



PROCAM
AGRONOMY THAT DELIVERS™

Technical Update
April '18

APRIL OUTLOOK

Spring fieldwork may be off to a slow start but plans will need to be in place for key input timings later this month.



Periods of cold and unsettled weather through much of March have reduced the opportunities for fieldwork. Slower crop growth, combined with the trend for later sowings, has produced a wide and variable range of winter cereal growth stages. The result is that the 'TO' timing for many crops will be pushed into early April. This timing is an essential element of the spring agronomy programme. It is an important intervention point for disease control, plant growth regulation and supplementary plant nutrition. This year, more than ever, there is a need in many crops to develop rooting and promote early growth where weather conditions have held crops back.

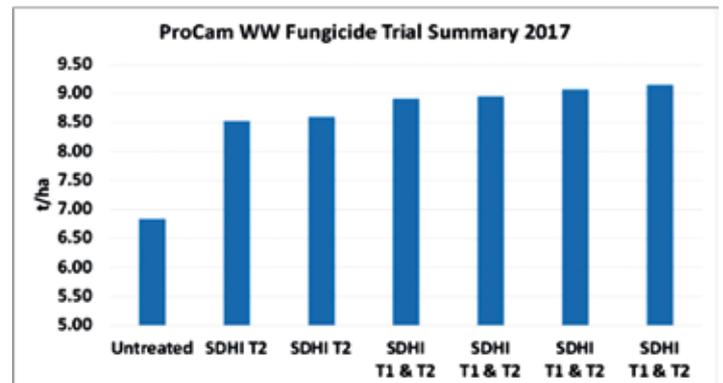
Despite TO applications just going on plans will need to be in place for the 'T1' timing likely to be required in the latter part of April. The T1 timing is targeted at the emergence of leaf 3 and is the critical starting point for effective suppression of septoria. Typically the emergence of leaf 3 coincides with GS 32 or the second node stage.

N.B. In late sown crops, e.g. drilled in late October and November onwards, leaf 3 will tend to emerge at the first node or GS31 growth stage.

The role of triazole fungicides in controlling septoria has been diminished in a curative/eradicator capacity as resistance has developed. The SDHI group of fungicides is still very effective but some further decline in efficacy was seen in 2017 as more tolerant septoria isolates to this group of fungicides were found. For optimum effect and to minimise the risk of developing resistance all T1 septoria fungicide strategies must:

- Target protecting leaf 3 before disease is established
- Include a fungicide mix with different modes of action
- Feature multisite protectant fungicides

There is some debate about using SDHIs at both the T1 & T2 timings. ProCam's fungicide trials in 2017 produced around an extra 0.5 t/ha where an SDHI was included at both timings compared with a single SDHI at T2. As demonstrated in the graph below.



Yellow rust remains an ever present threat. The frosts of March will have only slowed, not eradicated rust development. Two new races of yellow rust were identified in 2017. These are now 'colour-coded' to indicate the race's genetic grouping with a number to indicate its ability to cause disease. Many current varieties have shown susceptibility to these new races - red 24 and blue 7.

Fortunately, there is no resistance in the rust population to the triazoles and many of the SDHI and strobilurin fungicides are also effective rust options. Later sowing may reduce the eyespot risk but over 80% of wheat varieties on the recommended list have a rating for eyespot of 5 or less. The T1 timing is the last opportunity for effective intervention on stem base disease and should be remembered when planning the fungicide programme.

Fungicide choice and critically, application timing are essential for optimum disease control and top yields. Your ProCam Agronomist will have all the information and fungicide options to provide treatment solutions appropriate to your individual crops and varieties.

WINTER WHEAT

TAN SPOT 2018



In 2017 the DEFRA wheat disease survey of 250 commercial wheat crops revealed that the third most common disease was tan spot - *pyrenophora tritici-repensis*, found in 12% of crops inspected.



Tan spot is more common in Europe but is more frequently being found in UK crops. It overwinters as seed borne mycelia or as pseudothecia on crop debris. Rain splash moves infecting spores up the plant infecting and re-infecting leaves as they emerge. Key risk factors are minimal or non-inversion tillage and long periods of wet weather from GS32 onwards.

The typical eye-shaped leaf spots, which are easily mistaken for septoria tritici and nodorum, tend

to occur later in the season. A short latent period means this disease can potentially be a problem if wet weather intervenes between the T1 & T2 fungicide timings. Most of the triazole and SDHI fungicides that would be used in the course of a typical fungicide programme have good to excellent activity on this pathogen, although some resistance to strobilurins has been detected in Europe. A robust well-timed fungicide strategy should cope with tan spot very effectively but close monitoring will be needed, especially in a wetter season.

CEREAL APHIDS

FORECAST SPRING 2018



The AHDB have published their forecasts for cereal aphid activity this spring. Winter temperatures have surprisingly fallen in line with the long-term average throughout most of England. Consequently, first aphid flight was predicted as 'normal'. The forecasts are based on the mean temperature in January and February, because over the last 50 years or so this shows the strongest correlation with the timing and size of aphid migrations. The temperatures in January and February appear to reset future aphid activity each year with temperatures in November/December or March/April having little apparent impact. The outlook for this spring is therefore that unless weather conditions are wildly abnormal during the rest of spring aphids will fly around the middle of the range of dates they have done historically - possibly slightly later in the north of England.

OILSEED RAPE

SCLEROTINIA 2018



After recent cold snaps in March it seems almost incongruous to issue reminders about sclerotinia but oilseed rape crops will move quickly on as warmer temperatures return. Many will be in flower in the latter half of April. Sclerotinia monitoring to assess the 'germination' of buried sclerotia and spore release is already underway. Currently the risk is low but crops will need close monitoring as infection can occur from the yellow bud stage. Weather-based alerts for infection risk may be triggered in mild weather spells at the time when some crops have started flowering. Fungicides are only protectant in activity and will need to be applied before an infection alert to achieve good control. The AHDB monitoring webpage gives specific risk alerts for 15 monitored sites. Please see: <https://cereals.ahdb.org.uk/monitoring/sclerotinia/sclerotinia-risk-report.aspx>.

Also available is the BASF sclerotinia risk reporting, which will be weekly and is based on sclerotial germination and petal testing at 7 monitor sites. Please see: <https://basfrealresults.co.uk/osr/>.

POLLEN BEETLE UPDATE



While oilseed rape crops remain in the stem extension to green bud stage they are potentially vulnerable to attack from pollen beetle. The AHDB have recently concluded a project into developing an integrated pest management (IPM) strategy for pollen beetle and to refine guidelines for their control. Overall the project has demonstrated that pollen beetle numbers are rarely damaging. It has also shown that current thresholds and monitoring methods are a good base to set up an IPM strategy for pollen beetle that reduces unnecessary insecticide applications. Details of the project can be found at: <https://cereals.ahdb.org.uk/27653.aspx>.

Resistance to pyrethroid insecticides continues to develop in the pollen beetle population. Alternative insecticides are available but these should only be used if current thresholds are reached. Remember:

- Don't apply insecticides purely for insurance purposes
- Don't spray after flowering starts. The pollen beetles migrate to open flowers away from the buds and become pollinators rather than pests.