AHDB Harvest Report

Report 1-Week 3
Week Ending- 28th July
Prepared by ADAS
Overview

This harvest report has been prepared by ADAS for AHDB, 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 towards the end of June and into July started settled and dry. Conditions became a little more unsettled in mid-late July, but showers were rarely enough to cause significant disruption to harvest progress. There were sufficient periods of dry weather available to allow the relatively small areas of crops that were ready to be harvested to be cleared as planned.

Harvest started in WE14 July with small areas of winter barley and winter oilseed rape (OSR) harvested in the South and East regions. Increasing areas were harvested throughout the month as harvest progressed in these regions and crops in the Midlands and Yorkshire ripened ready for harvest. An estimated 55% of the GB winter barley area and 46% of the GB winter oilseed rape areas were harvested by 28 July. Where farms had completed winter barley and oilseed rape harvest, there were occasional reports of wheat fields being harvested (<1% total area). Harvest progress in these early stages is ahead of most recent years. The exception to this was the early harvest of 2018, where 76% winter barley and 60% winter oilseed rape was harvested by the end of July.

Yields of both winter barley and winter oilseed rape are highly variable, both within and between farms. The 2019/20 planting season has presented real challenges to crops, starting with dry conditions for oilseed rape and early winter barley establishment. This was followed by an almost overnight switch to exceedingly wet conditions from mid-autumn through to the end of winter and then a very dry period during the spring. This challenged the establishment and over-winter survival of many crops and when coupled with high pest pressure in oilseed rape led to numerous crop losses. Many crops that did survive had poor plant counts and in the case of winter barley, low tiller numbers. As a result, the expectation was that yields for the season would be negatively affected, especially where parts of fields were lost. The early indications from the winter barley and oilseed rape crops harvested in the South and East have borne up these concerns, with most farms reporting yields below average. Nationally, early yield indications show that winter barley yields to date have averaged 6.4-6.8t/ha, this is well below the high yields recorded in 2019 (Defra average – 7.8t/ha), and the 5-year average of 7.1t/ha. Early national harvested winter oilseed rape yields are also well below those seen in recent years, with crops harvested to date averaging 2.5-2.9t/ha. This is well down on the 5-year average of 3.5t/ha.

Indications of quality for early harvested winter barley and winter oilseed rape are based on a relatively small number of samples processed to date. Winter barley specific weights typically range between 63-65kg/hl, although there is a huge amount of variability. Nitrogen contents are in the region of 1.7-1.8%, with some reports up to 2.0%, slightly above the desired average for malting varieties. Early oil contents for winter oilseed rape are in line with those of recent years, typically 43-46%.

Relatively dry conditions during harvest meant that very little of the winter barley or winter oilseed rape harvested to date required drying and growers were able to wait for earlier sown OSR crops to reach optimum moisture levels before harvesting.
**Straw**

High proportions of winter barley straw are typically baled, with livestock use the key target for this straw, and this trend is being seen in 2020 too. Largely dry conditions during harvest to date facilitated baling, with most farmers intending to bale their winter barley straw. However, in line with the reduced grain yields, barley straw yields are lower than normal this year due to crops being thin and short. Where no pre-harvest glyphosate was used, straw required about 48 hours drying time to reduce moisture levels prior to baling.

**Winter Barley**

**Harvest update**

An estimated 55% of GB winter barley was harvested by WE28 July.

Harvest began the WE14 July with small areas of winter barley harvested in the East of England and South East, with the South West, East Midlands, West Midlands and Yorks & Humber beginning to harvest winter barley crops WE21 July.

By 28 July over half of the winter barley area for GB had been harvested (55%), with those in the South nearing completion (up to 97% was already harvested for the South East). A start to harvest had been made in Northern regions, with small areas harvested by WE28 July.

Winter barley harvest 2020 is in line with typical harvest progress, with a start being made in the South during the second week of July, and an increasing rate of progress towards the last week of July as harvest of winter barley neared completion in the South and got underway in the North. The recent change in weather from settled to unsettled has had little impact on harvest plans. Most crops that were ripe were harvested before the rain hit, and with breezy conditions crops dried rapidly between showers.

Where no pre-harvest glyphosate was applied, green tramlines and green grains on late secondary tillers caused a delay to crop ripening and affected the start of harvest for those in Yorks & Humber and the Midlands.

