



## Technical Bulletin: Spring Wild-oat Control

### The Wild-oat Threat

Wild-oats are among the most familiar of weeds being tall, stout annual grasses similar to cultivated or 'tame' oats. They are also some of the most competitive weeds with just 1 plant/m<sup>2</sup> reducing spring cereals yields by 0.6 t/ha. Wild-oats thrive in the environment we create for our spring crops.

Put simply, Good condition for spring cereals = Good conditions for Wild-oats!

The emergence patterns of wild-oats are much more variable than for most other problem annual grassweeds, most of which mainly emerge in autumn. Appearance of Common or Spring Wild-oats (*Avena fatua*) may be substantial, especially after cold winters. Slow and uneven germination prolongs emergence over many weeks and this unpredictable emergence pattern can complicate both chemical and non-chemical control strategies. Couple that with the fact that early emerging wild-oats have twice the impact on yield than later germinators then pre-emergence control strategies start to make sense.

Wild-oats herbicide control strategies in spring cereals can be focused pre-emergence or post-emergence. Post-emergence control relies on the use of ACCase or ALS inhibitors, such as SUs, 'fops' and 'dens'. Effective pre-em control is largely the domain of the Avadex products.

Whilst post-emergence control can be effective, resistance issues notwithstanding, early control pre-emergence ensures removal before any competition for light or nutrients thereby maintaining yield. The residual activity of Avadex also avoids the issues of timing associated with the prolonged period of wild-oat emergence.

Pre-emergence control with Avadex®		Post-emergence control	
Pros	Cons	Pros	Cons
Removal before any impact on yield	Very late emergers may escape	Target is visible	Resistance widespread
Removal before any competition for nutrients	-	Timing flexibility	Protracted germination may delay control or result in missed plants
60 years of robust performance	Very dry early spring could impact control	-	Dry springs impact performance
Prolonged residual activity ensures majority of wild-oats are controlled	For spring wheat, drilling depth requirement	-	Yield already impacted by time wild-oats are controlled

Key message: Early removal with Avadex maximises both yield and weed control!

### Wild-oat Resistance

Herbicide resistance in Spring (Common) Wild-oats in the UK was first identified in 1994 with resistance developing to ACCase inhibitors and ALS inhibitors. Today, resistance to 'fops' is the main problem but a recent NIAB wild-oat survey identified increasing numbers of Spring Wild-oat populations resistant to pinoxaden and iodosulfuron + mesosulfuron products.

The good news is that even after 60 years of use tri-allylate continues to deliver a robust performance against both Winter and Spring (Common) Wild-oats.

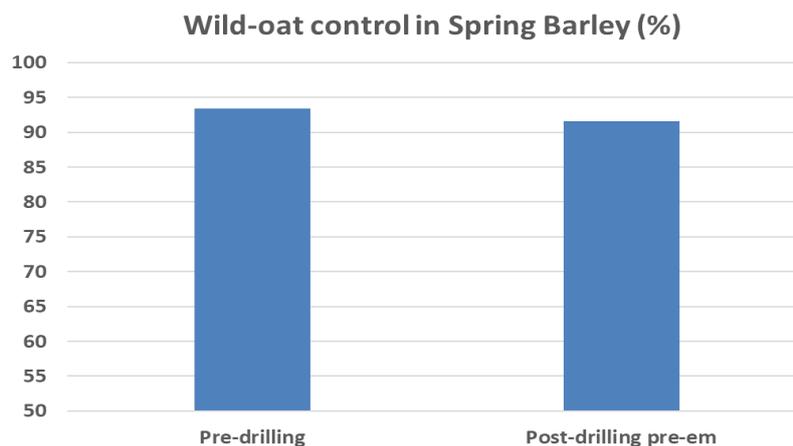
## Avadex Product Choice

Both Avadex products deliver an effective wild-oat control dose at all cereal drilling dates – autumn or spring. Remember, Avadex Excel 15G can be used on both Spring Barley and Spring Wheat whereas with Avadex Factor it's just Spring Barley.

### Spring Barley



The wide application window for both Avadex Factor and Avadex Excel 15G in Spring Barley was widely appreciated during last spring's record plantings. The option to apply ahead of drilling, as well as the classic post-drilling pre-emergence slot, allows plenty of time to get on. Remember, performance is equally effective whether it's applied pre- or post-drilling of the Spring Barley.



Source: 20 UK trials over 4 years

Besides spring cereals, Avadex Factor and Excel 15G can both be used in Spring Linseed, under an EAMU. In fact, the Avadex products are the only non-ACCase herbicides for wild-oats or Black-grass available for use in Spring Linseed. They are also the only pre-emergence graminicides available and, just like in spring cereals, the full autumn grass weed dose rate can be applied.

Whether in spring cereals or linseed, Avadex Factor and Avadex Excel 15G continues to deliver excellent wild-oat control even after 60 years!

**USE PLANT PROTECTION PRODUCTS SAFELY.** Always read the label and product information before use. For more information visit [www.Avadex.co.uk](http://www.Avadex.co.uk). Avadex® contains tri-alleate. Avadex is a registered trademark used under licence by Gowan Crop Protection Ltd. All trademarks duly acknowledged.



Gowan Crop Protection Ltd.,  
2<sup>nd</sup> Floor, Daniel Hall Building, West Common, Harpenden, Hertfordshire AL2 2JQ