



PROCAM
AGRONOMY THAT DELIVERS™

Technical Update
Aug '20

HARVEST POINTERS

Attention will be focused on harvest, but consideration must be given to early season crop husbandry to ensure optimum crop establishment and weed control.



One of the few positives from season 2019/20 is that the enforced late autumn drilling and increased spring cropping has generally helped to reduce grass weed numbers. Dry soils this spring further inhibited any potential 'spring flush' and restricted tillering of plants that did get away to give relatively low weed infestation with reduced herbicide expenditure. Having taken a step forward, it will be important not to lose any advantage gained, and this will start with the approach to post-harvest cultivations. Cultivation strategy will be dictated by requirements to manage soil structure, but also by the predominant weed issues in the individual field.

The legal limit for Erucic acid levels in oilseed rape oil is now 2%. Volunteer oilseed rape has been identified as a key source of contamination for increased Erucic acid in harvested seed. At harvest, an average of 5000 seeds/m² may be lost. Moving the shed seed into dry soil provides the ideal conditions for dormancy, i.e. darkness and water stress. Approximately 5% of dormant seeds will remain viable for between 3 and 15 years. Cultivations should be delayed for 4 weeks after harvest, especially when the soil is dry.

Where the soil is moist, shallow cultivations (5cm) will keep the seed where it can germinate easily and be sprayed off prior to drilling to reduce populations.

Stale seedbeds are not always successful for encouraging blackgrass to germinate. A shallow cultivation immediately after harvest followed by rolling for consolidation and good seed/soil contact could be done with the aim of encouraging blackgrass emergence. In wet conditions where the soil is moist, a stale seedbed can make a valuable contribution to reducing weed numbers and emergence should be rapid; although dormancy of the current year's seed can impact on the speed of the 'flush'. In dry conditions it is better to leave stubble untouched. Dews can wet the soil surface and access shed seed after harvest, encouraging germination. Seed left on the surface is also prone to be desiccated and eaten by birds or insects. Experience with multiple stale seedbeds does not show any great improvement in control over a single 'event'.

Sterile and Great brome need darkness to germinate and a cultivation soon after harvest to cover seed with soil will aid rapid emergence, although a layer of chopped straw can also suffice. Meadow, Soft and Rye bromes become dormant if covered by soil or straw. These seeds need to be left on the soil surface for at least a month to complete ripening and breaking of dormancy. Where a mixture of species occur, the cultivations should be focused on Sterile and Great brome as herbicide options for these species are more limited.

Ryegrass tends to germinate over a longer period than blackgrass. For that reason alone, stale seedbeds will tend to be less effective, although they will be likely to remove some early flushes of weeds.

Wild oat seed is viable around 10 days after fertilisation and is shed from the ear over a protracted period. Seed dormancy varies with population and position of the seed on the plant. Leaving soil untouched allows predation and mortality to occur, with seed losses as high as 85%. Burying seed can increase levels of dormancy and persistence in the soil. As with all stale seedbeds, cultivation with rolling is necessary to encourage significant seed germination.

COVID-19

INCOME SUPPORT 2020

There are still a number of loans and grants available to farms and diversified businesses which have been financially impacted by Covid-19. These are summarised below:

The Government Bounce Back Loan, is available to all UK-based small and medium-sized businesses that have been negatively impacted by Covid-19. Loans are available for 25% of annual turnover, up to a maximum of £50,000. The loans have no arrangement fees and have an initial 12 months that are interest free and with no capital payments. They can be repaid over 5 years at an interest rate of 2.5% or, in full, at any time, with no early redemption fees. The Government will provide a guarantee for 100% of the loan. All major banks are offering the loans; however the deadline for an application does vary between banks.

Small business funding in England and the Small Business Grant Fund (SBGF). Under this scheme, all businesses in England, in receipt of either Small Business Rates Relief (SBRR) or Rural Rates Relief (RRR) in the business rates system, will be eligible for a payment of £10,000 through their local authority and in line with the eligibility criteria below:

- is based in England
- occupies property
- was eligible for small business rate relief (including tapered relief or rural rate relief on 11 March 2020)

Self-Employment Income Support Scheme. Self-employed workers or a member of a partnership, adversely affected by Covid-19 may be eligible for this scheme, now extended until 19 October 2020. This is a taxable grant worth 70% of average monthly trading profits, paid out in a single instalment, covering a further 3 months' worth of profits, and capped at £6,570 in total.

The Retail, Hospitality and Leisure Grant Fund (RHLGF) supports businesses in the retail, hospitality and leisure sectors with their business costs during Covid-19. More information about these schemes can be found at:

<https://www.british-business-bank.co.uk/>

<https://www.gov.uk/guidance/check-if-youre-eligible-for-the-coronavirus-small-business-grant-fund>

<https://www.gov.uk/guidance/check-if-youre-eligible-for-the-coronavirus-retail-hospitality-and-leisure-grant-fund>

<https://www.gov.uk/guidance/claim-a-grant-through-the-coronavirus-covid-19-self-employment-income-support-scheme#extension>



OILSEED RAPE

CROP ESTABLISHMENT



Well documented pest problems with oilseed rape are causing the viability of the crop to be questioned. However, alternative, profitable break crops are not easy to find or fit into many arable rotations. ProCam's 4Cast data also indicates that the best wheat yields and gross margins are produced from crops grown after oilseed rape. These points alone may see an acreage maintained. As ever, the focus has to be on establishment to get the crop into a condition to minimise the threat from Cabbage Stem Flea Beetle (CSFB).

Drill Date. Drilling early increases the ability of the crop to tolerate the grazing damage from the adult CSFB. The plants will simply be bigger when the beetles return from their aestivation or 'summer rest', typically in late August/early September. The downside is that early drilling results in higher larval infestation. An AHDB project showed that larval numbers only reduced significantly in crops drilled into midlate September. Whatever the drill date, the key to successful oilseed rape establishment is to only sow when there is sufficient soil moisture. Minimising soil disturbance to conserve moisture and ensuring good seed to soil contact are critical factors to getting the crop away quickly.

Seed Rates. Trials looking at seed rates showed no difference in larvae per plant in crops planted from 40-120 seeds/m². Yields also, were similar across the range of seed rates tested. On balance there is little evidence for increasing seed rates on conventional varieties much over 'standard' seed rates.

Cultural control. A survey of around 200 growers showed that most used at least 1 out of 13 cultural control techniques to aid crop establishment. Chief amongst these were drilling into long stubbles and the use of companion crops. These reduced the attractiveness of the crop at emergence and sheltered it from the attentions of the adult CSFB. Using fast developing hybrid varieties was also a significant contributor to successful establishment.

Nutrition. Starter fertilisers, encourage rapid root development – not an option suitable for all drilling methods. Otherwise, ensuring that base nutrients and soil p.H. are all at adequate levels avoids any restriction to growth. Early post-drilling N also helps early growth; up to 30kg/ha is allowed to be applied to oilseed rape in the autumn under NVZ rules. Post crop-emergence, foliar application of nutrients and growth promoters e.g. Universal Bio, Canola Bio and phosphites, e.g. Incite, maintain and support on-going root growth and rapid leaf emergence.