

## NOTE

This is the fifth harvest report of the 2022/23 season and covers the beginning of harvest up to 23 August 2022. It is produced with data collected by RSK ADAS Ltd and compiled by AHDB. 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.

Grain and seed moistures from many crops are below the standard 14.5% for barley and wheat, and 8% for oilseed rape. Therefore, the reported yields are unadjusted.

## OVERVIEW

Harvest 2022 is now in the closing stages in most regions, with 95% of the total GB harvest complete as at 23 August. This pace exceeds the five-year average of 69% complete by this point in the season (week 7) and is slightly ahead of 2018 which was 85% complete by week 7.

As harvest is now complete in the southern part of England, the overall rate of progress has slowed. In week 7, just under 179Kha was cleared, compared with almost 900Kha in week 6.

The GB **winter wheat** harvest is estimated to be 98% complete, with the majority of the crop that is left to be cut in Scotland.

GB **winter barley** and **winter oilseed rape (WOSR)** harvests were completed in week 5 (w/e 09 August) and week 6 (w/e 16 August) respectively.

As at 23 August, the GB **spring barley** harvest was 81% complete, with 90% of the GB **oat** area also harvested.

Scattered heavy showers affected most regions in the past week, with lower temperatures too. The patchy nature of the rain meant that for many, showers were light or insignificant. Whilst others received sufficient rainfall to pause harvest or baling. However, the extended hot weather from the previous few weeks, meant that grains already had low moisture content. Therefore, grain moisture content was still at a suitable level to harvest once the rain stopped. Some farmers took the opportunity to drill WOSR when the combine was parked up. Many areas across England are in a declared region of drought.

Small quantities of grain have been dried in areas of localised rainfall, with conditioning of unripe grains required by some farmers to meet quality specifications. Hot grain that has needed cooling to ensure safe storage has continued to be a concern for farmers.

Combine fires continue to be a risk for many farmers, with dusty and dry conditions creating a high-risk environment. Water bowsers and tractors with a plough attached remain a common sight, ready to spring into action if a fire ignites.

## STRAW

For wheat, yield is good, but straw is brittle from the prolonged dry weather, proving tricky to bale. Baling has tended to be completed soon after harvest. Although where showers were forecast, some farms opted to chop and incorporate, especially where they already had a good quantity of high-quality straw already baled and stacked.

Winter barley straw has been of variable quality, with some hard to bale due to brittleness from being bleached by the sun and some getting smashed. Straw prices have been noted as lower this year, due to high quantities of clean, dry straw being produced.

For spring barley, straw yields are reported to be higher on earlier drilled crops with better establishment

Oat straw saw good yields from winter crops that had better establishment. Very little green, sappy straw has been noted. Some farmers have opted to chop straw to reincorporate this into the soil to avoid nutrient loss.

## WHEAT

### WINTER WHEAT

#### Harvest update

98% of the GB winter wheat harvest is now complete. This is well ahead of the five-year average of 54% complete by week 7.

Winter wheat harvest is now complete in the South East, South West, Eastern region, West Midlands and North West as at 23 August. Harvest in the North East, East Midlands, Wales and Yorkshire and Humberside is ranging between 94% to 99% complete, while 84% of the winter wheat area in Scotland has been cut.

Small amounts of grain have required drying in regions that saw rain showers in the past week. There have been some reports of ergot. However, these are isolated incidents that occur each year. Optical grain sorters identify affected grains and remove them during processing.

#### Yields

The GB winter wheat yield is currently averaging 8.2 - 8.6t/ha. Yields are varying from 5 t/ha on the light, dry soils to 14 t/ha on heavier soils which retained moisture during the hot and dry weather.

Milling wheat varieties are yielding 6.5 - 12.0t/ha, with feed winter wheat ranging between 5.0 - 14.0t/ha. Again, higher yields have been seen in crops with better establishment in water retentive soil.

#### Quality

The rapid harvest of 2022, with no significant rain holding up progress, has meant grain quality has been maintained throughout. Any changes in quality mostly reflect the variety mix ready for harvest at the time, with many of the better-quality milling wheats harvested first and feed wheat tending to be harvested afterwards. Hagberg falling numbers and specific weights are all good and meeting specification. However, proteins are lower than ideal, with some samples falling below the desired specification for milling wheat. This is often worst on crops where nitrogen uptake was limited by dry conditions at application.

**Specific weights** – Specific weights are good, ranging between 76 – 81 kg/hl on farm, with the GB average currently at 78 - 80kg/hl.

**Hagberg falling numbers (HFN)** - Hagberg falling numbers on milling varieties remain above specification, with no significant reduction seen as later crops harvested. The current average ranging between 275 – 305 seconds. Hagberg falling numbers over 250 are optimum for milling wheat varieties destined for breadmaking.

**Protein** – Protein levels are typically ranging from 12.0 – 13.0%. Where instances of low protein have led to grain rejections, lack of rain to wash in N applications limiting N uptake was likely the reason.

**Moisture levels** – A small amount of grain drying has been required in regions that saw rain showers. Moisture content is varying between 11 - 16%, with slightly higher moistures seen where showers dampened grain. The GB winter wheat crop is currently averaging 13.5 – 14.5% moisture.

## SPRING WHEAT

### Harvest update

Spring wheat yields are ranging between 4.0 - 8.5 t/ha. Lower yields have been a result of poor establishment on lighter soils, where crops became water stressed during the dry spring and summer. This affected grain development and fill. In the Eastern region, very low rainfall from planting to harvest for late drilled crops was noted at 50mm.

