



PROCAM
AGRONOMY THAT DELIVERS™

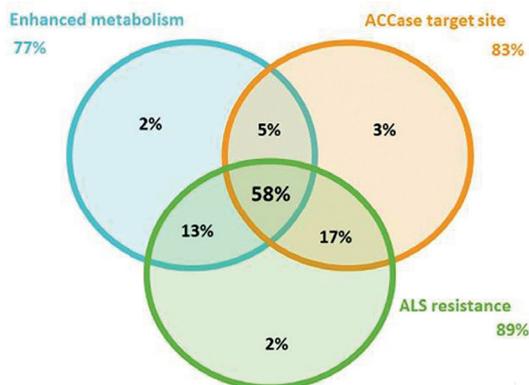
Technical Update
Oct '20

EARLY AUTUMN POINTERS

As October starts the urge to drill increases, but where grass weeds are a major problem a little more patience will bring its reward in better control and cleaner crops.



No doubt inspired by memories of last autumn's problems, cereal drills have been rolling in some parts since early September. Drilling early, before there has been a significant flush of grass weeds, especially ryegrass and blackgrass, may add to the weed burden on the crop and make control more difficult.



The above chart shows that 58% of blackgrass samples tested by ADAS in 2019 showed all three types of herbicide resistance. This implies that the options for successful post-emergence blackgrass control are likely to be limited and places even more reliance on the limited armoury of residual herbicides. A delay to drilling, ideally at least into early October, allows a better chance to spray off early-germinating weeds before the drill goes in.

However, the key benefit from later drilling is that cooler, moister soil conditions are more likely to aid activity of the residual, soil-acting herbicides.

Seedbed quality is also of prime importance; fine, firm seedbeds with minimal clods are needed for optimum activity.

The trend for later drilling has been seen in data collected in ProCam's 4Cast system. From autumn 2010 to autumn 2018 the average drill date for winter wheat has gone back year on year by around 13 days from early to mid-October. With the obvious exceptions in autumns 2012 and 2019, this has been achieved with no significant effect on average yields. Obviously, there is a need to keep a close eye on changing weather conditions and to monitor soil moisture levels, but where grass weeds are a major problem, patience and holding back the drill will benefit their control.

Irrespective of drill timing, the final part of the process is to ensure attention to detail with the application of the herbicides to the target i.e. the soil. All steps must be taken to maximise their efficacy and minimise spray drift.

- For grass weeds the pre-emergence timing is critical, ideally within 48 hours of drilling, especially if soils are moist. If dry, there is some justification for a longer delay but application must still be pre-weed emergence.
- Ensure sprayer boom height is at 50cm. This allows for the best coverage of the soil whilst minimising drift.
- Check wind speed — double the wind speed doubles the drift. Optimum 3–6kph.
- High forward speeds increase turbulence behind the boom. Keep speeds below 12kph.
- Use drift reduction nozzles e.g. air induction types to produce a coarser droplet.
- Apply at 100–200l/ha. Syngenta's work on herbicide application has demonstrated better herbicide performance from higher water volumes. A practical water volume will need to be selected to suit the individual farm situation by balancing areas to be sprayed and available spray days.
- Soil-acting adjuvants e.g. Velomax can improve herbicide performance, reduce drift and further reduce the risk of crop damage from the herbicide 'stack'.

BYDV

APHIDS AUTUMN 2019



Cereal aphid numbers caught in the suction traps run by the Rothamsted Insect Survey, were increasing steadily in the latter part of September. This gave a clear indication that the autumn aphid migration is already underway and particularly so for the bird cherry-oat aphid (*Rhopalosiphum padi*), the main vector for BYDV. Rothamsted Insect Survey has a new, free, BYDV text-messaging service to provide regional information on cereal aphid vectors. To sign up for this service, visit: <https://insectsurvey.com/aphid-alert>

With limited availability of the BYDV-resistant variety RGT Wolverine, suppression of BYDV will largely depend on cultural control and application of pyrethroid insecticides. Cultural control essentially relies on drill date. Crops sown later into October will generally be at a lower risk of BYDV infection, but even crops sown after mid-October can be susceptible if mild weather persists into the late autumn, allowing on-going aphid invasion and in-crop multiplication. Typically though, aphid flights stop when temperatures drop below 11°C and aphid activity greatly reduces at temperatures below 3°C.

There are no autumn thresholds for cereal aphid control. Current advice is to apply insecticide when second-generation aphids are present. These are the offspring of the first colonising aphids and, as they start to move away from the plants initially colonised, begin the secondary spread of virus within the crop.

The second generation is likely to be present when the accumulated daily air temperatures, above a baseline temperature of 3°C, reaches a 'T-Sum' of 170°C.

T-Sum calculations should start either:

On the day of crop emergence

or

Following a pyrethroid application

Based on drilling date and air temperatures, the AHDB BYDV management tool available at: <https://ahdb.org.uk/BYDV> predicts when the aphid second generation is likely to be present in crops and will give a more accurate guideline for the optimum spray timing in an individual crop. Your ProCam agronomist will also have full details of the aphid risk this autumn and the range of available insecticide options.

SLUG CONTROL

AUTUMN 2020



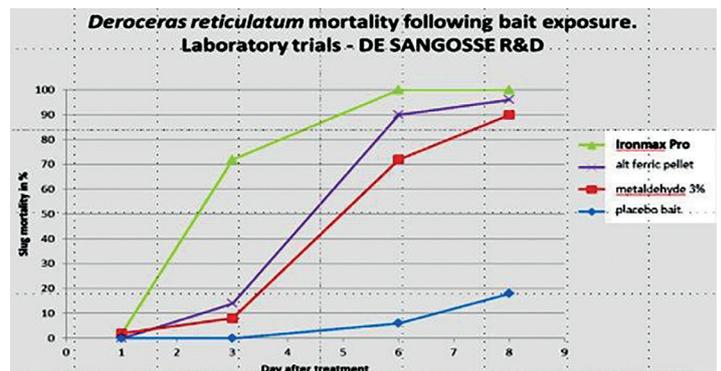
Defra have finally confirmed the dates for the withdrawal of metaldehyde:

- Sale, supply and use of metaldehyde is allowed until 31 March 2021.
- With a 12 month 'use-up' period to 31 March 2022.

In the period prior to the withdrawal dates coming into effect, metaldehyde products should be used in accordance with their labels and the Metaldehyde Stewardship Group's 'Get Pelletwise' best practice guidelines must be followed, which can be found at:

<https://www.getpelletwise.co.uk/how-you-can-help>

This decision will then leave ferric phosphate as the primary active ingredient for slug control. With more limited availability of metaldehyde in recent times it has gained in use and popularity and has demonstrated similar efficacy to metaldehyde in trials and field performance with reduced environmental impact.



Slug damage in early-emerging cereals is already being reported in crops after oilseed rape and beans and is likely to increase as October proceeds, especially in later-sown cereals.

As ever with slug pellets there are a few caveats:

- Best results will be obtained by using a top quality durum-based pellet e.g. Ironmax Pro. These last longer and are more reliable in wetter conditions. Check with your ProCam agronomist for details of the available options.
- Ferric phosphate is a stomach poison and stops slugs feeding as soon as it is ingested. Slugs then retreat underground to die. For this reason the effects can be less visible; fewer dead slugs are seen on the soil surface compared with comparable metaldehyde products. However, the reduction in crop damage is visible equally quickly.
- As with any slug pellet, accurate application, avoiding under or overlaps will bring the best results.