**Yields**

The current yield estimate for winter barley is 6.4-6.8t/ha, which is below the 5-year average yield of 7.1t/ha. This is based on early harvested crops from the South and East of England.

Winter barley yields are proving to be extremely variable. Variation is occurring in-field, with some bare or thin patches where establishment was poor during the wet autumn bringing down averages for the total field. Crops that were drilled earlier in the season managed to establish well prior to the onset of the wet weather and plant numbers were good. However, tillering was affected over the winter. It is estimated that just under 50% of the crop area was drilled after the rain started in early October (see March crop report for details). Therefore crops went into poorer seed beds and had more issues with establishment. These factors have all contributed to reductions in yields compared to previous years.

Where establishment was poor, or in crops on lighter soils negatively affected by the lack of moisture in spring, yields as low as 2.5-4.0 t/ha were reported. However, where crops were established early on heavier moisture retentive soils, hybrid varieties have yielded up to 10.5t/ha.
Quality

It should be noted at this stage in harvest quality data is only available for a small number of crops harvested in the South and East of England, mostly feed varieties. It is therefore expected to change as more crops are analysed. There are no mycotoxin issues to report.

Specific weight – Specific weights are averaging 63-65kg/hl, but are highly variable ranging from 57-67kg/hl. Lower specific weights are occurring on light soils that suffered high soil moisture deficits during the dry spring.

Screenings – Typical reports are around 1-6%.

Grain nitrogen (malting varieties) – Averaging 1.7-1.8%, but with some crops in the East recording nitrogen contents around 2.0%.

Moisture – Moisture contents averaging at 14%, with minimal drying required. Occasional poorer crops, where moistures were slightly high, required a short period of conditioning in stores or a brief run through the drier on low heat.

Germination – Reports show germination levels reaching 98% in the East of England and 99% in Yorkshire.

Winter oilseed rape

Harvest update

An estimated 46% of the GB winter oilseed rape (OSR) area was harvested by 28 July.

Small areas of winter oilseed rape crops were harvested WE14 July, mostly in the East of England. However, the main start of harvest across Southern and Central England got underway in the WE21 July, with about 13% of the national area harvested by the end of the week. During WE28 July, harvest progressed rapidly in Southern and Eastern regions. The majority of the crop area (80-95%) was cleared by the end of the week. At the same time good progress was made in the Midlands, with about 35% of the area cleared and a start was made in Yorkshire.

Good weather and rapid ripening of thin crops means that harvest progress is ahead of most recent years (with the exception of the early 2018 harvest). Crops in the North were only just ready for harvest WE28 July, with large areas destined for harvest in the next few days. Crop maturity was variable, especially in the Midlands. Some fields were harvested on two occasions, with the first part of the crop taken as it ripened and the later ripening section left for a few more days and harvested later. These were crops affected by the weather and cabbage stem flea beetle (CSFB) damage, some of which ended up flowering at two different timings.

Only a small area of crops were affected by lodging, approximately 1%-2%, mostly crops affected by the heavy showers in earlier in the season.

Yields

The average yield estimate for early harvested winter OSR is 2.5-2.9/ha.

This is c.15-30% down on the 5-year average yield of 3.5t/ha. This estimate is based on the early harvested areas in the South and East. Yields are calculated based on those fields that were taken to harvest. There were a high number of fields that were written off (c.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. Of those fields that remained, a good proportion had bare or thin patches, with 41% of winter OSR area deemed to be either ‘very poor’ (15%) or ‘poor’ (26%) in May (as highlighted in the May crop report). 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.

Yields on farm were variable depending on how well the crop established and the proportion of the field that could be taken to harvest. The poorest yields were reported where crops experienced winter waterlogging and CSFB attack, resulting in thin crops with gaps, some yielding as little as 0.5t/ha. In places where establishment was good and CSFB activity was low, crops were able to yield up to 4.4t/ha.

**Quality**

Few samples have been analysed to date as the majority of the area harvested was cut towards the end of WE28 July and therefore results are still being processed.

**Oil content** – Between 43 and 46%.

**Moisture** – Average moisture content at harvest was about 9%, with most samples needing a small amount of drying and conditioning to bring moistures down to 8%.