# Arable Crop Condition Report

# 14 July 2021

# Summary

This crop report covers the crop season from the beginning of April 2021 to the start of July 2021, capturing conditions pre-harvest. It is produced with data collected by RSK ADAS Ltd and compiled by AHDB.

The spring weather saw monthly extremes. Following a cold, dry April, the fourth driest on record, persistent rains in May saw that month return as the fourth wettest recorded. June turned more settled in the beginning of the month. However, cooler, wetter conditions were experienced for many regions later in the month. Indeed pockets of the South East had some very wet days during this period, with double the average rainfall recorded.

# Winter cereals

For the vast majority of winter cereals, conditions are "good-excellent", and look significantly better than in last year's challenging season. While April's dry weather stagnated growth for many, the wet May accelerated many crops through development stages.

Overall, weed pressure is low and has been well controlled by most. Black-grass in winter wheat has been an issue in some regions, particularly where herbicide applications were missed. A strong regional effect has been reported here, with western regions (except the South West) reporting lower issues. Only low incidences of pest pressure are reported across all winter cereals.

Good fungicide programmes have generally kept disease pressure under control, although Septoria severity is higher than normal in most regions – the wet May spreading infection onto the yield forming parts of winter wheat, and slow development delaying fungicide applications.

Some lodging has been reported, with June's heavy rain later in the month resulting in localised issues.

# Winter oilseed rape

Winter crops have overall recovered well from autumnal Cabbage Stem Flea Beetle damage. However, high incidences of the pest in Eastern regions have led to the loss of leading shoots, causing delays to flowering and uneven development across the field.

# Spring crops

The dry April allowed for good drilling progress to be made. However, this dryness has led to pockets of black-grass in spring wheat for some regions. Notably, the prolonged dry conditions in Yorkshire & the Humber after drilling reduced the effectiveness of pre-emergence sprays, leading to some problems. Disease pressure is generally low, although the East Midlands has identified some aggressive emergence of yellow rust and Yorkshire & the Humber is reporting the highest levels of rhynchosporium in spring barley for many years. However, this has been well controlled.

# Crop report

# Weather

April 2021 began settled, but soon turned very cold with a notable number of air frosts – the highest since 1960. Indeed, for the first time since 2012, April was colder than March. Daytime temperatures

did recover towards the middle and end of the month, but it was cold and showery in those closing days. However, these showers were not enough to stop April being the fourth driest since (at least) 1862.

April's unsettled and unseasonably cold weather continued into May. While temperatures rose slightly after the first week, frequent showers or rain continued for most areas. In conjunction, several notably windy days were experienced during this period. It was not until the end of the month when conditions settled down and became much warmer. In a direct contrast to April, May takes stock as the fourth wettest month since 1862.

The first half of June was largely dry and warm. The second half of the month saw temperatures broadly average for the time of year, although there were some cool and showery days. While most areas had a dry month, the South East was very wet, with more than double the average rainfall for some locations.

# **Crop condition**

Crop condition was assessed using the USDA approach. This classifies crops into one of five categories, from very poor through to excellent (details below). The values are given as a percentage of the GB area for that crop, that fall in each of these categories – regional condition scores are available through the Crop Condition dashboard, situated on the <u>AHDB website</u>.

# Crop condition definitions:

Very Poor	Extreme degree of loss to yield potential, complete or near crop failure.			
Poor	Heavy degree of loss to yield potential, which may be caused by excess soil moisture, drought, disease etc.			
Fair	Less than normal crop condition. Yield loss is a possibility, but the extent is unknown.			
Good	Yield prospects are normal. Moisture levels are adequate and disease, insect damage and weed pressures are minor.			
Excellent	Yield prospects are above normal. Crops are experiencing little or no stress. Disease, insect damage and weed pressures are insignificant.			

Milder temperatures towards the end of March allowed spring drilling to begin in earnest and the dry conditions during April allowed most to complete in a timely fashion. Some spring barley planting continued into May in the North West, West Midlands and Scotland.

