1 mL/100g

Myrcene Oil Composition: 30%-35%

Humulene Oil Composition: 25%-30%

Caryophyllene Oil: 8%-10%

Farnesene Oil: 0%-1%

Substitutes: Chinook

Style Guide: Extra Special Bitter