

# CHALLENGER

## VARIETY INFORMATION



### Genetic Origin

Bred at Wye College and released for commercial planting in 1972; it is a granddaughter of Northern Brewer crossed with a downy mildew resistant male and is a 'cousin' of Target.

### Agronomic Aspects

#### Growing

|                      |               |
|----------------------|---------------|
| Classification       | High Alpha    |
| Yield (kg/ha)        | 1,400 - 1,750 |
| Maturity             | Late          |
| Main growing country | UK            |

#### Resistance against Diseases

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

### Chemical Ingredients

#### Bitter Components

|                          |             |
|--------------------------|-------------|
| Alpha acid %             | 5.0 - 9.0   |
| Beta acid %              | 3.0 - 4.0   |
| Cohumulone % rel.        | 27 - 30     |
| Hard resins : alpha acid | 0.24 - 0.27 |

#### Polyphenoles

|             |           |
|-------------|-----------|
| Xanthohumol | 0.2 - 0.3 |
|-------------|-----------|

#### Aroma Components

|                              |           |
|------------------------------|-----------|
| Total oils (ml/100g)         | 1.0 - 1.5 |
| Beta-caryophyllene: Humulene | 0.30      |
| Farnesene % of total oil     | 1.0 - 2.0 |

### Aroma Evaluation (Smell of Raw Hops, 0-5)

|                            |                         |  |  |  |  |
|----------------------------|-------------------------|--|--|--|--|
| <b>Aroma Specification</b> | spicy, green tea, cedar |  |  |  |  |
| Fruity                     |                         |  |  |  |  |
| Floral                     |                         |  |  |  |  |
| Citrusy                    |                         |  |  |  |  |
| Spicy                      |                         |  |  |  |  |
| Earthy / resinous          |                         |  |  |  |  |
| Herbal                     |                         |  |  |  |  |
| Sugar-like                 |                         |  |  |  |  |

### Substitutes

| Brewhouse              | Dry Hopping            |
|------------------------|------------------------|
| Northern Brewer, Perle | Northern Brewer, Perle |

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**Hopsteiner**

COMMITTED TO THE BREWER