AHDB

AHDB Harvest Report

Report 2-Week 5

Week Ending- 11th August

Prepared by ADAS

Overview

This harvest report has been prepared by ADAS for AHDB Cereals & Oilseeds, using data supplied by regional reporters (mostly independent agronomists). The approach used is consistent with previous years allowing comparison of data and provides a snapshot of harvest progress throughout the harvest season. All harvest reports run from Wednesday to Tuesday – with data reported for the week ending on a Tuesday e.g. WE28 July. A full data dashboard of progress is available here. For comparison with previous years the second week of July, WE14, is referred to in the dashboard as Week 1.

Weather since the last report (WE28 July) and into August was dry and warm, which allowed harvest to progress unimpeded, as soon as crops were ripe and ready for harvest. A maximum temperature of 37°C was recorded in Surrey on the 31st July and August brought with it the hottest August day in 17 years (36°C on the 7th August).

Harvest has continued at pace during the last fortnight (since WE28 July), with just over 1.7 million hectares harvested, bringing the GB cereal and oilseed harvest to 50% complete. Progress over the last week was rapid with almost 720,000 ha cleared. This reflects increased areas of ripe crop and good combining conditions (dry crops, moderate straw levels). During WE4 August, harvest of winter barley and winter oilseed rape (WOSR) was drawing to a close in the South, with farms moving almost straight onto winter wheat harvest. Further North, harvests of winter barley and WOSR started in earnest in WE04 August and progress was rapid, aided by good weather. By WE11 August, harvest of winter wheat had started in most regions and was progressing well in the South with a start also made on the harvest of winter oats. Harvest progress to 11 August can be summarised as:

- **Wheat** – 47% complete, mostly in the East of England and South East, although a start has been made in most regions.
- **Winter barley** – 98% complete, small areas left to harvest in Northern England and Scotland.
- **Spring barley** – 12% complete, most of the area harvested in East of England, South East and South West, little harvested in Northern regions.
- **Oats** – 14% complete – start made to winter oat harvest in Southern England and the Midlands.
- **Winter oilseed rape** - 89% complete, harvest is nearing completion in Southern England and the Midlands, small areas left to harvest in Northern England and Scotland.

The overall picture on yields is that they are well below the high yields achieved in 2019, and also below the long-term average. Yields across all crops are highly variable, with bare patches and thin areas affecting many crops, resulting in reduced average yields. This variability and patchy nature of the crops makes forecasting of yields challenging for this season. Early wheat yields, based on early maturing varieties from the South, are averaging between 7.3-7.8t/ha. The five-year average is 8.4 t/ha, with yields typically 7-13% below average on these early harvested crops. Current estimated average yields for winter barley range from 6.3-6.6t/ha, remaining below average the 5-year average of 7.1t/ha. Early spring malting barley yields are below average. Current yield estimates for winter oilseed rape are between 2.6-3.0t/ha and continue to be below the 5-year average of 3.5t/ha.

Based on a relatively small number of samples processed to date, winter wheat quality is good with protein in the range of 12-14%, specific weights are between 77-79 kg/hl and Hagberg falling numbers (HFN) between 270-300 seconds. Winter barley quality is acceptable, although with nitrogen contents averaging 1.8% they are on the high side and some crops will fail to make specification for certain malting markets. Oil contents for winter oilseed rape average 44%.

The unevenness of ripening is a concern for many, with a lot of crops throwing out a second set of tillers. The grain in these tillers is still immature, whilst the original main stem and first couple of tillers

have grain that is rapidly approaching, or is already, ripe and ready to cut. This has required some farmers to spray off patches to ensure they are ready for harvest at the same time as rest of the field.

Relatively dry conditions during harvest meant that very little grain required drying, however hot weather and uneven ripeness has meant that conditioning was required for crops going into store to aid cooling down to safe temperatures.

Straw

Baling of straw has continued, with favourable baling conditions across much of England. A high proportion of wheat and barley fields have been baled to date, with the exception of some headlands where there is a lot of green material. The hot and dry weather conditions enabled bales to be efficiently stacked and removed from fields where needed. Winter wheat straw yields were variable and required longer drying time for secondary tillers to die out before baling where no glyphosate applied. Water stress in May and the high harvesting temperatures contributed to lower yields and brittle straw.

