

Technical Update Sep '21

NEW SEASON POINTERS

Rains in August interrupted harvest and have impacted on cereal quality, but did create favourable conditions for oilseed rape establishment and early autumn cultivations.



Cool and unsettled weather for most of August hindered harvest, but improving conditions towards the end of the month have allowed better progress.

No doubt, thoughts will be turning to the potential problems with establishing next season's cereal crops. Memories of drilling delays in the last two autumns may encourage an earlier start to drilling this autumn. However, lessons learned in recent years for effective reduction in grass weed numbers must not be forgotten.

Despite the difficulties encountered in the last couple of seasons it is still the case that a delay to drilling remains one of the key tactics to suppress grass weeds. Current soil conditions will aid cultivations, but equally importantly will encourage an early 'flush' of weeds. 'Stale seedbeds', if managed well, could make a significant contribution to lowering grass weed populations. To gain full advantage of this in high grass weed fields, drilling should be delayed until early-mid October.

Much emphasis is placed each year on the level of dormancy in blackgrass. Early indications are that levels are high this year with an average germination of 25%, meaning this year's seed will be reluctant to grow. However, the dormancy factor in blackgrass only applies to seed shed in the current year. Seed already in the soil from previous years will have no dormancy. Consequently, the impact of dormancy may be minimal depending on the amount of seed already in the seedbank. The key factor influencing grass weed germination, irrespective of dormancy will be moisture availability. Not rushing to drill and utilising current soil conditions to maximise the early germination of weeds and volunteer crop plants could pay dividends this year.

Where there are high black-grass populations consider burying weed problems by ploughing (but did you plough last year?). Good ploughing will bury this year's shed seed to below the germination zone (top 5cm). But cultivations will bring up weed seeds from depth and these will germinate rapidly. Buried seed will remain in the seedbank, but will decline by 70% per year.

However, where blackgrass populations were low in the 2021 crop, ploughing may well bring up more seeds than it buries and shallow, surface cultivations will be more appropriate. These, of course, have to be consistent with correcting any soil structural problems in the cultivation zone.

Holding back the drill where grass weeds are likely to be a problem until at least early October allows an opportunity to remove a flush of weeds with glyphosate. Equally, critically, it aids more effective herbicide performance.

Grass weed control almost exclusively relies upon pre- to early post-emergence, residual, soil-applied herbicides. These work better and last longer in the cooler, moister soils more likely to be found in October compared with September. A combination of different active ingredients and modes of action built into a pre-emergence 'stack' or pre/postemergence sequence is another element to be considered if the high levels of grass weed control needed to minimise any yield reduction are to be achieved.

Your ProCam agronomist will have all the latest information on the appropriate herbicide options to suit your individual field and weed scenarios.

OILSEED RAPE AUTUMN PESTS



The main threat to the successful production of oilseed rape in recent years has been Cabbage Stem Flea Beetle (CSFB). The August rains may have helped crops get going and suppressed early adult CSFB activity, but this can and will change quickly as/when the beetles return from their summer resting period. Currently available insecticides are limited in their efficacy. The level of resistance to pyrethroid insecticides is widespread and increasing. Their use should be both targeted and restricted for any worthwhile effect. Applications should only be made once damage has reached threshold levels. Adding water conditioners and certain adjuvants can extend the persistence and efficacy of the insecticide. Later applications into the evening have also been shown to improve control.

Also problematic is aphid control, notably Myzus persicae, the vector for the yield robbing Turnip Yellows Virus (TuYV). These aphids are highly resistant to both pyrethroids and pirimicarb and require the use of a very limited number of alternative insecticides for effective control. Several highperforming hybrid varieties now incorporate TuYV resistance. Treatments to conventional, susceptible varieties should be applied as soon as aphids are found in crops and especially if this occurs in the early (4-5 leaf) stages of crop development.

Recent unsettled weather will have encouraged an increase in slug population as we enter the main autumn drilling and crop establishment period. With limited availability of metaldehyde leading up to its final use-by date of 31/03/22 any use of slug pellets to restrict plant damage will focus on ferric phosphate based options.

For optimum control a slug pellet needs to have an effective active ingredient, good longevity in wet conditions and be immediately palatable to the slug. In addition, accurate spreading capacity, mould resistance and colour retention are key elements to consider when selecting an effective slug pellet.

Check with your ProCam agronomist on the ferric phosphate pellet options and ensure that you are using a high quality pellet with good palatability and longevity e.g. Ironmax Pro or Daxxos to optimise your slug control this autumn.





Once oilseed rape crops have emerged, the challenge is to maintain and develop the early growth to make the plants more resilient to weather fluctuations and the attentions of flea beetles.

ProCam trials have demonstrated that applications of foliar nutrients in combination with bio stimulants e.g. Canola Bio can increase root growth in oilseed rape plants when applied around the 4 leaf stage. Promotion of early rooting allows the plant to be more efficient at extracting nutrients from the soil and ultimately more resilient to weather extremes. Increasing root length density is strongly correlated with final yield.

Encouraging rapid growth will allow the plants to tolerate the damage inflicted by Cabbage Stem Flea Beetle (CSFB) adults when they inevitably start to arrive in crops. Crop nutrition has a vital role to promote fast and sustainable growth if and/or when CSFB attacks occur.



Department for Environment Food & Rural Affairs

The new Farming Investment Fund is set to open in October. The fund will provide grants to farmers for investments in equipment, technology and infrastructure that will improve profitability and produce environmental benefits. Where investments are being considered in the near future, planning is needed now to assess whether these could be grant-aided.

Financial support will be available via two options: the Farming Equipment and Technology Fund, and the Farming Transformation Fund.

As direct payments to farmers via the BPS will be gradually reduced and ultimately phased out, the Farming Investment Fund offers a new route to access financial support for agricultural businesses. The fund is scheduled to run to at least 2025/2026.

Check for announcements and more details of the Farming Investment Fund on the Defra website: https://defrafarming.blog.gov.uk