



AHDB



# AHDB Harvest Report

Report 3

Week Ending- 20 August 2019

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 reporting weeks run from Wednesday to Tuesday – with data reported for the week ending on a Tuesday e.g. WE20 August. A full data dashboard of progress is available [here](#). This report focuses on the week between 13 August and 20 August.

Conditions over the WE20 August were challenging, with heavy downpours leaving grain too wet to harvest for much of the week. Farmers had to snatch brief windows of opportunity between showers, where crops had sufficient time to dry out. Rate of harvest progress over the last week has decreased due to challenging weather conditions, resulting in just 160Kha harvested, compared to 625Kha the previous week. To 20 August 1.7 million hectares had been harvested, equivalent to 47% of the GB cereal and oilseed area. The main focus of harvesting activities were wheat and winter oilseed rape (WOSR), although those farmers who still had winter barley left prioritised that. Small areas of spring barley and oats were also harvested. Harvest progress to 20 August can be summarised as:

- **Wheat** –31% complete. Most milling varieties harvested in the south. Modest progress made during WE20 August due to showers, with harvest yet to start in North East and Scotland.
- **Winter barley** –98% complete, small areas left to complete in Scotland.
- **Spring barley**- 26% complete, mostly in the East of England.
- **Oats** – 25% complete, start to oat harvest made in northern regions.
- **Winter oilseed rape** -95%, complete in southern and central England, small areas left in Scotland and the north.

After a good start to harvest in WE30 July and WE6 August, the recent wet weather has hampered harvest for many regions. Especially those in the north who were hit hardest by the rain in WE20 August. The West Midlands and Yorkshire experienced high rainfall with around 45mm falling within a period of 42 hours and it has been a wet and slow start to harvest in Scotland. Weather over the weekend became more settled with longer dry periods, with crops dry enough to allow harvest to resume on Monday, especially in the east and south. There were some particularly intensive and heavy rain showers over the period which has led to an increase in lodging in unharvested crops. It is estimated that about 5% of the wheat area, 13% of spring barley and 12% of oats are affected by lodging, with crops in the north affected to a greater extent. The level of lodging ranges from slight leaning, through brackling and broken stems, to areas that are completely flattened. Where crops have lodged flat there are reports of sprouting occurring in the ear.

Wheat yields for those crops harvested before the rain are good, with early yields from southern and eastern England averaging 8.5-9.0t/ha, compared to the 5 year average of 8.3t/ha. Most milling varieties were harvested before the rain and have acceptable Hagberg falling numbers over 300 seconds, those varieties harvested in the last week are showing a slight decline dropping to 280 seconds. Protein levels are averaging 12.8% and specific weights are averaging about 75-76kg/hl.

Winter barley yields are estimated at 7.3-7.5t/ha, which is 4-7% above the 5 year average of 7.0t/ha. The majority of winter barley was harvested before the rain and therefore quality is largely unaffected with nitrogen content averaging from 1.6%. Early harvested spring barley crops have yielded well, with early estimates averaging 5.7-6.1t/ha. The area of oats harvested remains small and is limited to winter varieties. These have yielded well to date.

Winter oilseed rape harvest is almost complete, with just 25Kha left to harvest, mostly in Scotland and Yorkshire. Yield estimates are affected by the loss of crops and bare patches in fields as a result of

weed pressure and flea beetle damage, increasing uncertainty around the final national average yield. WOSR estimated yield is currently 3.0-3.3t/ha, a 6-15% reduction on the 5 year average of 3.5t/ha.

## Wheat

### Harvest update

An estimated 31% of GB wheat was harvested by WE20 August, equivalent to approximately 560Kha.

Most regions have made slow progress since WE13 August with only small areas harvested (~65Kha in total) in WE20 August. The reduced rate of progress puts wheat harvest behind that of the last 5 years, but with most crops ripe and ready for harvest and a good forecast for the week ahead it is possible to make up lost ground. The largest areas harvested so far have been early maturing milling varieties in the south. Harvest priority has been given to milling varieties.

The largest area harvested in WE20 August was in Yorkshire, with an estimated 19Kha harvested over the week. The West Midlands and East of England both managed to harvest over 13Kha, whilst elsewhere just occasional fields were harvested.

Approximately 5% of the GB wheat area has been affected by lodging issues, with reports that the increase has been due to the heavy rains experienced over the last week. The regions with the highest proportion of crops lodged are in the west, with 9-12% of the wheat estimated to have been affected from the South West, right up through the West Midlands and into the North West. In many cases the crop is only leaning rather than completely flat. Grain shedding remains an issue in lodged crops.

### Yield

Early yield data is based on early maturing milling varieties in the south and east of England, from crops harvested before the recent rain events. These early harvested crops had good yields, with most farms reporting above average yields. Based on these early yields, the estimated national average yield currently sits at 8.5-9.0t/ha, compared to the 5 year average of 8.3t/ha. It should be noted that recent rain and harvest of crops in the more northern regions may bring this average down as harvest progresses.

