

Early Autumn Pointers #2

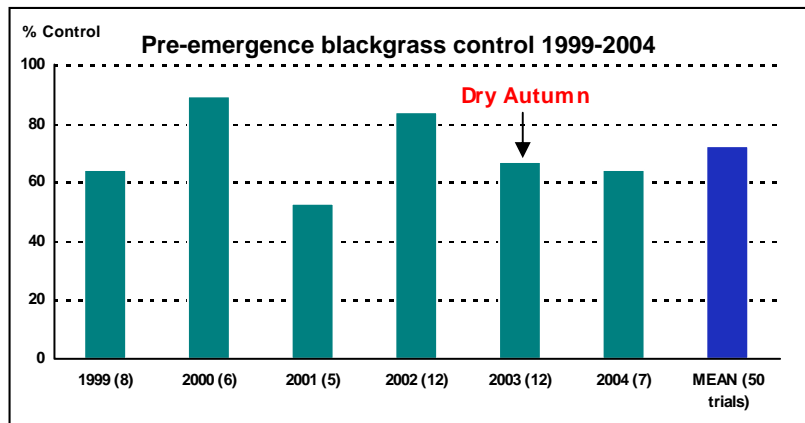
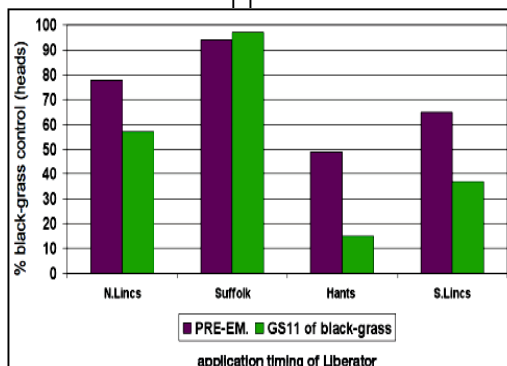
Generally dry weather in the last month has caused problems with seedbed preparation and crop establishment. It has also caused uncertainties over the use of residual herbicides. Hopefully the following notes will offer some reassurance together with some other topical reminders.



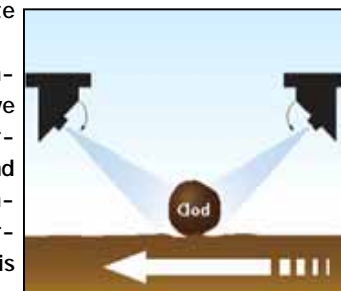
The dry conditions this autumn are causing understandable concerns over the use of residual herbicides especially the pre-emergence products targeting grass weed control. The graph below summarises average control achieved from a pre-em application of Crystal over a 6 year period in varying autumn conditions. The results show a robust performance in the last really dry autumn in 2003. Comparable results when 3-4 weeks of dry weather followed application have also been found with other key pre-em products e.g. Defy and Liberator. With expected high dormancy in black-grass seed and a potential extended germination period residual herbicides are the essence of an effective grass weed control strategy. The decision to apply a pre-em will depend on:

- Overall weed risk—and resistance status of grass weeds
- Seedbed quality
- Seed drilling depth—around 32 mm is needed for most products
- Workload and spray opportunities

If there is any doubt about seedbed quality and seed depth then a pre-emergence application should be considered. But best results usually come from pre-emergence applications. As shown by the adjacent slide comparing blackgrass control with Liberator applied pre or early post-em in 2008. Although there may be some degradation of the herbicide in dry soil the loss of efficacy is less than the reduction in blackgrass control from missing the pre-em timing



The picture above is taken from an application trial in 2009 and demonstrates the different spray pattern and quality that can be achieved with the varying nozzles currently available. While this has greater significance when applying contact materials to small target weeds it is important to ensure that the sprayer set-up is appropriate for the products being applied



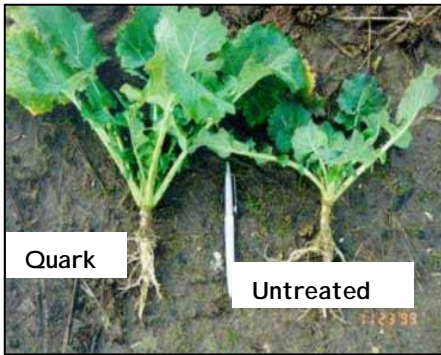
Although angled nozzles were developed mainly to increase spray retention on small grass weeds they have been shown to improve the performance of residual herbicides. Alternating the nozzles to point forwards and backwards along the boom has also improved weed control by up to 30% compared to a straight flat fan arrangement. Seedbeds are likely to be more cloddy this year so nozzle configuration could be a significant contributor to better weed control.

