PROCAM
AGRONOMY THAT DELIVERS™

Technical Update
Oct '18

EARLY AUTUMN POINTERS

A relatively early harvest and generally good conditions for field work in September have got the cereal drills rolling. The focus now is to optimise the autumn herbicide programmes.

As ever, the variability of the UK weather has created vastly different regional soil conditions. Overall, especially in the south, soils are still relatively dry despite the effects of the early autumn storms. Although cereal drilling has started, the trend in recent years, where grass weed control is a key issue, has been for drilling to be delayed. ProCam's own 4Cast system has seen average drilling dates for winter wheat go back by around 10 days from early to mid-October over the last 7 years. Over that period there has been no significant effect on average yields.

Following closely behind the drill will be the requirement to control weeds - especially grass weeds. In most cases whether the target is blackgrass, ryegrass, bromes or meadow grass and broadleaf weeds the weed control will rely on soil acting residual herbicides. These need fine, firm seedbeds with few or no clods to work at their best.

A concern will be if soils remain warm and dry. In warm soils the herbicides will degrade rapidly and will 'run out of steam' more quickly. If dry, they simply will not be available to be picked up by the developing grass weeds. Later drilling makes it more likely that applications of residual herbicides are made in conditions better suited to optimising their activity. Irrespective of timing the final part of the process is to ensure attention to detail with the application of the herbicides to the target i.e. the soil. All steps must be taken to maximise their efficacy and minimise spray drift.

Key points to note:

- The optimum timing of pre-emergence herbicides is within 48 hours of drilling, especially if soils are moist. If dry there is some justification for a longer delay but application must still be pre-weed emergence.
- Ensure sprayer boom height is at 50cm. This allows for the best coverage of the soil whilst minimising drift.
- Check wind speed - double the wind speed doubles the drift. Optimum 3-6 kph.
- High forward speeds increase turbulence behind the boom. Keep speeds below 12 kph.
- Use drift reduction nozzles e.g. air induction to produce a coarser droplet.
- Apply at 100-200 l/ha. Recent application trials carried out by Syngenta indicate better herbicide performance from higher water volumes by producing less drift and more herbicide hitting the target. A practical water volume will need to be selected to suit the individual farm situation by balancing areas to be sprayed and available spray days.
- Soil acting adjuvants can improve herbicide performance, reduce drift and reduce the risk of crop damage from the herbicide 'stack'.

ProCam introduced a new adjuvant in 2017 specifically designed to improve the performance of residual herbicides. Velomax is a unique blend of oils, tall oil fatty acids and alkoxylated alcohols. Velomax improves distribution of the herbicide on the soil surface, helping to maintain a more even loading of active ingredient in the areas where weed seeds are germinating. It also helps to hold the residual products in the 'active zone' for longer. The ability of Velomax to 'hold' residual herbicides in the upper layers of the soil typically reduces the risk of crop phytotoxicity, especially where heavy rain follows soon after application.

Another key benefit from including Velomax with the residual herbicide application is reduction in spray drift and improvement in the herbicide deposition on the soil. Adjustments in the droplet size range have been recorded with both flat fan and air induction nozzles.

TUYV

AUTUMN 2018

Although much of the pest focus in oilseed rape has been on Cabbage Stem Flea Beetle (CSFB) another potential cause of significant yield loss is Turnip Yellows Virus (TuYV). This is spread by the Peach Potato Aphid (Myzus persicae). TuYV is frequently symptomless in the crop but has been shown in trials to reduce yields by up to 30%. The threat of TuYV has increased since the loss of neonicotinoid seed treatments. M. persicae are largely resistant to pyrethroid and pirimicarb containing insecticides and control relies on other foliar applied insecticides e.g. pymetrozine (Plenum), thiacloprid (Biscaya) and flonicamid (Teppeki).

At the end of September numbers of peach potato aphid were being found in oilseed rape across the UK from the 2 leaf stage. The effects of TuYV are more severe if infection occurs at or before the 4 leaf stage but can continue through the autumn as aphids migrate into the crops. This creates difficulty in advising on the optimum timing for treatment. Where aphid numbers are low it may be better to delay spraying until the aphid migration is virtually over when further, significant infection is unlikely. In the UK this is typically around mid-November. With this approach there may be some virus infection but hopefully not sufficient to have a significant impact on yield. Where high populations and colonies of aphids are found, an earlier spray will be advisable to prevent serious yield loss. Discuss strategies and treatment options with your ProCam agronomist.

SLUGS

AUTUMN 2018

The re-registration of metaldehyde slug pellet products, scheduled for July 2018, has still not taken place. This means that products and labels remain unchanged for the time being. While the slug risk has been relatively low through September it is likely to increase as conditions cool and get wetter through October. Later sown cereal crops could be particularly under threat.

Remember the stewardship guideline that: no metaldehyde pellets should be allowed to fall within a minimum of 10 metres of any field boundary or water course.

This will not apply to Ferric Phosphate e.g. IronMax Pro, an effective and worthwhile alternative to metaldehyde.

BYDV

AUTUMN RISK 2018

Autumn 2018 will be the last for the use of neonicotinoid cereal seed treatments. The ban effectively means that no neonicotinoid treated seed should be placed on the market or used after the 19th December 2018. (Incidentally this also applies to sugar beet and maize seed). However, supplies of clothianidin (Deter) should be available and adequate for those who wish to use it this autumn.

Towards the end of September the Rothamsted suction traps were showing increases in aphid numbers, particularly the bird cherry-oat aphid (Rhopalosiphum padi). This aphid is the main vector for BYDV. Early sown and emerging crops will be at risk of infection. Any aphids locating unprotected crops will continue to develop and spread at temperatures above 3°C. Crops sown with Deter treated seed will be protected for around 8 weeks after drilling. Early sown non-Deter treated crops should be sprayed with a pyrethroid at the 2-3 leaf stage with a top-up application likely to be needed in late October. For October sown non-Deter treated crops insecticides will typically be targeted at the late October/early November timing. With the emphasis on pre-emergence herbicide applications it is all too easy to overlook the post-emergent BYDV protection.

BYDV is also spread by the grain aphid (Sitobion avenae) and pyrethroid resistance has been identified within its populations. This aphid is a far less significant vector of BYDV. However, numbers of grain aphid need to be monitored. It is thought they contribute more to later autumn infections.

Your ProCam agronomist will have the latest details of aphid numbers and BYDV risk this autumn.

SPRAYING CPD

NRoSO
National Register Of Sprayer Operators

OPERATOR ROADSHOWS 2018/19

As in previous years ProCam will be running a series of Spray Operator Roadshows during the autumn and winter as part of the on-going NRoSO training programme.

Details of dates and venues will be available from your ProCam agronomist and will be included in future newsletters. Attendance at one of the roadshows qualifies for 10 CPD points.

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