While dry conditions enabled drilling and good establishment, initial growth was slowed. Winter crop development also stagnated for many due to drier conditions. May's rains allowed soil moisture to be replenished, and development stages to be caught up. However, it also brought with it increased disease pressure. Septoria severity is higher than normal in most regions and the unsettled weather has also caused lodging for some.

As at the beginning of July, 68% of winter wheat was estimated in "good-excellent" condition, up from 63% at the end of March. Only 6% was estimated in "poor-very poor" condition – a significant improvement versus the end of May 2020 (26%). Equally, other winter crops are coming towards

harvest with a much improved picture on the year (see table below). Despite the dry, cold April, May's rains have reduced the percent of winter crops rated "poor-very poor" as at the end-March.

Where crops have been rated "poor-very poor", it is where disease and pest pressures have been more prevalent. In these regions, dry conditions have reportedly reduced the effectiveness of preemergence sprays, or increased rain splash from the wet May spreading infection.

	Very Poor	Poor	Fair	Good	Excellent
Winter wheat	1%	5%	26%	50%	18%
Spring wheat	0%	5%	45%	44%	6%
Winter barley	0%	5%	28%	51%	17%
Spring barley	2%	5%	19%	52%	22%
Winter oats	1%	2%	19%	62%	16%
Spring oats	1%	3%	18%	64%	14%
WOSR	4%	9%	29%	46%	13%

## Table 1: Average crop condition of the drilled area – GB crops

Source: RSK ADAS

# Winter wheat

# Crop development

Overall, 68% of the GB winter wheat crop is rated "good-excellent", with just 6% "poor-very poor". However, there are some regional differences that underpin the headlines. The North East, West Midlands & Wales and the East Midlands are reporting that 84% of the winter wheat falls in the top two condition categories, while the South East and Yorkshire & the Humber state only 54% of their winter wheat to be in "good-excellent" condition. Strong regional effects of Black-grass have been seen, seemingly increasingly problematic in earlier sown crops. In addition, wet weather in May has increased Septoria, with rain splash transferring the infection to yield forming parts of the plant.

By the beginning of July, the majority (76%) of crops were at medium milk; the main exception to this being later sown Scottish crops. The most forward crops are seen in the South West, with 70% at soft dough stage. Pockets of the South East, West Midlands and Eastern regions are also reporting crops at this stage (5%).

# Nutrition

No real issues are identified here. During March, almost all crops received their first nitrogen application. Second applications were largely completed by mid-April, with the dry conditions allowing timely fieldwork.

# Weeds

# Black-grass

Control has been good where residual herbicides were applied pre-emergence and contacts postemergence. However, where these applications were missed, control has been poor with more widespread infestations reported. Specifically, large areas of fields have been affected, rather than just patches and black-grass heads are visible above the crop. The worst areas have been sprayed off with glyphosate. A strong regional effect has been seen with black-grass damage. Western regions (excluding the South West) have seen relatively low incidences. In other regions, especially in early sown crops, issues have been more problematic. For some, the move to spring cropping has helped with the control in certain problem fields.

#### Ryegrass

This is becoming an increasing problem. A growing level of resistance to contact herbicides has been reported, making control challenging. In addition, the prolonged germination this season has reduced the efficacy of residual herbicides.

#### Broadleaves

The cold and dry weather earlier this year meant few broadleaves were present at T1 spray timing. However, the rain in May caused a late flush, resulting in an increase in herbicides at T2. Where these herbicides were applied in line with the flush, control is good. However, where they were applied in the dry, some crops have had flushes of weeds after application. The most prevalent weeds are **poppy, mayweed, groundsel and brassicas**. **Burr Chervil**, reported again this season, is seemingly spreading further. Overall, most weeds are well-controlled pre-harvest. However, where canopies are thin, there are some late flushing weeds becoming established.

#### Pests

Overall, pest pressure is low. *Aphid* numbers are very low, as are *frit flies*, and very little impact has been found. Low numbers of *slugs* have caused very limited damage throughout the season. *Orange wheat blossom midge (OWBM)* levels have also been low. However, there have been occasional hotspots of OWBM reported in the West Midlands.

