



PROCAM
AGRONOMY THAT DELIVERS™

Technical Update
August '17

HARVEST POINTERS

Harvest is progressing and preparation for next season is already underway. Lessons learned from weed control strategies last season, must be adhered to this Autumn.



An early start to harvest 2017 in generally fine weather, was interrupted by unsettled conditions in the later part of July, reminiscent of a 'Typical British Summer'. Early yields and quality from the winter barley and oilseed rape crops indicate a significant improvement from 2016, when low sunlight levels limited crop potential. It remains to be seen if the high June temperatures this year and recent rains will impact on later maturing crop yields and quality.

Obviously as harvest proceeds, thoughts quickly turn to next years cropping and preparing seedbeds for the 2017/18 season. Much of the effort in cultivations is focused on weed control, especially grass weeds, notably blackgrass. Typically these days, seedbeds need to be prepared with the aim of optimising residual soil acting herbicide performance. These require finer and firmer seedbeds than might have once been thought of as a 'good autumn seedbed' for winter crops.

In the haste to turn the ground over optimum stubble management for the dominant weed species in the individual field can be overlooked. Various studies on the effects of different stubble cultivations on a range of weeds has shown that only 3 weeds benefitted from early post-harvest cultivations i.e. volunteer cereal, sterile brome and soft brome.

It may seem counter-intuitive but all other grass species and shed oilseed rape seed gave better germination when cultivations were delayed and seed was left on the surface to mature and germinate.

A compromise would be a shallow, superficial cultivation with consolidation to move seeds into moisture and ensure good seed/soil contact to encourage rapid germination. Deeper, primary cultivations can encourage moisture loss and move seeds to depth where they are less likely to germinate and are also less likely to be picked up by birds and other predators. Whatever the dominant weed species the aim with all cultivations must be to adopt a flexible approach and to react to the individual field/farm/weather circumstances.

Irrespective of weed control issues, first and foremost cultivations should be targeted at correcting any soil structural problems. Cultivation pans slow down water movement through the soil and the development of vigorous crop rooting. Blackgrass thrives in wet soil conditions. Good drainage and water movement through the soil is fundamental to limiting the effects of blackgrass.

Where weed seed return from the previous crop is very high and/or soil conditions are wet ploughing may be the best option. Ploughing with complete inversion to more than 15cm can bury weed seeds to a depth from which they are unlikely to emerge. This will only be achieved through good ploughing, with well-set skimmers. Poor inversion leads to poor control. Blackgrass seed declines quickly at depth. The numbers of viable seeds brought back up will be low, especially if ploughing is only done on a rotational basis i.e. no more than 1 year in 3.

The need for cultural control to support herbicide inputs is now well understood. A key element is delayed drilling - into good quality seedbeds. This allows more time for a 'stale seedbed' but is also more likely to produce better herbicide efficacy. The benefits of this integrated approach were clearly seen this season. Make sure the progress with grass weed control this year is maintained in the next crop.

OILSEED RAPE

CROP ESTABLISHMENT



Adult cabbage stem flea beetles (CSFB) have been evident in high numbers again in grain stores as the oilseed rape crops have been harvested. The threat to new crops this autumn is likely to be maintained. The pest is also spreading north and west from the main damage areas in the east and south east with more crops being affected over wider areas than previously. As last year, there are no neonicotinoid seed dressings available and no changes to the post-emergent insecticide options.

Although CSFB are found in high numbers at harvest they will soon move into shelter to aestivate i.e. 'rest' for much of August. This rest period varies from year to year. The adult CSFB typically return in late August/early September to move onto the newly emerging crop and cause the familiar 'shotholing'.

There have been few consistencies in recent years in devising strategies to reduce the CSFB threat. Moving drilling dates earlier in August can help but sowing too early can bring more difficulties with disease control, excessive canopy size and other pests e.g. cabbage root fly. ProCam trials testing the use of 'nurse' crops to divert the attentions of the CFB from the crop plants and/or incorporating the Clearfield variety technology have been undertaken. To date while results have been promising more work is needed to establish workable protocols.

Every advantage must be taken during the 'rest' period to establish a vigorous crop capable of tolerating the adult CSFB grazing. Key to establishment is drilling into good quality moist seedbeds or, if dry, to only drill if rain is imminent. Following the rains in July moisture should be available.

Starter fertilisers e.g. Umostart placing N&P close to the seed at drilling can encourage early rapid root development but this is not an option suitable for all establishment options. Otherwise it is important to ensure that base nutrients and soil p.H. are all at adequate levels to avoid any restriction to growth. Applying N will also aid crop growth. Up to 30 kg/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, Hadron and phosphites can maintain and support continued rapid crop growth.

Universal Bio, a product containing micronutrients and growth promoters, produced a 25% increase in both root and shoot weight in a 21 day period over plants treated just with a standard base fertiliser.

Insecticide options to combat CSFB are limited. Resistance to pyrethroids has been confirmed in the UK CSFB population. The percentage of resistant individuals in tested samples has been shown to be increasing year on year. If insecticides are required, ensure full recommended doses are used. Avoid repeat applications with pyrethroids to prevent resistance spreading.

Your ProCam agronomist will have details of all the available nutrient and insecticide options to get your oilseed rape off to the best possible start.

SLUG CONTROL

AUTUMN 2017



Despite a hot and relatively dry June, slug numbers have recovered following recent wetter weather and will be a risk to the newly sown oilseed rape crops.

The Metaldehyde Stewardship Group's 'Get Pelletwise' campaign has been broadened this year to include the protection of small birds and mammals. The enhanced stewardship is now a CRD-agreed condition of metaldehyde product availability. The core guidelines and product labels for metaldehyde use in autumn 2017 have not changed i.e. a maximum use of 700g ai/ha per year is permitted BUT no more than 210g ai/ha (ideally only 160g ai/ha) should be applied between 1st August and 31st December.

However, new for 2017 is the requirement for a 10 metre buffer zone to all field boundaries - not just those bordering watercourses. Full details on the latest guidelines can be found at: www.getpelletwise.co.uk

Non-metaldehyde options based on ferric phosphate e.g. IronMax Pro will be increasingly required to cover the areas where metaldehyde cannot be applied. These offer equivalent quality and efficacy to metaldehyde.

The What's in Your Backyard (WIYBY) interactive mapping service provided by the Environment Agency has been decommissioned. For details of where to access some of the key farming information go to:

<http://apps.environment-agency.gov.uk/wiyby>