

Explanatory note – committee meeting 29.01.2018:

For a start it is important to emphasize that for industry test varieties the stress test results will ONLY be regarded as additional information. For these varieties it will be the actual large scale industry tests that will be crucial for the further development of the varieties. On the other hand, for the five varieties that are not yet at industry level, the stress test results will be decisive for the approval of going into industry test.

AGRONOMI:

Please find sheet summarizing results from the Danish national trials (SortInfo) regarding yield, kernel quality and disease resistance in the data package. These results should be considered as background information, as the committee only look at the malt / brew quality of the varieties. It is up to the applicants themselves to assess whether the agronomy of the individual varieties justifies further commercial development, and ultimately can realistically justify a multiplication acreage of 750 ha.

MALTING DATA FORM OFFICIAL TRIALS:

See the attached micro malting results for the specific years the varieties have been in official testing (the test is performed at VLB). Looking ahead, there should always be two years of micro malting's from Tystofte on the new Danish Preferred varieties. The Micro malting program for Tystofte-maltings is typically more "gentle" than for stress testing (6 days malting instead 5 days in stress tests).

STRESS TEST:

Performed as micro malting at VLB with samples from Official Trials / Farmer Union Trials from the locations Tystofte, Sejet and Skive. Three steeping degrees have been used: 41%, 43% and 45%. In addition, malting is performed in just 5 days and mashing program as isotherm 65oC. All in all, a rather "rough" treatment of the varieties, especially at steeping 41% the varieties, are pushed to the limit, as is also seen from the low modification and the relatively high viscosity and beta glucan values.

In the word document with figures for the individual quality parameters, upright lines are used to guide the reading and interpretation. The individual lines represent the value of the standard (KWS Irina or RGT Planet) that for the particular parameter has achieved the lowest value. With regard to protein and proteolysis properties, it is usually desired that these parameters is balanced. Therefore, guide lines here are based on the average value of standards.

Index values range from 1 to 5 with low value for best results. For the proteolysis parameters, only 2 and 3 index values are given, as a balance value is desirable. Index 3 is given for values beyond, what is achieved for the KWS Irina and RGT Planet.

Index boundaries are formed in such a way that the difference between the highest and the lowest value is divided by 5 and then evenly distributed on the values 1 to 5. The green and red markings in the document "Stresstest_Indexscheem_Colors" are based on the following guidelines: KWS Irina and RGT Planet is taken as a starting point. The best value for a given parameter, as one of the two standards has achieved, is considered acceptable and is coloured light green. The test varieties will then get the same colour for the same value. A value that deviates negatively by one point from this, is considered neutral and not coloured. A distance of two characters in the negative direction is coloured red – with increasing red intensity by increasing difference. Same principle of green colour - increasing green intensity due to increasing positive deviation.