

**CATCH WILD OATS BEFORE  
THEY GET AWAY.**



**AVADeX<sup>®</sup>TRA**

# Protect your yield before Wild



**I**t is important to deal with Wild Oats early. That's because the time to protect your yield is before Wild Oats have done the damage.

The 0-4 leaf stage is critical in crop development as this stage has the most influence on final crop yield. Wild Oats are the most competitive grass weeds and can cause large losses of potential yield /income. You can't regain lost yield by treating Wild Oats later.

Avadex® Xtra's pre-emergent action eliminates competition from Wild Oats while they are still underground, before they get a chance to compete with the crop for moisture and nutrients. Less competition in this early stage helps you maximize crop yield.

Crop yield trials have shown Avadex Xtra treated areas averaged 10% more grain than crops treated with post-emergent herbicides. That's an extra 100kg for each tonne of production you expect from a hectare!

## Getting the Best Results with Avadex Xtra

To get the most out of using Avadex Xtra make sure you consider the following factors;

Avadex Xtra is a soil-applied herbicide, which controls Wild Oats as they emerge through the soil. Although applied as a liquid it is only active in the vapour phase.

When Avadex Xtra is incorporated and comes into contact with moisture it turns into a vapour, which fills the pore spaces in the soil.

The Avadex Xtra vapour is absorbed by the coleoptile of germinating Wild Oats, leading to the failure of the leaves to emerge from the coleoptile.

Mechanical incorporation aids the process in three ways:

1. It increases the probability of contact of the Wild Oat coleoptile with Avadex Xtra in moist soil.
2. It minimises herbicide losses to the atmosphere where free moisture is present on the soil surface.
3. By removing clods and creating a more even seedbed it maximizes the soil surface area exposed to Avadex Xtra.

## Incorporation

The objective of incorporation is to uniformly distribute the Avadex Xtra in the top 3 to 4cm of soil.

Different soil types will require different incorporation techniques in order to achieve the same effect.

Sufficient incorporation may be achieved in light textured soils by spraying Avadex Xtra then sowing with a combine or air-seeder with heavy trailing harrows or a rotary harrow.

In heavier soil types an additional harrowing following spraying may be necessary to achieve the same results.

Soil conditions also vary locally, even on the same property, so make sure the incorporation approach is designed to uniformly distribute the Avadex Xtra in the soil given the soil type and situation of that particular paddock.

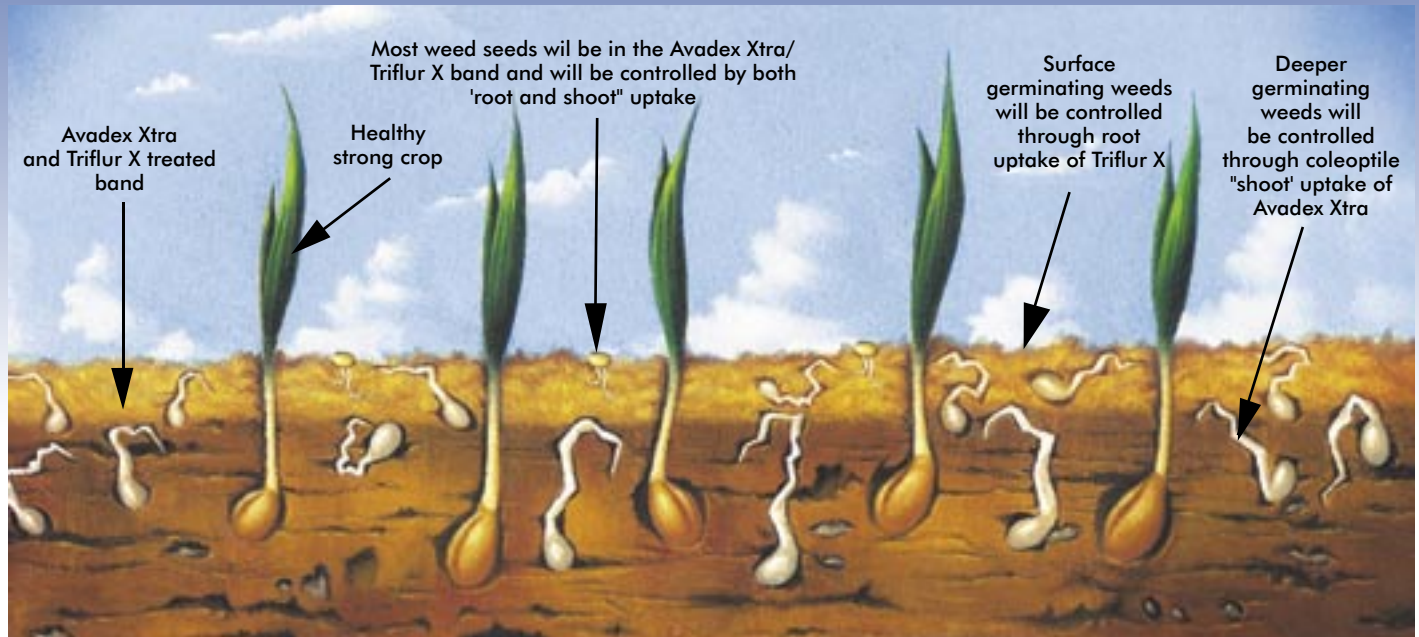
There are some important factors that impact the effectiveness of incorporation:

1. Point size needs to equal tyne spacing to ensure even incorporation. If the point size is greater



# Oats have done the damage

## How Avadex Xtra with Triflur X Stops Wild Oats & Annual Ryegrass



than tyne spacing, a strip of soil will be left untreated, giving striped results.

