



HUMULUS LUPULUS

AND OTHER BITTER TRUTHS

The new crop – lots of hops, little alpha acid, inspiring aroma

Dried, pressed into bales and put into storage – the 2019 hop harvest is all wrapped up, and some the hops are already being processed into pellets. The growers can sit back and relax. This year they have harvested roughly 128,800 tons of the green gold worldwide – a record! Not since 1993 has this volume of hops been harvested. This is due not only to the much higher-yielding varieties we have today, but also to world hop acreage which has reached a new peak of 61,480 hectares. In 1993 acreage was quite a bit higher, at 91,121 hectares. It fell below today's level for the first time in 1998 and reached its lowest point in 2013, when it amounted to just 46,140 hectares.

Comparison of the two main hop-growing countries

Comparing the two most important hop producers, Germany saw total hop acreage rise to 20,420 ha in 2019 as a result of modest year-on-year growth of 280 ha, accounted for mainly by the Herkules and Perle varieties, while the USA saw growth of 750 ha, bringing total hop acreage there to 24,000 hectares. The Americans took their biggest leap ahead in the period 2014 to 2016, however, expanding their planted area by more than a third (!) from 15,707 to 21,570 hectares.

The shooting star among the varieties there is Citra. With new planting accounting for 1,073 hectares in 2018, Citra now boasts a total area of 3,656 hectares. In its meteoric rise, Citra has displaced the well-established varieties Cascade and Centennial. As a result, more than half (52 %) of US hop acreage is accounted for by proprietary varieties. In Germany we see quite the opposite picture, with acreage almost exclusively devoted to varieties from public breeding programmes and regional varieties. These varieties also continue to dominate the top five of the world rankings. Herkules, released by the hop research centre in Hüll in 2006 and mainly used for bittering, is the undisputed leader in terms of acreage with over 6,500 hectares. An albeit distant second place

is taken by the Czech regional variety Saaz, followed by Citra (released in 2008) and two other varieties bred in Hüll, Perle (1978) and Hallertau Tradition (1993).

Harvest top, alpha acid flop

In the meantime, alpha acid content is causing concern. In almost all the European varieties it fell below the ten-year average in crop year 2019. Last year produced the fourth crop in the past five years with below-average alpha acid values. As a result, there will be shortages in connection with some varieties, in particular Perle und Hallertau Tradition, in the 2020 brewing year.

What about aroma?

During a two-day workshop at the BarthHaas Campus in Nuremberg, the Sensory Expert Panel assessed cones taken from 49 different hop varieties from the USA, Europe and Australia. According to the findings of their sensory analysis, the aroma intensities in the 2019 crop are very good. Many varieties put on a remarkable display of talent. Perle, for example, presents fruit aromas in an abundance and clarity as yet unknown for this variety. Citra comes up with intense citrus notes that again outperform its berry aromas as they did in crop year 2018. Hallertau Tradition also displays an attractive profile. Here, citrus and wood notes come to the fore in 2019 rather than the green fruits or berries that are also distinctive of its mother Hallertau Mittelfrüh. One thing's for sure, these new intensities are inspiring. We can certainly look forward to encountering the hops of 2019 in the beers of 2020!

The aroma profiles of all the 49 varieties analysed are listed in the Hop Harvest Guide 2019 which will be available for download on the website www.barthhaas.com from January.