

## Herkules – the New Hüll High Alpha Cultivar

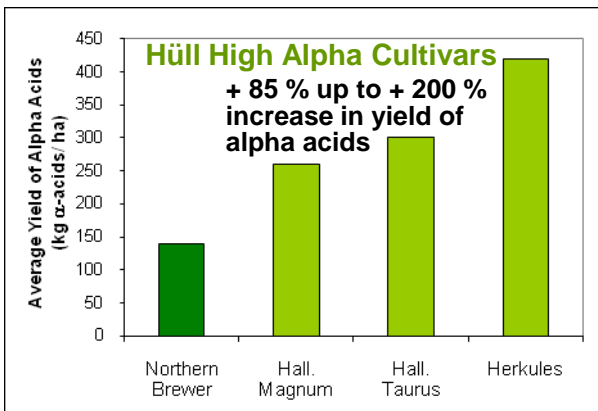
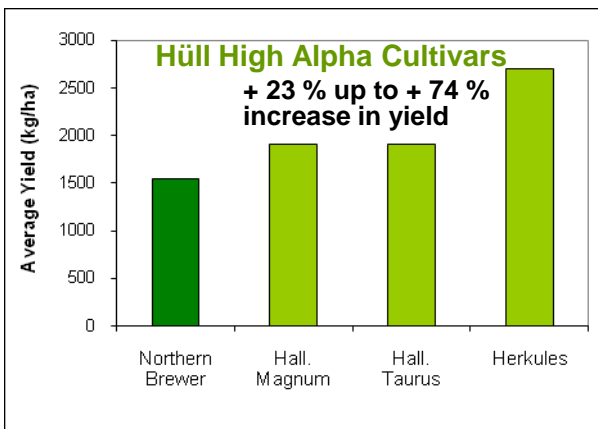
A. Lutz, J. Kneidl, H. Ehrmaier, K. Kammhuber, and E. Seigner

### Introduction

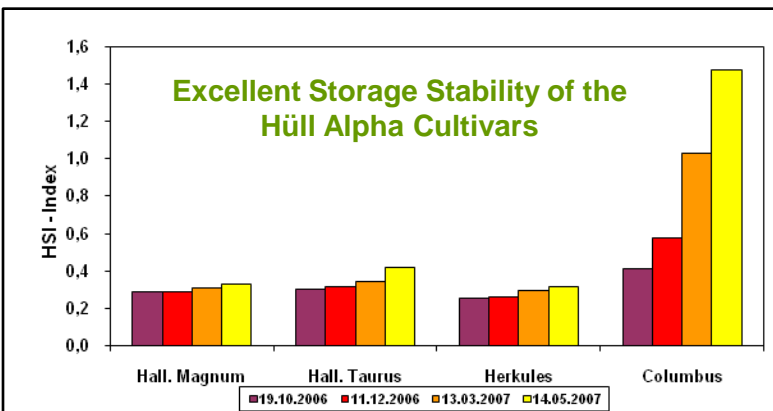
A new robust, high-yielding, high bittering hop cultivar tolerant to various diseases has been released in 2006 by the Hop Research Center Hüll.

### Progress in Breeding

Grown on 1,800 ha in 2008 Herkules proves its impressive progress in breeding for growers and brewers as well. Originating from a cross between “Hallertauer Taurus” x “PM-resistant Hüll male breeding line” the major advantages of Herkules are its stable high yield of 2,700 kg/ha on average and the very high alpha acid content of 15 - 17 % resulting in more than 400 kg alpha acids/ha. In addition, it provides tolerance to downy mildew, *Verticillium* wilt and resistance to several powdery mildew strains as well as improved tolerance to crown rot. Excellent brewing quality combined with very good storage stability increases the value of Herkules for the brewing industry.



| High-Alpha Cultivars | Aroma and Bittering Quality |             |                |                |
|----------------------|-----------------------------|-------------|----------------|----------------|
|                      | Aroma Points                | α-Acids (%) | Cohumulone (%) | kg α-Acids /ha |
| Northern Brewer      | 22                          | 8-10        | 27-32          | 140            |
| Hallert. Magnum      | 22                          | 13-15       | 21-29          | 260            |
| Hallert. Taurus      | 22                          | 15-17       | 20-35          | 300            |
| Herkules             | 22                          | 15-17       | 32-38          | 420            |



Herkules has the potential to safeguard the stable supply of quality hops and increase the competitiveness of German hops on global markets in providing stable, very high yield and alpha acid contents together with broad disease tolerance and superior brewing value.