#### Disease

**Septoria** severity is higher than normal in most regions, with infection present on leaf 2. Occasional spots have also been reported on the flag leaf. Some yield impacts are expected in the worst affected crops. The wet May allowed infection to spread from the lower leaves to the yield forming parts of the plant. In addition, the slow development extended the period between T1 and T2, delaying second fungicide applications. This has allowed the disease to establish on higher leaves. Septoria severity appears to be lower in the North East, with it only appearing in late June.

**Yellow rust** incidence was high, but well-timed, robust fungicide strategies have provided good control. Occasional reports of **eyespot** have been noted, but the incidence and severity of issues are low. Low incidences are also noted for **fusarium** and **stem disease**. In the Eastern region, the wet June and poor early disease control has led to increased **ear disease** being noted in some areas.

# Spring wheat

#### Drilling progress

Overall, good drilling progress and establishment was made in all regions where the soil was sufficiently dry. The majority of crops were drilled in March (or even as early as February for some). Further north, drilling started in March, with the majority of crops going in during April.

#### Crop development

For spring wheat crops, 50% are estimated to be in "good-excellent" condition, although the slight majority (45%) are rated as "fair". Only 5% are pitched at "poor" and none as "very poor". Significant regional differences are noted, with 100% of Scottish crops estimated to be "good-excellent", compared to 25% in the South East – heavy regional rainfall in June in this area having a detrimental impact.

Over half (54%) of the crop has finished flowering; the most forward crops being recorded in the North West, North East and the South East.

#### Nutrition

No problems identified.

## Weeds

#### Black-grass

While no significant problems have been identified, prolonged dry conditions in Yorkshire after drilling reduced the effectiveness of pre-emergence sprays. This has led to some pockets of issues.

# Other weeds

*Wild oats* and *ryegrass* are present in many crops, but numbers have been well controlled. Therefore, only a limited yield impact is anticipated. No significant problems have been identified with broadleaf weeds.

# Pests

Overall, no widespread problems have been identified. In Yorkshire, *orange wheat blossom midge* numbers were high in some crops.

#### Disease

*Septoria* and *yellow rust* have both only been noted at low levels. In some pockets of the East Midlands, some aggressive emergence of yellow rust has been identified.

# Spring barley

#### Drilling progress

The majority of the crop was planted in March and April, though continued into May in Scotland, the North West and the West Midlands. Establishment was good overall. The dry conditions resulted in slow initial growth, though subsequent rainfall has led to rapid progression.

#### Crop development

Spring barley crops are estimated 74% "good-excellent", with only 7% rated as "poor-very poor". Eastern crops are pitched at 94% "good-excellent", versus 55% of Scottish spring barley falling in the same categories. The majority (40%) of crops have finished flowering, with a small (6%) of forward crops hitting the soft dough stage. These are largely located in the South West and East Midlands.

#### Nutrition

No problems were identified.

#### Weeds

No major **black-grass** problems have been identified and overall a good control of grass weeds is reported. Additionally, very limited **broadleaved weeds** have been reported, with good control of them where required. However, late emerging **wild oats** have been widely identified.

In the West Midlands, it is reported that *groundsel* has been difficult to control and becoming a challenge in many parts of the rotation.

#### Pests

Both *aphids* and *frit fly* counts are not reporting numbers above threshold.

#### Disease

Good levels of control are reported for most disease pressures. Only low levels of *rust* are seen this season, as is the case for *rhynchosporium* for most regions. However in Yorkshire, the highest levels of rhynchosporium infection for many years have been recorded, most likely due to the wet May. This has been well controlled where present. Very little *net blotch* has been identified.

# Winter barley

# Crop development

As at the beginning of July, 68% of winter barley crops are in "good-excellent" condition. The strongest crops are in the West Midlands and North East, while Yorkshire & the Humber rated just 48% of winter barley in "good-excellent" condition, with the majority being reported as "fair" (50%).

