# Alternative nutrition in wheat



The aim of this trial was to investigate the application of an alternative foliar fertiliser.

#### Summary

In 2003 the BCG-WFS tested the bio fertiliser 'Extra Life' and compared it to using MAP as a standard fertiliser, at the Birchip site. There were no wheat yield or quality benefits from using the alternative nutrition product 'Extra Life'.

Over the many years that the BCG-WFS have been testing a wide range of alternative bio nutrition products we have never found a yield or quality benefit.

## Background

The BCG-WFS have been testing alternative nutrition products for many years. Every year we try to include one of more alternative or 'new' nutrition products and compare these to the more traditionally used cropping fertilisers such as MAP or DAP.

In 2003 the BCG-WFS compared the bio fertiliser 'Extra Life' to MAP.

#### Methods

This trial was conducted using a fully replicated (x4) randomised block design at the Birchip site.

Yitpi wheat was sown at 175plants/m<sup>2</sup> on May 12, with 50kg/ha of urea drilled prior to sowing. Triflur 480<sup>®</sup> at 0.8L/ha was applied pre-sowing and LVE MCPA<sup>®</sup> at 400ml/ha and Lontrel<sup>®</sup> at 75ml/ha were applied on June 20.

The product investigated was the liquid bio fertiliser 'Extra Life' produced by Terra Firma Fertilisers. 'Extra Life' is a soil borne Micro floral Complex grown in an Aqueous Solution. 'Extra Life' was applied at the five leaf stage of the crop by boom (100L/ha of water). The bio fertiliser was compared to MAP.

### Results

During the 2003 there was no affect on yield or quality (protein or screenings) from the bio fertiliser 'Extra Life'.

Table 1. The influence of the bio fertiliser 'Extra Life' on wheat yield and quality.

Product	Rate /ha	Timing	Yield (t/ha)	Protein (%)	Screenings (%)
MAP	60 kg	sowing	2.8	7.2	8.0
MAP 'Extra Life'	60 kg 4 L	sowing EPE	2.7	7.7	7.4
MAP 'Extra Life'	30 kg 4 L	sowing EPE	2.6	7.9	8.8
MAP 'Extra Life'	0 kg 4 L	EPE	2.6	7.7	7.5
		LSD (5%)	NS	NS	NS

EPE = Early post emergent (at the 5 leaf stage for the crop)

# Interpretation

There were no yield or quality benefits of using the bio fertiliser 'Extra Life' during the 2003 season.

## **Commercial Practice**

The BCG-WFS has over many years tested a wide range of products. During this testing not one of the new alternative bio nutrition products has ever shown a yield or quality benefit. The results over years of trials have shown that good basic nutrition using currently available sources of cropping fertilisers which contain N, P, S and Zn provide the most cost effective returns to growers.