

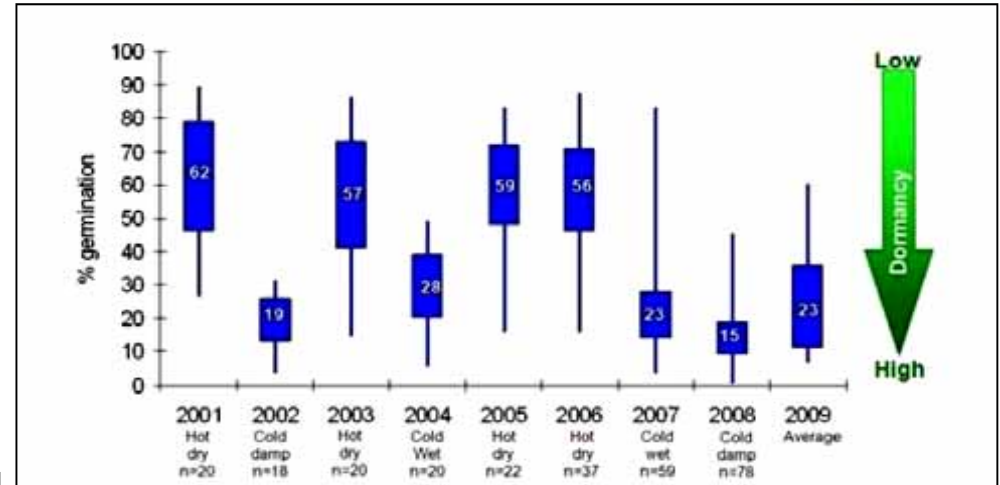


## Early Autumn Pointers

*Hopefully all is safely gathered in and good progress is being made with oilseed rape establishment and cultivations for autumn cereals. The following notes below are aimed at providing a few reminders of crop husbandry decisions that will need to be taken in the near future*



**High dormancy levels are predicted in blackgrass seed again this autumn**  
As last year, results from HGCA funded research are suggesting that dormancy in blackgrass seed is high this autumn. Dormancy is determined by weather conditions when the seed matures—usually in the second half of June to mid-July. Conditions in 2009 were the most variable of all the years when this work has been carried out. Although generally conditions in this period were warmer and drier than the long term average 50% of the sampling sites received above average rainfall. This means that despite an average high dormancy level there will be a wider range of dormancy than last year and some sites may show a more rapid blackgrass emergence this autumn.  
Overall however, the prediction this year is that blackgrass germination will be slow, even with adequate seedbed moisture.

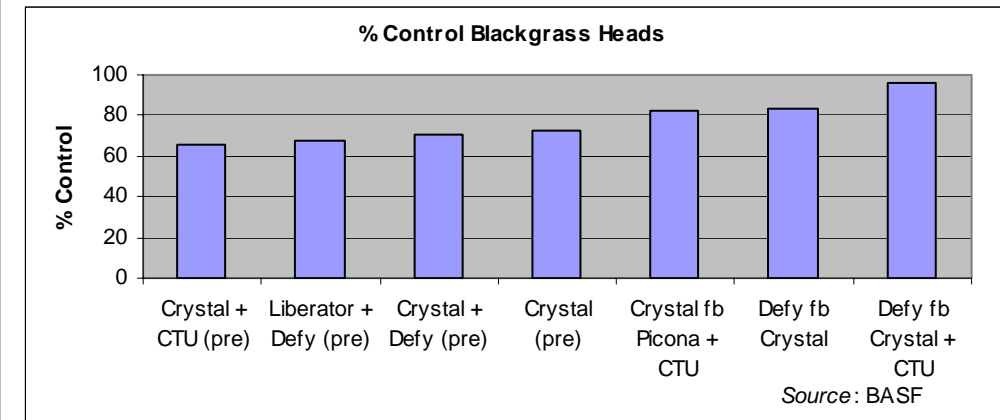


The advice for this autumn is very similar to last year.  
If blackgrass is slow to grow the opportunity for effective stale seedbed control may be limited—but should still be taken if germination occurs  
Drill early and aim to establish a competitive crop—don't reduce seed rates where high blackgrass levels are expected. (see over)  
Blackgrass is likely to germinate over a longer period making use of residual herbicides vital.  
Good seedbeds are essential to maximise herbicide activity. Don't stint on that extra pass if it will reduce clods and improve herbicide performance.  
Drilling depth is important where pre-emergence herbicides are planned e.g. seed should be covered by 32mm of settled soil for applications of Crystal, Liberator and Defy.

Much has been said about the use of residual herbicides as the key element in a grass weed control programme. The loss of key active ingredients, IPU and trifluralin has certainly reduced the available options. Residual 'stacking' and sequencing has been suggested as a method of improving grass weed control and in a high dormancy year could provide a high level of control. The graph below shows selected treatments from a single trial in 2009 to illustrate the point that very high levels of control are achievable from a residual herbicide programme. Your ProCam agronomist will be pleased to discuss these results in more detail and suggest programmes that are appropriate and tailored to your individual weed problems.

Herbicides must be applied at the time and in conditions that best suit their activity. Pre-emergence herbicides work best when applied within 48 hours of drilling. If necessary stop the drill and start the sprayer so that herbicide timing is optimised.  
Use angled nozzles e.g. the Defy or Hawk nozzle and alternate them forwards and backwards along the boom. Syngenta trials have shown around 20% higher blackgrass control when Defy was applied with angled rather than flat fan nozzles.