The start of July has seen 58% of GB winter barley crops at the soft dough stage, with a few forward crops reaching the grain hardening stage. These more forward crops are largely in the South West.

## Nutrition

No problems have been identified.

#### Weeds

Levels of **black-grass** are lower in winter barley than winter wheat – more a result of farmers tending to avoid planting heavily infested fields with winter barley due to a lack of chemical control options. In most regions, where black-grass has been identified, residuals have provided a good level of control. However in Yorkshire, control has been reported as being less effective than expected.

#### Pests

*Frit fly* numbers are very low, as are *aphid* numbers. Only very minor *BYDV* has been seen as a result.

#### Disease

Low levels of **brown rust** are seen where good control has been used. However, greater incidences are recorded where inadequate fungicide programs have been employed and/or susceptible varieties have been grown. **Rhynchosporium** has been kept under control by good fungicide programmes, although occasional pockets of increased severity have been noted on susceptible varieties. **Net blotch** has been well controlled by fungicide programmes, with levels currently low.

# Oats

#### Crop development

At the beginning of July, 78% of winter and spring oats have been rated as "good-excellent". The Eastern region is reporting 91% and 94% of winter and spring oats respectively as "good-excellent" while in turn, the South East is estimating 65% and 55% in the top two categories.

Eleven percent of GB winter oats have reached soft dough stage, with the majority (80%) of the South West at this stage. However, the majority of GB crops (38%) are currently at the medium milk stage.

Later planted spring oats are mostly (45%) showing ears fully emerged. Again, the most forward crops are in the South West, with 50% of the spring oat area at the soft dough stage.

#### Nutrition

No problems have been identified.

#### Weeds

Generally, weed pressure is low. There are limited **black-grass** issues – partly as oats are rarely grown in heavily infested areas. **Wild oats** are present, but the impact has been low. Overall, there has been good control of **grass** and **broadleaved weeds** where good timings of herbicides was used.

#### Pests

Aphid numbers are reported as very low.

## Disease

Disease pressure is low. April frosts and robust fungicide programmes have given good *mildew* control. Incidences of *crown rust* are low and have been well controlled by fungicides. T3 fungicides have been applied, where needed, to prevent late infection.

# Winter oilseed rape

# Crop development

The estimated condition of OSR at the beginning of July was 59% "good-excellent", with 13% rated as "poor-very poor". Yorkshire & the Humber rated 76% of the OSR area as "good-excellent". More challenges have been seen in the South East and Eastern regions, with 36% and 40% of crops reported as "good-excellent" and 30% and 20% (respectively) of area of questionable viability.

All GB crops in all regions are now seeds full size and green.

# Nutrition

No issues have been identified.

#### Weeds

Good weed control is generally present. *Black-grass* is well controlled overall, where adequate herbicide programmes have been used. Problems have been identified in fields where inadequate herbicide programmes have been employed or a weak crop has provided poor competition.

#### Pests

While large numbers of *Cabbage Stem Flea Beetle (CSFB)* were seen in the autumn, winter crops have generally recovered well from the damage – helped by the ample rainfall. However, the high incidence of CSFB in the Eastern region led to loss of leading shoots, causing delays to flowering and uneven development across the field. In contrast, Yorkshire & the Humber have reported their lowest levels of CSFB damage since the neonic ban.

**Aphid** numbers are low and limited incidences of **pollen beetle** have been reported (more so in late flowering crops). Some **seed weevil** problems have been reported in Yorkshire & the Humber and the South East. Also, localised issues from **pigeons** have been seen in more backward crops.

#### Disease

Disease pressures have been low and well controlled. *Phoma* was well controlled in the autumn, leading to low incidence of stem canker at this stage. *Light leaf spot* and *Sclerotinia* have also been well controlled with low incidences reported. Sclerotinia risk has been lower this season, with the cool, dry conditions in early flowering. This allowed most farmers to use a single fungicide application during late flowering for control.

# Contact

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