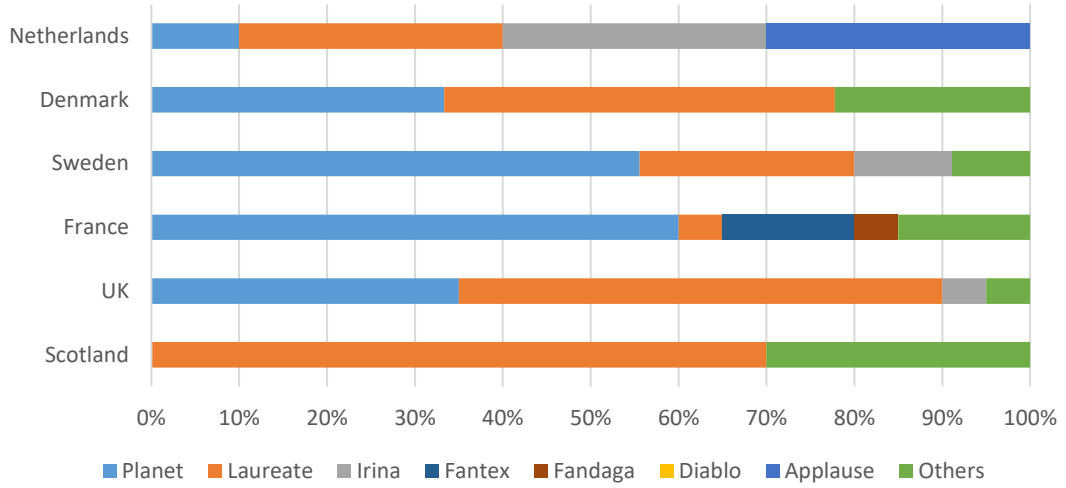
Holland Malt on the fields Insights on crop '22

A wet harvest and mild winter conditions supported a higher acreage of spring malting barley and an early start. Rains during the start of the growing conditions were sufficient on average but were intense and with intervals. Temperatures were relatively high. During flowering period, conditions where dry, no or only very limited infections reported. Further rain showers in June supported the crop before a long dry period started from July till August. Temperatures were high boosting development and speeding up the ripening. As a result, harvest in the EU was early this year and supported by dry and sunny conditions.

Barley variety distribution per country



Protein values throughout our sourcing areas

Region	Protein	Sanitation
France North & East	11-12.5%	Excellent
France West-Mid	10.0-11.0%	Excellent
Netherlands	9-10.5%	Excellent
UK	9.5-10.5%	Excellent
Denmark	9-10%	Excellent
Sweden	9-10%	Excellent
Scotland	8.5-9%	Excellent

"Hereby we present you our first results and overview over the Western European crop of 2022. We have had a warm and dry summer, with excellent harvesting conditions in the main barley regions. The only remarks we need to place here are towards the protein levels. Malting and brewing industries are challenged to a quest to go low! Please have a look at the info, I trust it will be of interest. And of course, please do not hesitate to contact for more information or extra advice.

Stay safe and keep brewing!

Martijn van Iersel"

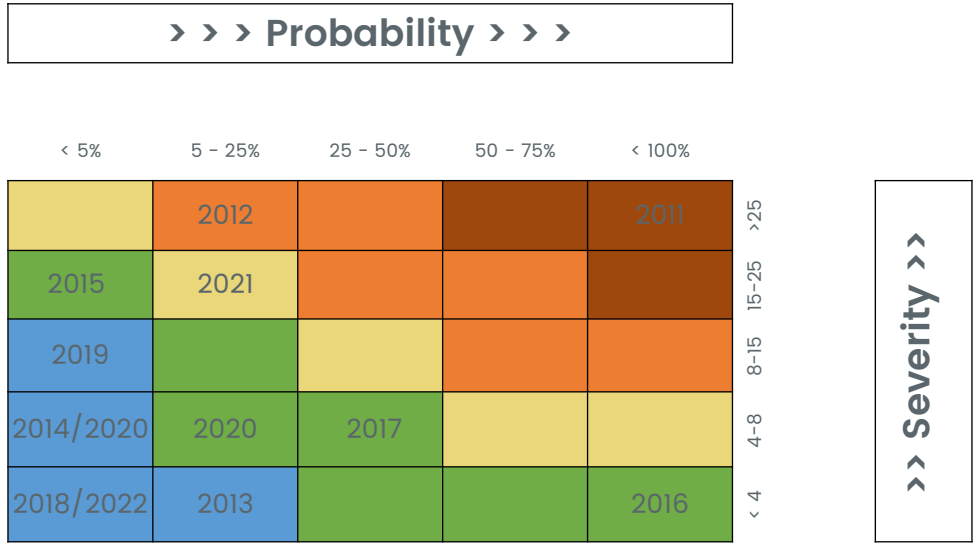
Martijn van Iersel,
Quality Manager Holland Malt

Malthouse insights

Nihil gushing risk

The risk on gushing potential of malt in a specific crop year can be presented with a risk table (see below). The severity with which samples may show gushing potential is depicted vs. the probability (see right). The combination results in a high risk (top right corner) vs. low risk on gushing (bottem left).

Due to dry conditions during spring and flowering and subsequently good ripenings conditions, the disease pressure was low and infections of Fusarium are hardly reported. Barley is healthy. Crop 2022 can be considered safe with respect to gushing tendency.



Typical malt analysis crop 2022

Moisture	4.3	%
Extract	82.4	%
Difference f/c	0.9	%
Protein	9.4	%
Soluble N	624	mg/100g
Kolbach	41.5	%
Hartong 45	37.6	%
FAN	136	mg/l
Saccharificat.	9	min
pH	6.1	

Color	3.9	EBC
Boiling color	5.9	EBC
Friability	92.8	%
PUG	2.2	%
WUG	0.6	%
Filtration time	<30	min
Viscosity 8.6%	1.49	min
ß-glucans	128	mg/l
Final attenuat.	81.6	%

Typical Malt Analysis

A typical malt analysis from current crop. Some dormancy is still present at this time, but level subsides easily. Due to the overall low protein levels, we see significantly higher extract levels.

Brewhouse insights

More information?

Please contact
Martijn via
info@hollandmalt.com

Milling

Check your mill settings. Modification of current crop is sufficient and higher friability levels are observed. Be aware that kernel size is clearly higher. Crushing of the malt should not have to result in any issue.

Gelanitisation Temperatures

High temperatures during the grain filling period have resulted in high gelatinisation temperatues, typically between 64 and 66°C. Luckily, due to low level of proteins, the starch complex is not so much supported by proteins. This will improve the starch degradation.

Mashing Advise

Protein levels are generally low which will result in an overall lower amylase activity. In combination with a higher gelatinisation temperature, ß-amylase activity might thus be limited. Some careful adjustment is needed in order to preserve sufficient ß-amylase activity and secure a sufficient final attenuation level. Furthermore, low protein levels will result in lower levels of soluble protein. Mashing recipe should be looked at in order to mitigate any effects on foam stability.

Fermentation

Be aware of the final attenuation in view of the changes in amylase activity and gelatinisation temperatures . Furthermore, the lower protein levels might impose a risk for lower FAN levels, this might be of interest for those brewing with crude raw materials in addition to malt.

Filtration and Stabilisation

Due to the excellent germination, we see good and complete modifications of cell wall endosperm. Low protein levels will assist the filtration and stabilisation of pilsner beers.