

Applying Intake® in-furrow with liquid fertilisers

In recent years, there has been rapid uptake in banding liquid fertilisers using modified seeder systems that can also allow the addition of in-furrow fungicides and trace elements.

Not only does this application method reduce fertiliser costs, it allows the grower to vary fungicide and fertiliser rates according to the needs of an individual paddock at the time of sowing.

- In-furrow fungicides are traditionally coated on granular fertilisers and banded or drilled with the seed. Fungicide coatings add to the cost of the fertiliser (about \$20 per tonne) and are somewhat inflexible.
- Compared with the application of Intake® on granular fertiliser, banding Intake® with liquid fertilisers should provide a more uniform distribution in-furrow and better plant uptake.
- Over the past two years, CSBP, Elders, Landmark and Crop Care have been working with growers to explore the in-furrow application of Intake® mixed with liquid fertilisers.

What is Intake®?

- Intake® is a broad spectrum fungicide manufactured by Crop Care. It can be coated on granulated fertilisers or mixed with liquid fertilisers and applied in-furrow.
- Intake® in-furrow provides up to 18 weeks' protection against stripe rust, *Septoria* and Take-all in wheat; powdery mildew and scald in barley; and blackleg in canola.

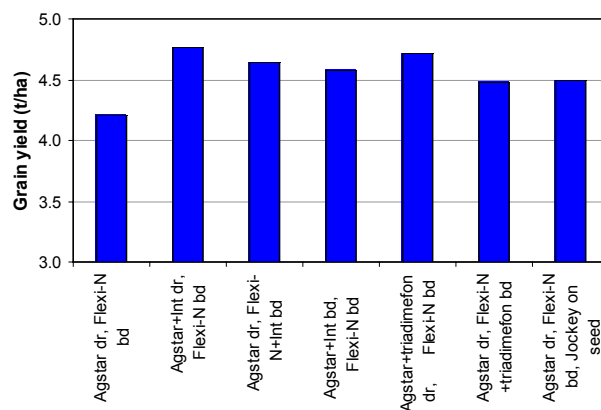


In-furrow Intake® can be mixed with Flexi-N and banded at sowing

Trial Results

- Intake® in-furrow with Flexi-N has been evaluated in field trials at one site in 2002 and nine sites in 2003.
- Disease pressures were very low in 2003 across the State; however, there was a significant response to fungicide application at three sites.
- The data at hand suggests the application of Intake® mixed with liquid fertilisers is equally as effective as coating Intake® on granular fertilisers.

Banded fungicides increased yields at Salmon Gums



Legend: Int = Intake®, dr = drilled, bd = banded
least significant difference = 0.385 t/ha

Mixing Intake® with Liquid Fertilisers

- Intake® is water soluble and mixes readily with Flexi-N, Flexi-NS and Liqui-NS with good tank agitation. Experience with other liquid fertilisers is limited.
- Some precipitation and build-up of residues can occur when trace elements are added with Intake® and liquid fertilisers, especially if tank agitation is poor, the distribution hoses to each tine are long, and temperatures are low. A simple jar test will indicate if problems are likely.
- Pre-mix the trace elements in water before adding the fertiliser and then add the Intake® last (i.e. zinc then copper, then fertiliser, then Intake®).
- Some machinery manufacturers have developed a system of injecting the fungicide into the distribution hose as the liquid fertiliser leaves the tank. This eliminates the need to pre-mix in water in the tank and minimises fungicide exposure to the operator.
- Check filters, orifice plates and nozzles for blockages regularly during application, and rinse the whole system thoroughly with water every 24 hours or less.