



Tips for fitting Avadex applicators to drills and Cambridge rolls

Getting a drill or set of Cambridge rolls geared up for applying Avadex in the same pass requires careful planning. **Piers Welkin** shares some pointers

Growers planning to fit a granular applicator to their drill or Cambridge rolls need to make sure they are set up with a high-volume fan and wide-bore pipework to ensure the product makes it smoothly from the hopper to the outlets.

Residual herbicide Avadex Excel 15G (tri-alleate) – a time-honoured means of grassweed control – has been experiencing something of a renaissance due to diminishing chemical options and a flare-up in resistance to post-emergence products.

As such, plenty of farmers have invested in

their own specialist application equipment, which can be mounted on a drill or Cambridge rolls to save making a separate pass or having to employ the services of a contractor.

“Comparative trials over the past seven seasons show Avadex 15G improving blackgrass control by an average of 18% across a range of pre-emergence programmes – including those based on the newest chemistry,” says Hank King, UK crop protection manager at Avadex manufacturer Gowan.

“The improvement is almost identical for sterile brome and averages 14% with ryegrass. And autumn Avadex can also frequently elim-



Rigging up an Avadex applicator on Cambridge rolls, and factoring in the folding mechanism, requires careful consideration

inate the need for spring wild oat spraying.”

An increasing number of growers are opting for the 450g/litre pre-em liquid formulation Avadex Factor for blackgrass, ryegrass, wild oat and annual meadowgrass control in wheat, barley and linseed.

However, for those wanting the full 2.25kg/ha tri-alleate rate, fitting a granular applicator to the drill or rolls is an effective option – provided the right equipment is used and operated in a way that allows the granules to form a herbicide layer above the sown seed.

Accuracy is essential

With micro-granules weighing tiny fractions of a gram, getting the 15kg/ha rate spread evenly across the planted area requires accurate applicators that are configured and mounted correctly, calibrated regularly, and operated at a sensible forward speed.

“A simple slug pelleting or seeder unit is totally inappropriate for Avadex,” says Opico technical specialist Glenn Bootman. “It’s a precision formulation that requires precision placement.”

The Lincolnshire firm offers its pneumatic Micro-Pro, which has individual metering rollers on each outlet that are electronically adjusted to match the radar-monitored forward speed.

MACHINERY DRILLING

◀ This, says Mr Bootman, works well up to a width of 12m when mounting on a set of Cambridge rolls, as it keeps the applied Avadex as far away from the sowing operation as possible, thus ensuring the seeds are safely buried below the tri-alleate layer.

Increasingly, though, growers are mounting their applicators on the drill instead. The advantage of this is that it doesn't necessitate a pass with the rolls, especially when the drilling window is tight, the weather is challenging, or the drill happens to give sufficient consolidation.

Application from a drill carries a greater risk of tri-alleate coming too close to the seed, so applicator placement is particularly important.

THE OPTIONS

There are plenty of options for growers looking to invest in their own applicators, from implements for mounting on Cambridge rolls or drills, to standalone tractor-mounted or UTV-towed units with booms.

Read about the offerings from the likes of APV, Horstine, Opico, Stocks Ag and Techneat at fwl.co.uk/granular-applicators

"The key thing to avoid on the drill is applying Avadex to moving soil, which runs the risk of granules rolling down to end up near the seed," says Mr Bootman. "Making application the last thing that happens on the drill is the best way to be safe, with rear-facing spreader outlets working behind the packer."

"Most modern drills are very adept at placing the seed into consolidated soil and closing the slot cleanly, but particular care is essential with older equipment – and there are some that I'd be reluctant to fit an applicator to."

Drilling speed is an important factor to consider, particularly where it encourages too much soil movement at the point of granule application. Slowing down will also make for more consistent sowing to the recommended 4cm depth, reduce the likelihood of weed seed germination and avoid leaving open or shallow slots.

Pipework and outlets

Consideration should also be given to how the applicator is mounted, to ensure an uninterrupted flow of granules, says Andrew Wright of Stocks Ag. In particular, growers should consider the specification and setup of the fan and distribution tubes, and design and placement of the outlets.

"Avadex granules have an uncanny knack

of finding any low spots in the pipework and sitting there, so you need a high-volume fan, decent-diameter pipework – 32mm is better than 25mm – and a nice downhill flow from the hopper to the outlets," Mr Wright says.

"Keeping the pipe runs as short as possible helps, as do straight pipes to single outlets rather than Y-pieces to doubles."

