

# JACOBSEN LIMITED EDITION SINGLE MALT ALE

## — A COLLABORATIVE BREW BETWEEN THREE CARLSBERG DEPARTMENTS

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On top of the Valby hill in Copenhagen, you will find the Carlsberg Research Center – only a stone's throw from the Jacobsen Brewhouse and Visit Carlsberg. The three Carlsberg Group departments are currently working on a project to exploit the best quality properties of a newly developed malting barley from the research center and now translated into an innovative new Jacobsen Limited Edition beer. The recipe is based on a "Single Malt Ale", in which only one type of malt is used, namely that of the new malting barley variety.

The new malting barley variety represents the result of many years of research and development, initiated in the 1980s. The vision was to enhance the beer's freshness and flavor stability, which falls perfectly in line with Brewer Jacobsen's golden words.

The new malting barley is proanthocianidin-free, meaning that the corresponding beer is naturally more stable than that brewed from traditional malt, and therefore without ambiguities referred to as chill haze, that may occur in lager beers. Normal beer is often stabilized by a deep cooling process, to precipitate cold-sensitive proteins and proanthocyanidins, which are removed by filtration prior to bottling. However, traditional beer stabilization is a time consuming process that also takes up hefty amounts of space in the yeast cellars, as it takes quite a long time to cool off the large cylinder tanks. In

addition to this, the process is also very energy-consuming, which means that there is also a sustainability benefit in avoiding this process.

The new barley variety, which has now found its way to the Jacobsen Brewhouse boilers, was grown and harvested on the island of Funen, more specifically at the Banke farm near the Little Belt. The yield was approximately 2000 kilos of barley, which was sent for malting at Carlsberg Development Center's small special malting plant. Of the 1500 kilos of base malt, 150 kilos were taken for further roasting in order to provide a bit more color and flavor to the beer.

The latter part of the process was carried out in the kitchen at the Carlsberg Museum. The procedure is completed by a so-called "in-vivo" mashing, consisting of a two-step process in which the starch of the malted grain is broken down to glucose,





maltose, maltotriose, fructose and sucrose. Subsequently, the malt is heated and roasted to bring out the best flavor and color nuances in the malt. During this process, several Maillard products are formed, adding a symphony of taste sensations described as ranging from toffee, chocolate and roasted coffee. The exciting taste combinations contribute to the finished beer as a cohesive experience across your tongue. In addition, the beer also has a golden bright color and a creamy white head. Product-wise, there is talk of a genuine Single Malt Ale in which all malting barley grains have been grown together in the same 2000-squaremeter field. The grains are malted together and they are caramelized together, providing a genuine Limited Edition not unlike a specialty wine from a single field. On July 31st, the malt was picked up by a horse-drawn carriage at the Carlsberg Laboratory at Carlsberg Research Center and

transported to the Jacobsen Brewhouse. This event was meant to symbolize that Brewer Jacobsen wanted to ensure that beer brewing and an understanding of the chemistry behind mashing and fermentation, as well as the physiology of barley and yeast physiology, was maintained at the highest level possible, simply to guarantee an optimal quality of the finished beer was guaranteed.

The day after, August 1st, the malt was milled and the brewing process could begin. Over the following three weeks, the wort was fermented. Following dry hopping, bottling of the Jacobsen Limited Edition Single Malt Ale took place on August 28th, which completed the ring of the "Single Malt Ale" project.

The new Limited Edition Single Malt Ale from Jacobsen can only be bought in the Brand Store at Visit Carlsberg. 