Wheat

Harvest update

An estimated 47% of GB wheat was harvested by 11 August, with larger areas harvested in the South where winter barley harvest was completed.

Wheat harvest started in earnest in WE4 August, with rapid progress made in the East of England, Southern England and the Midlands. Wheat harvest was only just starting in northern regions during the latter part of WE11 August, as their winter barley and oilseed rape harvests drew to a close. It is mostly early maturing varieties that have been harvested to date, with the later maturing varieties now ripe in the East of England, but still a week or more away from ripeness further north.

By 11 August, harvest was most advanced in the South and East, with 65-75% of the regional areas complete. The Midlands, Yorkshire and North West ranged from 6-50% complete whilst the North East and Scotland had yet to start. Secondary tillering, triggered by the extended dry spell followed by rain, and associated uneven ripening is a common occurrence. Where no pre-harvest glyphosate was applied, this has made harvesting more difficult due to the increased levels of green matter present slowing progress to a certain extent. However, given the plentiful harvest opportunities and the long days available with settled good weather, this has been more of an inconvenience, than a problem. Harvest progress remains ahead of most recent years, but slightly behind the early harvest of 2018 (57%).

Yields

The current yield estimate for winter wheat is 7.3-7.8t/ha, which is below the 5-year average yield of 8.4t/ha. Where crops were drilled early into good seed beds (about 20% of the area), crops were thick and yields were good. However, there are a high proportion of crops that were either patchy due to poor establishment from cloddy seed beds or waterlogging over winter, whilst a proportion (about 20% of the area) of crops were drilled very late (mostly February) and these were often thin (lacking both plants and tillers), having gone into wet seed beds which then rapidly dried out before roots were established.

Current yield estimates are based on early maturing varieties harvested in the South and East of England. Many of the earlier harvested crops are from the earlier drilled crops, which may impact final yields.

The best yields reported to date are in the region of 12.0t/ha, where earlier drilled crops on heavier land were drilled and well established, before the autumn rains hit. Crops on light land were often able to establish better than the later drilled crops on heavy soils. However, where soils were very light, these crops were affected by water stress in the spring suppressing yields slightly compared to normal years. At the opposite end of the spectrum are late drilled heavier fields, where seed beds were cold and cloddy at drilling. Where compaction and subsequent waterlogging was an issue these fields were often patchy, with large areas of crop either absent or affected by low plant and tiller numbers. The waterlogging also led to poor root development and as a result, these crops were further impacted by lack of water in May as the poor root systems were unable to access reserves at depth. In the worst affected crops yields dropped as low 2.5t/ha, especially on second and third wheats. Headlands and areas affected by waterlogging were worst affected and in some fields, these had a complete absence of crop or very low plant and tiller numbers, resulting in a reduction in the overall yield of the field.

Milling variety yields to date are typically in the range of 6.1-8.0t/ha, whilst feed varieties have yielded up to 12.0t/ha, but more typically 5.9-8.0t/ha.

Quality

Quality to date is based on early maturing varieties (predominantly milling varieties) harvested in the South West, South East and East of England. So early into harvest there is a bias towards data from the South and East of GB. Data should, therefore, be treated with caution at this stage of the season. Early milling quality is good, with good specific weights reported, Hagbergs averaging well over 250 seconds, and good protein levels. Overall grain appearance is good, although there are reports of shrivelled grains coming from second and third wheats, especially where secondary tillering was an issue.

Specific weight – Specific weights are variable, with some feed wheats not threshing tops of ears properly and reducing the overall average. Typical range between 77-79kg/hl. In some areas crops were reaching as high as 84kg/hl which has helped to balance out yields on thin crops somewhat.

Hagberg Falling Number (HFN) – Limited data, but early indications are that HFN are typically between 270-300 seconds.

Protein – Protein contents of milling wheats are higher than average with early reports showing 12-14%.