Farm yields have ranged from 6.0-14.5t/ha, typically milling varieties have yielded 6.5-12.0t/ha whilst feed varieties have yielded 7.5-12.5t/ha, with the occasional report up to 14.5t/ha. The best yields have come from heavier land, whilst on lighter land yields tend to be lower due to early drought stress and loss of tillers.

### Quality

Quality to date is based on a relatively small area harvested with the largest areas in the South West, South East and East of England. The majority of quality data available is also for crops harvested prior to the recent wet weather. These early samples have reasonable specific weights, although the small area of crops harvested in the last week have shown reductions of 3-4 points. For those crops harvested in the WE20 August, drying and cleaning of grain has improved quality somewhat. Reports show that Hagberg falling numbers (HFNs) are meeting specification, with most milling varieties averaging over 300 seconds. In crops harvested in WE20 August, especially in the West Midlands and South West, there are indications that HFNs are starting to fall. Protein levels remain on the low side, typically between 12-13% and has been reportedly due to high yields.

**Specific weight** – Specific weights have been typically good despite the harsh weather with the highest weights seen on heavier soils and lower weights associated with crops that were affected by a lack of moisture during grain fill. Specific weights of the small area of crops harvested in WE20 August were 3-4 points lower than those harvested in previous weeks. Ranges on farm are between 73-83kg/hl with an average of 76kg/hl.

**Hagberg falling number (HFN)** –average 300+ seconds for early harvested crops, whilst those crops harvested in western regions during WE20 August have dropped to about 280 seconds. Occasional crops harvested in WE20 August dropped to 160 seconds in milling varieties.

**Protein** – Protein levels range from 11.5- 13.9%, with milling varieties averaging 12.8%.

**Moisture** – Average weekly moisture content 17%, up from 15% in the previous week. Moisture contents for grain harvested in the WE20 August typically started at 18-20%, and therefore required some drying.

## Winter barley

### Harvest update

An estimated 98% of winter barley was harvested to 20 August, with about 19Kha harvested in WE20 August. There is just c.7Kha left to harvest, predominately in Scotland and Yorkshire. Harvest progress in 2019 remains in line with the early harvests of 2017 and 2018 and about a week ahead of the later harvests of 2015 and 2016.

It is estimated that about 5% of the winter barley area had been affected by lodging, mostly in the form of leaning on headlands and overlaps. However, based on the yield information received to date lodging had little impact on overall yields.

### Yields

The current GB yield estimate for winter barley is 7.3-7.5t/ha, a 4-7% increase on the 5 year average of 7.0t/ha.

Farm yields to date range from 5.7t/ha to 12.0t/ha. Conventional 2 row malting varieties are tending to yield 7.5-8.0t/ha, with 6 row feed barley varieties typically yielding 8.0-10.0t/ha, whilst the hybrid varieties are yielding in the 9.0-12.0t/ha range. The highest yields have been found on malting varieties on heavy soils, where as those yielding lower are on lighter land with thin sands and have been previously affected by drought.

### Quality

The majority of winter barley was harvested in the good weather at the start of the harvest period with most samples meeting quality specifications. Specific weights of those harvested in drier weather have been good, grain nitrogen levels are slightly lower than average allowing for more margin in meeting contract specification. The small volume of grain harvested in the WE20 August, had slightly lower specific weights and higher nitrogen, but most remained within specification.

**Specific weight** – Average 64 kg/hl, typical range of 63-69kg/hl.

**Grain nitrogen (malting varieties)** – Average 1.6, Ranging from 1.4-1.9%

**Germination** – Reports show germination levels reaching 99-100% in the West Midlands and Yorkshire and 94-98% in the East of England and South East. There are occasional reports of pre-germination taking place in lodged crops.

**Screenings** – Typical reports are around 5%, ranging from 2-15%. The higher screenings were reported in Scotland where crop canopies were dense.

**Moisture** – As most winter barley was harvested in drier periods in WE13 August few crops required drying. Moisture contents averaged 15%. The small area of crops harvested in the last week came in at higher moistures of 16-20% and needed a small amount of drying ready for storage.

## Spring Barley

### Harvest update

An estimated 26% of GB spring barley was harvested by WE20 August, equivalent to approximately 180Kha.

Rate of harvest progress dropped off significantly in the last week in response to unsettled weather and prioritising other crops. As a result just 17Kha were harvested in the WE20 August. At 26% complete, spring barley harvest remains ahead of most recent years, although slightly behind the early harvest of 2018 where 33% of the area had been harvested at this time.

The recent heavy rainfall has led to increasingly widespread lodging issues, with an estimated 13% of the national area affected. The highest proportion of lodged crops is reported in the South West where c.26% of the area is affected. As with other crops the severity of the lodging is variable ranging from leaning crops, through to brackling and to crops laid flat. Where crops are laid flat this has led to challenges with harvest.

### Yield

Early yield reports are based on a small sample of crops harvested mostly from the South West and East of England. Early yields prior to the recent rain are tending to be above the farm average in the West and close to average in the East.

Farm yields to 20 August have ranged between 5.0-10.0t/ha, with malting varieties yielding 6.5-8.0t/ha and feed varieties are reportedly reaching 10.0t/ha. The lower yields have been reported where crops have experienced brackling, the highest yields are typically on heavier soils.