These essentials are generally easy to achieve on most drills, but multi-section rolls can

be problematic from a pipework perspective because of the need to cater for implement folding. This usually means longer pipe runs and more complicated mounting arrangements – without forming any low spots.

Outlets also need to be set at the correct centres and heights to give a decent overlap and an even spread pattern across the full width of the machine. For most Stocks Turbo-Jet installations, this is 500mm off the ground and 600mm apart.

"If you have more outlets, they are closer to the ground, but I like to see them high and wide. Apart from anything else, this keeps the deflector plates well clear of soil and debris," says Mr Wright.

"Any misalignment, damage or slight obstruction to these plates will disrupt the spread pattern. That is why it's always worth conducting a daily check of the pipework and outlets to make sure there is a smooth, uninterrupted granule flow to clean deflector plates set at the correct angle."

For that reason, Mr Wright recommends regular calibration and spread pattern testing, which can be done with the dummy Avadex granules supplied free of charge by Gowan.

The need for an accurate spread pattern, as well as application rate, also makes micro-granule applicator certification under the National Sprayer Testing Scheme particularly important, the manufacturer says. ■

A slower drilling speed will help reduce soil movement at the point of granule application



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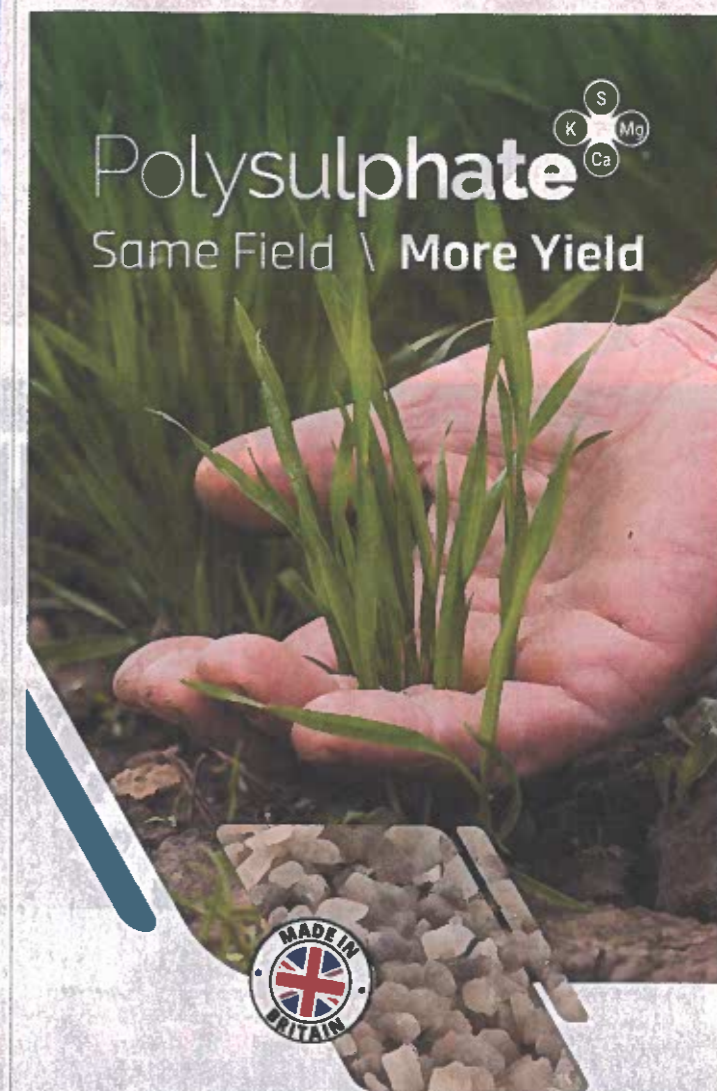
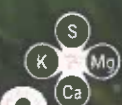
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ONLINE

Read more about getting the most from Avadex this autumn at fwl.co.uk/autumn-avadex

BEST APPLICATION PRACTICE

Regardless of the application method, Gowan urges all growers using Avadex Excel 15G this season to adhere to six key stewardship guidelines:

- Always respect the 10m aquatic buffer zone
- Fully empty, secure, fold up and dispose of all bags
- Brush up and dispose of any spills carefully
- Ensure all staff applying the granules have PA4G certification
- Do not apply the granules when it is too windy or there is a risk of surface run-off
- Follow all Voluntary Initiative H2OK? guidance.