2. In soil which is prone to be very cloddy or which commonly crusts after rainfall, incorporation without some prior seedbed preparation is not advisable. Wild Oat seeds emerging from clods will not be controlled, nor will incorporation be sufficiently uniform to provide for optimum performance.
3. High levels of trash and weeds (>30%) should be avoided as they impede free flow and mixing of soil.
4. If seeding equipment is being used to incorporate Avadex Xtra in light soils, it should be set up to avoid excessive soil flow as this can result in uneven incorporation in the soil, and soil should be left in a relatively level state following the passage of the seeder.
5. Care should be taken in heavy soils with high moisture content to ensure sufficient incorporation is achieved.

### Soil Temperature & Moisture

Avadex Xtra is lost to the atmosphere when unincorporated product comes into contact with free soil water.

In soils with a moist soil surface, incorporation should take place within 6 hours. Where the soil surface is dry, a longer interval of up to 24 hours is acceptable.

Avadex Xtra requires moisture to be activated, with minimal activity in dry soils.

Soil temperature can also affect Avadex Xtra performance. At 5°C and under, Avadex Xtra has relatively little activity. Some Wild Oats may germinate in temperatures <5°C, but most germinate between 10°C and 30°C.

### Avadex Xtra & Triflur X the Comprehensive Pre-emergent Package

Both Avadex Xtra and Triflur X are pre-emergent products renowned for providing excellent returns for growers through robust weed control and early removal of problem weeds. Many growers have always used the two products in isolation of each other however in many broadacre situations a combination of the two products can provide even more comprehensive weed control resulting in better economic returns for growers.

Once incorporated Avadex Xtra will control many of the deeper germinating weeds in the soil profile as the coleoptile of these weeds has to grow through this band whilst Triflur X will compliment the Avadex Xtra via affecting the root growth of many of the shallower growing weeds.

With Triflur X being predominantly active on the roots of weeds and Avadex Xtra being mostly active on the coleoptile the combination of these two herbicides provide a complimentary profile in the soil that equals better weed control in a wide range of paddock situations.



## Fight Wild Oat Herbicide Resistance

Weed populations may become resistant to a single herbicide used on the same paddock year after year. Resistance reduces the effectiveness of a herbicide which means your crop will be under more competition and suffer higher yield losses.

One way to manage resistance is to rotate herbicides from different chemical groups. Most Wild Oat herbicides such as Wildcat<sup>1</sup> and Topik<sup>2</sup> are classified as Group A herbicides. Avadex Xtra is a Group E herbicide, and provides a valuable rotation in your cropping plan when targeting Wild Oats.

If you have reason to be concerned that Wild Oats on your property are developing a resistance to post-emergent herbicides, then rotation of herbicide groups, with different modes of action, is highly recommended.

After 30 years of use in Australia, no incidence of Wild Oats developing resistance to Avadex Xtra has been recorded.

## Reduce Risk and Save Time

By controlling Wild Oats early in the season, it limits the risk of Wild Oats getting away, especially if it's too wet for you to get on the paddock to apply a post-emergent herbicide.

Avadex Xtra gives you the management flexibility because it helps you spread the year's workload. You can apply Avadex Xtra from three weeks prior to planting up to the day you seed, and your crop will be protected from germinating Wild Oats for six to eight weeks, provided Avadex Xtra is incorporated as per label directions.

## Measuring Performance

As Avadex Xtra is a pre-emergent herbicide, one of the challenges is measuring results for a weed that did not grow. The most effective way to do this is to leave an untreated comparison strip so that the area treated can be compared with an untreated area. It's important to remember that Avadex Xtra improves yield by reducing early competition, and farmers can still be better off financially even if some late Wild Oats still germinate.

Following absorption into the growing shoot of the Wild Oat, the sheath or coleoptile becomes thickened and the shoot becomes bluish green. Other symptoms include a brown pinched tip or rupturing in the lower part of the coleoptile. Some plants that get only a partial dose may emerge with a red discolouration of the leaves and the secondary root system fails to develop.

Two to three weeks after sowing, check the performance of Avadex Xtra by scraping back the soil to see dead and dying Wild Oats.



Left: treated with Avadex Xtra Right: untreated control.



For further information, see your local Avadex Xtra reseller:

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