Angled Nozzles Better for Pre-em Herbicides



*Last year was also a high dormancy year for blackgrass so what happened to all the seed?*

*Around 30% germinated in the autumn with only a relatively small (3%) germinating in the spring. (higher levels were seen emerging from clods as poor seedbeds weathered and where soil was moved for spring sowing). This pattern has been consistent over the last 2 years. With such a small germination in the spring the focus must be on maximising control in the autumn. There is little to be gained from waiting for a spring 'flush'. Herbicides are always more effective when applied to small weeds.*

*It is generally accepted that around 80% of the ungerminated seeds will decay within 1 season. So, out of 100 seeds last autumn around 32 should have grown, 54 should have been lost leaving 14 to grow this autumn. Hopefully, these will be some of the early emerging plants that will be controlled culturally before drilling.*

The effect of crop competition on suppressing blackgrass is often underestimated. Wheat is not as competitive as either barley or oats but a vigorous crop aids grass weed control. Trials have shown that increasing plant numbers from 150 to over 300 plants/m<sup>2</sup> reduced blackgrass populations by around 20%. This is illustrated in the data below from Rothamsted Research.

In a high dormancy blackgrass year stale seedbed control opportunities may be limited so there is less value from delayed drilling and more to be gained from starting with a vigorous competitive crop.

More recent work has focused on identifying varieties with competitive growth habits likely to be effective at suppressing grass weeds. Robigus was shown as the most and Hereward the least competitive varieties.

Viscount, Oakley, Einstein, Humber and Gladiator were also good competitive varieties while Alchemy gave less 'control'. This work is on-going and will be developed so that it may be used as another criterion to consider when selecting varieties.

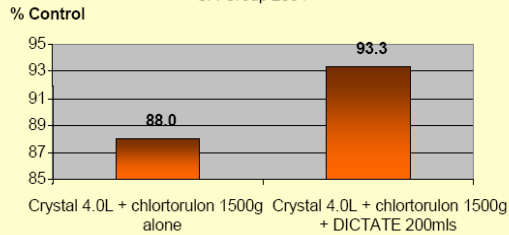
### Cultural Control

Effect of Seed Rate

	Crop seed rate		
	Low	Medium	High
Crop plants/m <sup>2</sup>	95	321	523
Black-grass plants/m <sup>2</sup>	64	98	84
Black-grass heads/m <sup>2</sup>	707	520	366

Source: Rothamsted Research

The effect of DICTATE on residual herbicide activity  
(5<sup>r</sup> resistant blackgrass; Oxford)  
OA Group 2004



Dictate is a specialist adjuvant for use with all residual herbicides applied pre or post emergence. It increases the soil's ability to retain the herbicide once applied, reducing the risk of leaching and thus increasing herbicide persistence and weed control.

It also acts as an anti-drift agent allowing more of the herbicide to hit the target.

Over 5 years of independent trials have shown typical increases in herbicide performance of 5-7%. In high grass weed fields this is a significant improvement in control. Ask your ProCam agronomist for more details of this newly available product.

**Autumn control of thistles in grassland.**

There is still time for effective control of thistles and other perennial weeds in new and established grassland. Weed control can often be better now than in the spring.

This is because the grass has often just been topped or cut so the weeds are actively re-growing and healthy

They are often more uniform in emergence and size/regrowth

Plants are looking to take nutrients down to the roots

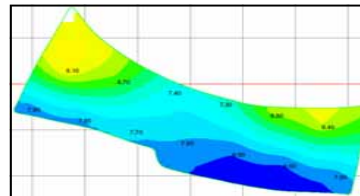
Conditions for growth are often as good or better than the spring so that herbicides applied in August & September can often give 5-10% better control compared to a spring application

Thistles in the rosette stage are at the optimum stage for an application of Pastor or Thistlex.

Don't miss out on this opportunity to improve the productivity of your grassland.

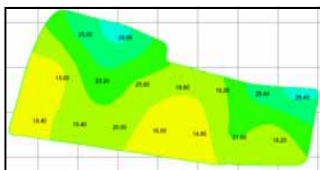


Even though fertiliser prices have fallen back from the highs of last year there is no excuse for complacency in planning base fertiliser applications. Many fields have a very wide range of nutrient levels within them and simple overall application of fertiliser may easily under or overestimate nutrient requirements. GPS soil mapping allows the field nutrient levels to be accurately mapped so that spreading plans can be devised to ensure fertiliser is only applied to the areas that actually need it. Even at the current lower fertiliser prices keeping control over the cost of all crop inputs is



essential to optimise crop gross margins.

ProCam now offer a full GPS soil sampling service to include the production of individual field maps for pH, P, K, & Mg, nutrient recommendations and spreading plans appropriate to the crop and yield expectation. These soil maps can be used to provide recommendations for at least 4 years before needing to be updated.. Talk to your ProCam agronomist about the benefits of GPS mapping.



Drilling is progressing and slug pellets are being applied to crops where damage is anticipated. When the rush is on it is vital that application standards are maintained. If metaldehyde levels in water exceed the Drinking Water Directive standard this autumn it could well be banned or its use severely restricted. Follow the guidelines for good practice detailed in the 'Get Pelletwise' campaign literature. . Importantly, check slug levels to confirm the risk of crop damage before application. Use a good quality pellet to improve efficacy and ensure accurate spreading patterns.. Ask your ProCam agronomist for details of the guidelines for pellet use and the available options.

**KEEP metaldehyde out of water!**

**For more information...**

Website: [www.getpelletwise.co.uk](http://www.getpelletwise.co.uk)  
Helpline: 0845 1770117