The picture below shows blackgrass in Linseed following a pre-emergence herbicide applied using two different nozzles in the previous wheat crop.

In addition Syngenta has developed another angled nozzle—the Defy nozzle— which will allow boom heights to be raised to 75cm - an advantage possibly on wider booms. Forward speeds up to 14 kph are feasible and reduced drift is also claimed. More details are available from your ProCam agronomist.

N.B. The addition of adjuvants such as Dictate or Silwet can improve the distribution and retention of residual herbicides in the soil, reducing the risk of degradation and leaching thus keeping more herbicide in the right layer of the soil for maximum weed effect. Ensure all elements of your application are geared for optimum control.





Dry weather has hindered the development of many oilseed rape crops. As days shorten in October it is imperative to develop plant size and root length going into winter so that the plant can create the basic framework for vigorous spring growth—and to tolerate pigeon damage!

In dry soil the plant's ability to pick up nutrient from the soil is limited. So, foliar growth stimulants such as Quark can give a lift to plant metabolism by promoting photosynthetic

efficiency and plant hormone production. An alternative treatment is NutriPhite Excel a product that supplies phosphite—a highly active form of phosphorus to the plant. The direct nutrient supplied is quite small but the effect of NutriPhite is to stimulate the plant's root activity making it a better scavenger of nutrient from the soil. Improvements in both plant size and root length have been demonstrated. Both products can be combined with foliar nutrients e.g. Croplift a multinutrient mix or Safe-N a foliar nitrogen. Both options have the effect of 'kick-starting' the plant's metabolism allowing it to respond more quickly when favourable conditions for growth return. Talk to your ProCam agronomist about the most appropriate option for your crops



In the autumn the sprayer is under pressure. Spray timings are critical and spray days can be limited. There is often a number of different products to be applied to varying crops. Even though time may be limited ensure sprayer hygiene and washout procedures are rigorously followed to avoid spray contamination and severe crop damage. Discuss spray priorities with your ProCam agronomist and plan your spraying jobs so that down-time when washing out can be minimised. Ensure that the correct cleaning procedures are followed for the products used. Also make sure that washings are disposed of safely and in line with the Code of Good Practice. Incorrect washout procedure and disposal is another source of water contamination and must be avoided at all costs.



Don't let the dry conditions encourage complacency with regard to slugs. Activity has been low in recent weeks but occasional slug grazing has been seen, mostly in oilseed rape crops. With the prospect of cooler, wetter conditions returning in October slug numbers can recover very quickly. Backward oilseed rape crops and wheat following oilseed rape will be most at risk. Maintain slug monitoring and be prepared to treat as numbers reach threshold levels. As ever it is vital to follow the guidelines in the 'Get Pelletwise' campaign. Scrutiny of pesticide levels in water will be increasingly vigilant not least as the River Basin Management Plans have now been approved and will be put into practice under the Water Framework Directive.



Early drilled cereals are emerging—very often quite unevenly depending on seedbed quality and available moisture. These early emerging plants will be at risk from BYDV and also Gout Fly (see adjacent picture). Gout fly lays its eggs on cereal leaves. The larvae then move down the leaves into the stem and their feeding damage causes gouted and stunted tillers on early sown crops. With protracted emergence a persistent pyrethroid is essential to give effective control against virus carrying aphids and egg laying female gout flies. Make sure these early crops are sprayed from the 2 leaf stage onwards. First sighting of Gout fly eggs on wheat have been reported from Essex.



Fusarium levels and consequent mycotoxin levels have been generally much lower this year following the very high levels in 2008. However, after the problems of 2008 there is a requirement to provide a DON test for all wheat samples destined for milling in addition to a risk assessment on the grain 'passport'. ProCam can arrange for your grain to be tested at an independent laboratory. Your local ProCam agronomist will have full details of this new addition to our range of services.

Some dates for your diary.

ProCam & Rutherford's Spring Farmer Conferences 2010

Tuesday 9th February Ardingly, Sussex

Thursday 11th February Tattersalls, Suffolk

Full details of the programme for each event will be circulated in the coming months