### Quality

With such a small area harvested to date there is limited quality data available. With bias towards the south and east of the UK, data should be treated with caution at this stage of the season. Quality of early harvested grain tended to be good, but there are indications from the small area harvested in WE20 August that quality has deteriorated slightly due to wet conditions and lodging of crops.

**Specific weight** – Average 64kg/hl, typical ranges between 62-68kg/hl.

**Grain nitrogen (malting varieties)** – Average 1.6%, typical range 1.3-1.7%

**Screenings** – Average 3%, ranging from 1-6%, with higher screenings reported in the South West.

**Germination** – Ranging between 96-98% based on early reports from the south.

**Moisture** – Weekly average of 17%, compared to 15% the previous week. Typical moisture contents of crops harvested in WE20 August were 16-19% and crops dried well where lodging was not an issue. Small amounts of drying were required on those crops harvested in WE20 August.

## Oats

### Harvest update

An estimated 25% of GB oats were harvested by 20 August, equivalent to approximately 45Kha.

Rate of progress in the WE20 was slow, with just 14Kha harvested during the week as a result of the unsettled weather. At 25% complete, this level of progress is behind most recent years with typical progress at this stage in August closer to 40% complete. Oat harvest remains most advanced in the South West and East of England with 48-57% of the regional area harvested. Other regions have continued with winter oat harvest with Yorkshire harvesting 20% by WE20 August.

The recent heavy rainfall has caused an increase in lodging across the remaining oat area, with an estimated 12% of the national area affected. Brackling and leaning are present mostly on headlands and spray overlaps. The South West has the largest proportion of its crop area affected with an estimated 35% of the crop area lodged to a greater or lesser degree. Lodged crops will be a priority for harvest over the next few days to minimise the impact of lodging on quality.

### Yields

Yield data is based on a relatively small area of winter varieties harvested mostly in southern regions. Early yield data is available for winter oats with a small area of spring oats now harvested in the East of England. Farm yield reports are around the farm average and typically range between 5.5-10.0t/ha. The poorest yields have come from spring oat crops where crops were laid flat. Whereas winter oat varieties, which were harvested ahead of recent rains, have typically yielded 6.0-7.5t/ha, with occasional reports of yields up to 10.0t/ha.

Spring oat variety Elyann has yielded well, with good specific weights.

### Quality

There remains limited quality data for oats, and that which is available is mostly for winter varieties. Specific weights are on the low side, especially where lodging was an issue. Grain shedding remains a concern in crops that are ripe and ready for harvest.

**Specific weight** – Ranging between 45-54kg/hl, with the lowest weights from crops that have lodged flat and brackling has occurred.

**Moisture** – Average weekly moisture content 17%, up from 16% in the week before. Only small areas of oats were harvested WE20 August, but these tended to have higher moistures, of up to 18%, compared to those crops harvested in the previous week. Crops which have lodged have required the most drying.

## Winter oilseed rape

### Harvest update

An estimated 95% of the GB winter oilseed rape (WOSR) area was harvested by WE20 August, equivalent to approximately 500Kha.

WOSR harvest is complete for much of southern and central England. The main areas left to harvest are in Yorkshire (9Kha) and Scotland (10Kha). Harvest progress remains broadly in line with the early harvests of 2017 and 2018 which were both 100% complete at this point, and about two weeks ahead of the later harvests of 2015 and 2016 where harvest was 80% complete by this point in August.

## Yields

Estimating oilseed rape yields remains challenging this year as there are a number of fields with partial or complete crop failures that have been written off in the last few weeks before harvest. These areas are therefore included in the overall area of WOSR that is assessed for yield. Yields are highly variable due to a combination of poor establishment, cabbage stem flea beetle (CSFB) damage and failures in weed control. The current estimated yield for winter OSR is 3.0-3.3t/ha, which is 6-16% reduction on the 5 year average of 3.5t/ha.

Farm yields have remained variable, mainly related to CSFB attacks in the autumn and spring, but failed weed control also had an impact. Farm yield ranges are between 1.2-5.0t/ha, the main difference across the yield range is due to how much was affected by pest damage, with some fields only partly harvested, due to bare patches and gaps caused by pest damage. Lower yields have not been restricted to soil type and have been seen across both heavy and light soils. Those that have yielded well have been the crops least effected by CSFB and pigeon damage. The main concern now is the small areas that still require harvesting as wind and heavy rains have been causing some pod shattering.

## Quality

Oil contents are still being reported as slightly lower than average which has been attributed to the wet weather and pest damage. The lower oil contents have been reported in the South East and East Midlands, with crops in the West Midlands, Northern England and Scotland tending to have slightly higher oil contents.

**Oil Content-** Between 38-47%, averaging 44%.

**Moisture-** The majority of crops were harvested at low moisture contents of 6-9%, with farmers harvesting at night and early in the morning to try and raise the moisture content. However, the small areas of crops that were harvested in the WE20 August saw moisture contents increase to 11-14% at the start of harvest each day, resulting in the requirement for small amounts of drying prior to storage.

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