Moisture – Averaging 14% with little requirement for drying. Farmers are typically combining at 15.5% moisture and coming down as low as 12.5% later in the day. Conditioning of grain, blowing cool air through it, has been required to bring temperatures down. Where headlands were affected by secondary tillering, moistures of 18% have been reported, with some farmers choosing to leave the worst affected headlands until last to minimise the moisture content. Glyphosate has been widely used to control late weeds and secondary greening.

Winter Barley

Harvest update

An estimated 98% of GB winter barley was harvested by WE11 August, with about 7Kha left to harvest in Scotland and small areas in the East Midlands and Wales. Harvest progress in 2020 is in line with the early harvest of 2018, which was 99% completed by week 5 (equivalent to WE11 August), but about a week ahead of most recent years.

Progress was rapid in WE04 August with over 100,000 ha harvested. Rate of progress slowed in WE11 August as farms in most regions completed their harvest areas. The settled dry weather conditions in most regions of the UK facilitated rapid and efficient clearing of crops, with plenty of combine hours available each day. The majority of the crops harvested in the last fortnight were from the Midlands, Northern England and Scotland, with Southern and Eastern England almost complete by the end of July.

Yields

The current yield estimate for winter barley is 6.3-6.6t/ha, which is 7-11% below the 5-year average yield of 7.1t/ha.

Winter barley yields remain variable with hybrid varieties typically yielding 8.5t/ha and occasional reports of crops over 10t/ha. However, these are balanced out with crops of below 5t/ha for 2 row malting varieties. In-field variability is common, with some patchy areas where establishment was poor on heavier soils yielding little if anything, whilst better established parts of the field have yielded well. However, the gaps bring down the overall averages. Yields in the Midlands and Yorkshire dropped compared to previous weeks as harvest moved to the remaining areas of crops that were sown late and/or struggled with the wet winter and dry spring. Farm yields to date range from 2.5t/ha

to 10.0t/ha. Conventional 2 row malting varieties are tending to yield 4.2-7.0t/ha, with 6 row feed barley varieties typically yielding 5.5-7.5/ha. The best yields are reported on earlier sown crops that established well, with lower yields on those that were sown later.

Quality

The majority of winter barley was harvested in good weather and as a result the quality of most grain samples is good. However, nitrogen contents of malting varieties are on the high side and may fail to meet UK specifications.

Specific weight – Specific weights are typically in the region of 62-69kg/hl, but remain highly variable with some reports of specific weights as high as 78kg/hl in Yorkshire, typically from hybrid varieties. However, specific weights have dropped to as low as 55kg/hl where light soils became water stressed in May.

Screenings – Typically around 1-7%.

Grain nitrogen (malting varieties) – Average 1.8%. Low yields from later sown crops are linked to some high nitrogen contents – ranging from 1.5-2.1%. Some crops in the East are recording nitrogen contents at around 2.0-2.2%. These nitrogen levels are outside most UK malting specifications (<1.65% for distilling, <1.75% for brewing).

Moisture – Moisture contents averaging at 15%, with little drying required, some blowing of grain at night was required to reduce grain temperatures.

Germination – Reports show germination levels reaching 97% in the North and 98% in the East of England.

Spring Barley

Harvest update

An estimated 12% of GB spring barley was harvested by WE11 August.

The start of spring barley harvest began towards the end of WE4 August with occasional crops harvested in the South and East of England. By WE11 August, the Midlands and Wales were also underway with spring barley harvest. Crops in Scotland are still in 'dough' development stage, with some areas of fields looking patchy. Harvest progress is in line with recent years, with harvest of spring barley at 25% in week 5 of 2019 and 17% in 2018.

Yield

Early yield reports are based on a small sample of crops at this stage, mostly from the East, South East and South West. It tends to be the better crops that have been harvested to date. Early indications are that on the heavier, more moisture retentive, land yields have held up well (5.0-7.5t/ha), however, on the lighter soils where water stress was an issue, yields are reduced (4.0-6.5t/ha). Feed varieties are typically yielding about 1t/ha more than malting varieties.