Proteins are currently being noted between 12.0 - 13.5%. Small amount of ergot in samples, but it will be removed by the optical sorter when processed.

## BARLEY

### WINTER BARLEY

#### Harvest update

The GB winter barley harvest for 2022 was completed by week 5, with all regions except the North East and Scotland finishing in week 4.

Very little lodging reported, with less than 1% of the GB crop affected.

Limited amounts of ergot have been found in samples from central stores, which has resulted in downgrades to feed. It is unlikely that these levels are higher than previous years.

#### Yields

The yield varied between 6.0t/ha on the lightest, driest land up to 12.5t/ha on the heaviest land that retained moisture. The GB average winter barley yield is 7.2 - 7.4t/ha, which is slightly higher than the previous five-year Defra average for UK of 6.9t/ha.

#### Quality

**Specific weights** – Specific weights are ranging between 65 - 72kg/hl on farm, with hybrids producing slightly lower specific weights than two row varieties. The GB average winter barley specific weight is estimated at 66 - 68kg/hl.

**Screenings** – Screenings are averaging between 2 - 3%.

**Grain nitrogen (malting varieties)** – Reduced N applications due to high costs, combined with dry weather, has resulted in occasional samples recording grain nitrogen levels at 1.5%. However, most samples have been at acceptable levels, ranging between 1.6 - 1.8%. Grain nitrogen is averaging acceptable levels of 1.6 - 1.7%.

**Moisture** – The winter barley crop is averaging 13.5 – 14.5% moisture content. Very little grain has required drying.

**Germination** – Successful germination observed in over 95% of crop. Winter barley germination levels are averaging between 95 – 99%.

## SPRING BARLEY

### Harvest update

The GB spring barley harvest is now 81% complete, as at 23 August. This is well ahead of the five-year average rate of progress of 37% complete, by this point in the season (week 7).

Spring barley harvest is now complete across the Eastern region, South East, South West and West Midlands. Harvest is nearing completion in the North West, Yorkshire and Humberside, East Midlands and Wales. Particularly in the North West and Yorkshire, large amounts has been cleared in the last week. As at 23 August, Scotland was 56% complete and the North East 42% complete. In these northern regions, not huge week on week progress has been seen. This is likely due to other crops being prioritised, as well as the arrival of scattered rains. Though progress in Scotland is well ahead of the five-year average.

Pockets of ergot have been noted in samples across several regions. Ergot can be detected by optical grain sorters and removed at processing.

Price premiums have been reported to be falling due to the volume of high-quality grain available this harvest.

### Yields

The average for GB spring barley yields is currently 5.5 - 5.9 t/ha. As with other crops, the lower yields are from lighter soils which suffered water stress, while the higher yields are from early drilled crops, in heavier soil.

Yields for malting varieties are coming in between 4.4 – 9.0 t/ha, with yields of feed varieties between 4.4 - 10.0t/ha.

### Quality

**Specific weights** - Specific weights are ranging between 63 - 70kg/hl on farm and are meeting specification. The GB average is currently 63 - 67kg/hl.

**Screenings** – Screenings are currently averaging between 1 - 4%.

**Grain nitrogen (malting varieties)** – Nitrogen levels are ranging between 1.4 - 2.1% on farm, within malting specification. The GB average is 1.4 - 1.8%.

**Moisture** - Moisture content is varying between 11 - 15%, with the GB average at 13 - 14%.

**Germination** – The GB average is currently between 95 – 99 % germination.

## WINTER OILSEED RAPE

### Harvest update

The 2022 GB WOSR harvest was completed in week 6 (16 August). This is ahead of the five-year average pace of 91% harvested by week 6 but is in line with 2018 progress.

### Yields

Yields are ranging from 2.1 - 5.2 t/ha on farm, with average GB yields at 3.2 - 3.6t/ha. The highest yielding crops established well in autumn in moisture retentive soil and had minimal damage from pests and/or disease.

CSFB has caused less damage to crop this year and therefore has had less of an impact on yields than in previous years.

### Quality

**Oil content** - Oil content is typically ranging between 42 - 47% on farm, with a GB average of 44 - 45%.

**Moisture** - Very little WOSR has been dried this harvest. Concerns have been around keeping seed cool enough for safe storage and transport, with end users refusing seed above 24°C due to safety concerns. Seed over 30°C has been common this season. Farmers have had to harvest in the early mornings/night for the seed to have a moisture content above 6% to meet specification.

## OATS

### Harvest update

The GB oat harvest is now 90% complete. This is well ahead of the previous five-year average of 43% by week 7. Progress was slower in the latest week, due to a combination of rain, as well as harvest being completed in the Eastern region, South East, South West and West Midlands. The main progress was seen in Scotland, where just over 7Kha was cleared.

Grains are bright with a clean appearance. Low mycotoxins are also being noted in winter and spring varieties, indicating low fungal infection of the oat crop

### Yields

Winter oat yields are ranging between 6.0 - 10.0t/ha on farm, with spring oat yields ranging from 5.5 - 9.5 t/ha. The GB average oat yield is currently 5.1 - 5.9 t/ha.

### Quality

**Specific weights** - Specific weights are coming in between 49 – 61 kg/hl on farm, indicating good quality, dense grains for the higher values. The GB average specific weight is currently 54 – 56 kg/hl. Lower specific weights are seen in crops that have suffered water stress. The high specific weights are generally being seen in winter crops in moisture retentive soil that received adequate nutrition.

**Moisture** – Small amounts of grain has been dried in regions that saw heavy rain showers, or where grains are green and unripe, requiring conditioning. Moisture content is currently ranging from 12 - 15%, with the average currently 13 – 14%.