

UKGTN HARVEST REPORT

HARVEST 2020



[Introduction]

As most of you will know, the UKGTN does so much more than just supply ring checks.

Yes we are a ring check provider, however we also standardise the NIR equipment of our full members prior to harvest, downloading updated calibrations and then monitoring the performance of these calibrations over harvest.

In this report we will inform you, our valued members, how this monitoring process went this year, in what were very unusual harvest conditions for everyone involved.

[Contents]

Processes Explained

Timetable of Events

Sample Numbers

Calibration Performance





The Processes Involved

What do we do at Standardisation?

The harvest monitoring process started back in March when we sent out renewal forms to each of our members. Once these were returned the membership for the coming harvest year was finalised and agreed with the equipment manufacturers.

Standardisation samples for barley, wheat, oats and OSR were prepared by the team at Sciantec and sent out to the members who had 'signed up' for the year.

As a side note, it is vital that you sign up in the timescale advised by Paul (Sciantec) as if you sign up late, you may not receive the standardisation samples in time.

On the agreed date, we ask you to run these standardisation samples, with the scan function to save. These scans are then 'picked up' by the equipment suppliers allowing them to standardise your equipment against the sub-masters held at our reference labs. We have previously carried out a comms check with the equipment supplier to make this process smoother.

We do this to try and ensure that your equipment is performing the same as the sub-master and the same as the rest of the NIR equipment in the Network.

This will not make your equipment read exactly the same as everyone else, however it should be within an acceptable range.

At the same time as standardisation the equipment suppliers will also download any calibration updates required before harvest starts.

This normally happens when extra samples are added into the calibrations from the previous harvest, hopefully making the calibration more robust.

The success of the standardisation and calibration download process is monitored by the equipment suppliers, Paul and Vic (Technical Administrator). You may receive emails from Paul or Vic advising that the process has not been successful and ask you to scan again or do a manual sync for example.





The Processes Involved

What do we do at Harvest?

Harvest is a very busy time, I'm sure you will agree; everyone is always extra busy at his time of year. Even in this busy period however the committee members of the UKGTN commit to regular harvest calls to monitor your calibrations.

You can see you is on the committee by clicking on the link below—

<https://www.ukgrain.org/steering-committee>

Samples are received from all over the UK, for all commodities (barley, wheat, OSR and oats). These are analysed with the appropriate reference method and then compared with results generated by the Network NIR equipment. The committee makes a judgement as to the accuracy of the NIR results and if required request a bias adjustment from the equipment suppliers. In this way we ensure that your NIR equipment is reading 'in line' with the given reference method. And after the standardisation exercise earlier in the year, you should also be reading 'in line' with the rest of the UK NIR population.

As a committee we commit to meet weekly to discuss results, however if there is a potential issue or concern we may meet twice a week. Please rest assured that the committee are putting in a lot of time and effort to ensure that your calibrations are performing at their very best.

The harvesting monitoring process started on the 14th of July this year, when we have our first harvest call over Zoom. These continued weekly until the 22nd of September when we had our final call.

We did make a number of changes this year, most of you will have received emails advising you that your calibrations were having a bias adjustment. These are kept to a minimum and only requested if required. As with any process these are not always 100% successful at the first time of asking; so some of you may have received emails from Paul or Vic requesting some action on your part to ensure a successful download.





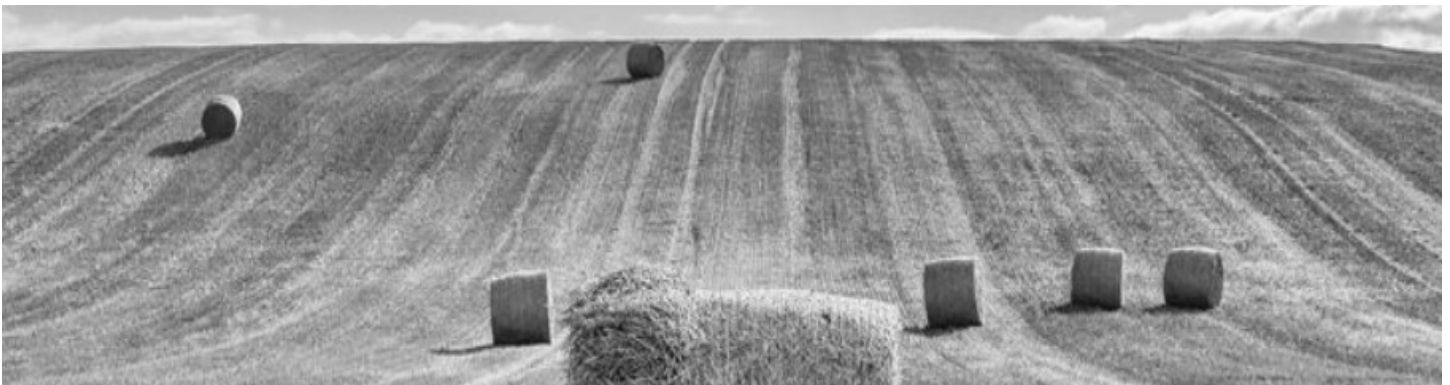
Samples at Harvest

So, what did we analyse this harvest; how many samples did we check?

As a committee we have a more rigorous process for nitrogen in malting barley, where we run what we call the Barley Workbook. For the other commodities and analyses we use the equipment supplier internet portals and also our own spreadsheets.

Below you will see a table noting the amounts of samples analysed to ensure your calibrations were reading correctly throughout the whole of harvest.

Commodity	Analysis	Samples Tested
Barley	Nitrogen	1083
	Moisture	257
	Specific Weight	224
Wheat	Protein	112
	Moisture	112
	Specific Weight	102
OSR	Oil	203
	Moisture	203
Oats	Protein	108
	Moisture	108
	Specific Weight	94





Calibration Bias Adjustments

In harvest 2020 we made a number of bias adjustments for various commodities and across all the equipment suppliers.

Below is a summary of the 13 bias adjustment requests that we asked to be put in place across the UK NIR population—

Commodity	Bias Adjustments
Total	13
Barley	6
Wheat	3
Oats	2
OSR	4

Remember that this is across the whole Network so involved all three of the suppliers of equipment with full membership i.e. Foss, Perten and Infracont.

This was on par with previous years, and on the whole, we had a very successful harvest in terms of monitoring your calibrations. The time and effort was all worthwhile!



UKGTN HARVEST REPORT

HARVEST 2020



[Summary]

I hope this report informed you about the work carried out by the UKGTN committee this year on your behalf. A lot of time and effort has been expelled to ensure that your calibrations are perming at the highest level, comparable to the reference methods for all commodities and all analytes.

If you have any more questions about the process or the Network please email Vic ,the Tech Admin on the address below.
admin@ukgrain.org

[Closing]

As a committee we would like to wish all our members a very Merry Christmas and a prosperous 2021.

