The Wheat Report

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UK wheat crop

The abnormal weather patterns across Europe this summer have played a major part in the availability and cost of wheat to millers and hence flour to bakers. A dry, hot spell before Easter raised concerns about crop root systems, but by midJune the wheat crop was relatively disease-free and a prolonged period of dry weather in July and August resulted in an early, quick harvest for most farmers. On the downside, the hot weather resulted in rapid grain maturation impacting on grain size and crop yields.

The current NFU estimate of size of the 2003 UK wheat crop stands at 14.6m tonnes i.e. approximately 9% or 1.4m tonnes below 2002. This reduction reflects a) a drop in area sown to wheat (figures of between 5% and 12% have been quoted) b) a reduction in average wheat yields (7.7 tonnes per hectare) i.e. around 4%.

The seed certification statistics show the UK crop again dominated by soft Group 3 wheat with Claire and Consort accounting for over 40% of the seed. Group 1 breadmaking wheat appears to have declined by around 2% with a swing towards higher yielding Group 2 wheat with inferior breadmaking potential but increased market opportunities. These figures would convert to a potential bread wheat supply from the UK of around 4.4m tonnes.

Quality

I am indebted to the HomeGrown Cereals Authority who have provided the following wheat quality data.

On the surface, the 2003 crop appears to be excellent in basic quality terms.

Over the 4- year period 20002003, specific weight data shows an improvement in all nabim groups. The only region exhibiting low specific weight appears to be Scotland and this probably reflects varietal selection as much as environmental conditions. This data suggests that specific weight will not be a major restriction in relation to UK millers' usage of UK-grown wheat in bread flour grists. For the biscuit sector, an average specific weight of 77.2kg/hl indicates that many samples may fail to meet normal intake cut-off of 76.0kg/hl, but the sector is substantially oversubscribed and therefore this does not present a problem.

The average Falling Number for the 2003 UK crop currently stands at 290s with the bread and biscuit wheat (Groups 1 - 3) all averaging above 270s.The nabim Group 1 category, dominated by Malacca a particularly sound variety in this respect, has produced the highest value at 310s. Regionally, little variation is expressed in the Falling Number data except that the South West appears to have produced the lowest values. Thus, the vast majority of wheat destined for the baking sector will be satisfactory in terms of Falling Number.

The average wheat protein content for the 2003 crop currently stands at 12.7% on a dry matter basis; the highest level achieved over the last four years. **nabim** Group 1 varieties, with an average grain protein content of 13.7% on a dry matter basis, clearly outperforms Group 2. The average grain protein content of 13.0%

for **nabim** Group 2 will contain a considerable quantity of wheat that will fail to meet a typical breadmaking protein specification of 13.0%. Export opportunities have also been developed for Group 2 wheat putting greater pressure on the availability of suitable wheat in this category for UK millers.

Groups 3 and 4 wheat shows a significant improvement in wheat protein content in 2003 - a direct effect of reduced yields. The main wheat growing areas i.e. the East, South East and Midlands/Western show high average grain protein content with marked reductions as we move northwards. Thus, protein content is likely to be **the** limiting factor for UK wheat with respect to bread flour.

Looking at individual varieties from the 2003 harvest. it is clear that improvements have occurred across the board. Comparing the performance of the most popular varieties in each category between 2002 and 2003 a consistent improvement is observed in 2003 samples for specific weight, Falling Number and protein content. In summary, in basic quality terms the UK crop appears to be good if less plentiful than usual.

Looking a little more deeply at flour quality characteristics, protein quality does not appear to have improved in tandem with protein content. In terms of bread wheat, the flour produced has shown good flour colour and average water absorption capacity leading to bread that has good volume and crumb structure, but is not exceptional, in quality terms. On the biscuit flour front, flours have exhibited moderate gluten strength (Resistance) and good Extensibility.

Europe

However, the UK has fared better than many of our European neighbours. Overall, wheat production is reported to be down by 13% due to the

heatwave that hit Europe's I wheat growing regio Reduced crop product figures have been reported France, Germany Italy, Sp and across Eastern Europe is the Ukraine. Of particu interest, drastic reductions wheat production (of up to 5(have been quoted for I Ukraine and the French crop one third of EU production) i! least 15% smaller according recent crop survey data at 31 tonnes. As a result there I been some concern that the 1 may be in deficit for the year.

France

Quality reports suggest that 2003 crop is the best for 10 ye and that there will be so surplus of good quality export. Unlike the UK cr breadmaking wheat has been the increase over the last years. The 2003 crop characterised as being acceptable specific weight, high protein content wit mean value of 12.5% excellent Falling Number.

German

The final quality report has yet been issued, but int figures suggest average Ge Grain for 2003 has high F Number and is of high pr content and quality. The av grain ash content of gra relatively low resulting in flour extraction during production of a 550 flour.

Question: Paul Matthews, Sh Under Wychwood You were saying that the protein content in bread wheat, the quality of the protein not go up according, say from 15% we are experiencing a

15% protein wheats but the value isn't you say 2% higher than 13 in effect?

Answer:- I'm always concerned about very high protein content wheats, first of all in the UK it normally means that they are quite shrivelled and that means that a lot of that protein is locked up, its locked up within the grain and you don't access it in functional terms so very high protein content wheats concern me quite a lot but at around the 13-14% what we are seeing is the increase in protein content doesn't have the same rise in protein quality, we are not getting quite as much lift as we would expect, not quite as much in terms of low volume and in terms of crumb structure so we would hope to see a straight line, if we got a line of relationship for protein content like that we would hope to see something

very similar for baking quality, we are seeing a flatter relationship for baking quality.

Question: Ross Warburton

You talked about your concerns around the numbers of No 1 wheats being used, what would have to change to increase that to a level that bakers and millers would be happy with ?

Answer:- First of all I suppose if we are willing to pay a higher premium for a lower yielding product, the other issue would be if breeders could produce a real gold standard that has a yielding capacity of some of the two varieties and in a way a variety like Sion 19 was the herald of that, that sort of variety for the industry, the fact that it is high yielding means that its lower protein content so it doesn't totally fit that niche for the industry and it seems to me

that all breeders are trying to go for the high yielding Group 2 market. If we look at the varieties coming through and if I was to put them out on the table in front of you, you wouldn't pick one out at as the real winner, there's nothing that hits you and you think that that's the equivalent of Hereward, that's what we're looking for as an industry, there are other millers here who assess new varieties but I think they'd agree with me that there isn't a real high standard Group 1 coming through the system at the moment and breeders admit that they are going for that Group 2 category so we need to get that message across to them that that's what the industry needs. We can cope with a certain amount of Group 2 but if the whole market became that we would really struggle I think.