





Scientists at the Hutton (and its predecessors) have been involved with barley breeding for decades, working closely with seed developers to **develop new varieties of barley that have delivered significant improvement in yield** and other economically important characteristics.

These improvements have enabled farmers in the UK to **increase the average yield of barley by around a third** from 4.8 tonnes/ hectare in the mid-1980s to 6.3 tonnes/hectare in 2023.



Improvements in genetics and genomic research are rapidly assimilated by **breeders around the world** and advances developed by scientists at the Hutton are now regularly used elsewhere in Europe and increasingly around the world.

The effect of this is apparent in European barley yields, which **increased by around 12% between 2000 and 2023**. Genetic research and plant breeding undertaken by the Hutton has played a major role in this.

It was estimated that around **11% of genetic improvements in barley since the mid-1980s can be attributed to the Hutton**. It is estimated that around £31.7 million of the value of the UK barley crop in 2023 can be attributed to the Hutton.



Between 2000 and 2023, average yields increased from 4.1 to 4.9 tonnes per hectare. In 2023, total European barley production was around 47.4 million tonnes. By applying UK farm gate values of barley, it is possible to derive an **indicative value of this production of around £112 million**.