Quality

With such a small area harvested there is very little data available, with bias towards the South and East of GB. Data should be treated with caution at this stage of the season. Quality of spring barley is varied, where grain ripeness is uneven green grains are present in the samples. Grain nitrogen contents are variable with a tendency towards the high side.

Specific weight – Ranges between 64-65kg/hl.

Grain nitrogen (malting varieties) – Between 1.5-2.2%. Grain nitrogen levels are high in the East of England with many samples above 2%.

Screenings – Estimate of 2-9% based on limited data received. Higher screenings reported off lighter soils.

Germination – Very few samples to report from.

Moisture – Ranging between 12-15%. Farmers typically started combining with moisture at 16.1% and coming down to 14.5% at the end of the day some ambient air was required to dry out green grains and those that were above 14% pre-storage.

Oats

Harvest update

An estimated 14% of GB oats (winter varieties) were harvested by WE11 August. Harvest of winter oats began WE4 August in the South and East of England and progressed steadily through WE11 August with small areas harvested in the Midlands and Wales.

This level of progress is ahead of last year (17%), but behind the harvest of 2018 where 57% of the area had been harvested by this point in time. Oat harvest is most advanced in the South East and East of England, with almost half of the regional areas harvested. Most other regions made a start on winter oat harvest by the 11 August, with occasional crops having been harvested as far north as Scotland.

Yields

Early yield data is only available for winter oat varieties which tend to yield higher than spring oats. Yield data is based on a relatively small area of crops harvested mostly in the South West and East of England. Farm yields to 11 August ranged from 2.9-7.5t/ha with some of the best yields to date reported in the East of England. Better yields are from crops sown in October, whereas poorer yields were late sown crops which went into cold and damp seedbeds during winter months.

Quality

There is limited quality data available for oats to date, and that which is available is for winter varieties.

Specific weight – Ranging between 52-55kg/hl.

Moisture – Between 13-16% with very little requiring drying. Farmers starting harvest at 15.4% and coming down to 11.9% on hot days.

Winter oilseed rape

Harvest update

An estimated 89% of the GB winter oilseed rape (WOSR) area was harvested by 11 August.

Harvest continued at pace in WE4 August through to WE11 August, with approximately 100,000ha harvested each week. WOSR harvest is near completion for much of Southern and Central England. The main areas left to harvest remain in Yorkshire (~12Kha), the North East (~16Kha) and Scotland (~20Kha), with just occasional late maturing crops left in the Midlands. Desiccants were applied to most areas of WOSR in Scotland over the last fortnight. These crops will be ready for harvest in the next week. Harvest progress remains broadly in line with the early harvest of 2018, and about a week ahead of 2019.

Yields

The average yield estimate for WOSR is 2.6-3.0t/ha.

This is currently 14-26% down on the 5-year average of 3.5t/ha and was calculated based on those fields that were taken to harvest. There were a high number of fields that were written off (~70-75Kha reported in the May crop report 2020) by the end of May as a result of poor establishment, pest damage (cabbage stem flea beetle, pigeon, slugs) and then poor over winter survival. Yields were calculated based on the total area of the field, and the total production of that field, therefore where there were bare areas, these will have had a negative impact on average yield.

Reported farm yields to date have varied widely; ranging between 0.5-4.7t/ha. Farm yields were dependent on establishment of crops and the proportion of fields that could be harvested. Later sown crops (mid-September) tended to yield better than earlier sown crops as they were less affected by flea beetle. Heavier land that was well drained also produced some of the higher yields. The lowest yields were reported where crops experienced CSFB attacks, resulting in patchy areas, with some yielding as low as 0.5t/ha. In places where establishment was good and CSFB activity was low, crops were able to yield up to 4.7t/ha, mainly in the East of England. There was reports some crops in the Midlands (about <5% of the area) were being flailed and ripped up at harvest, due to crop failure.

Quality

Oil content –Between 43-45% and, averaging 44%.

Moisture –Average moisture content at harvest was about 8%, some drying and conditioning in stores has been necessary where crops harvested above 8% moisture content.

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