

AFIA Trial Results for 2001

After a dry winter, we have been able to produce some results for the 2001 AFIA fodder trials at Elmore in Victoria. The 13 legumes and 23 cereal lines were sown on May 17 2001. This was a little later than last year given the later break in the weather. The Incitec 0 to 10 cm soil tests prior to sowing showed:

- pH in water of 5.5
- Nitrate nitrogen of 31.3 mg/kg
- Olsen phosphorus of 6 mg/kg
- Organic carbon of 2.2 %C

The trial site has grown cereal crop for the two seasons prior and had been permanent clover based pasture for at least 10 years prior to that. The results shown and discussed are the average dry matter production of the plots that were sown on May 17 and cut when the plots reached maturity for hay production. In the case of cereals this was deemed to be the milky dough stage and full flowering for the legumes.

It needs to be stated that these results are from one site in one season. Proper recommendations are always made from a number of trials in a number of sites.

AFIA would like to acknowledge the sponsorship and support of the following companies involved with these trials:

<i>Cultivar Marketing</i>	<i>Pioneer Hi-Bred</i>
<i>Heritage Seeds</i>	<i>Seedco</i>
<i>Hi-Fert</i>	<i>SARDI</i>
<i>Incitec</i>	<i>SGB</i>
<i>Pacific Seeds</i>	<i>Wesfarmers Bendigo</i>
<i>Paramount Seeds</i>	

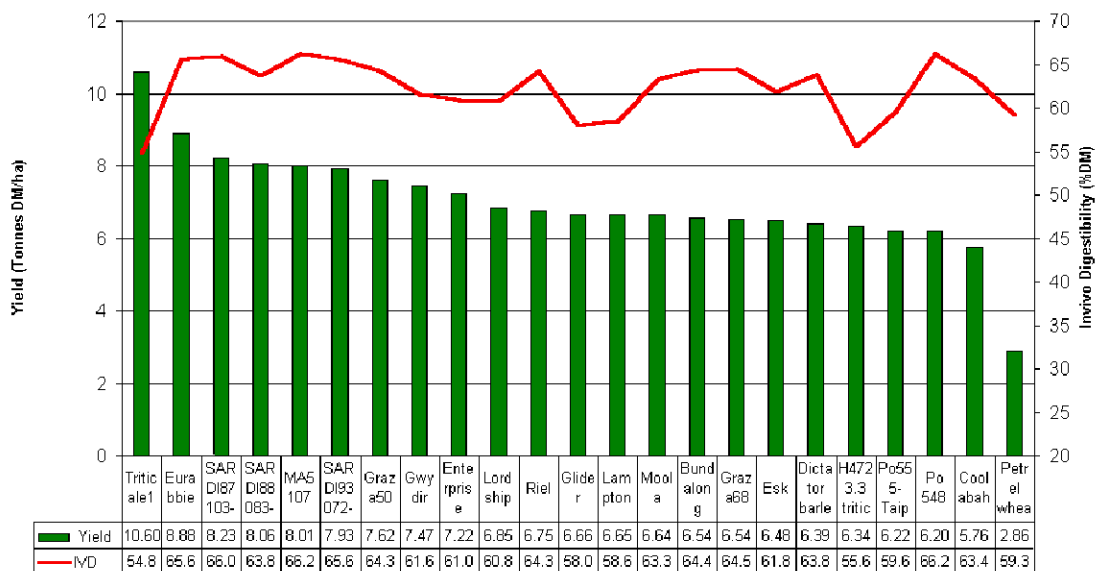
Cereal Results

A new triticale line provided from one of our exporters has yielded the highest dry matter at maturity this year at 10.60 mt/ha. Quality results are quite disappointing for this triticale variety and could create marketing problems with IVD levels around 54%. The variety Eurabbie bred in NSW also performed well with an average yield across the three replicates of 8.88 mt/ha. Notably, the old oat variety Coolabah performed poorly relative to the other cereals.

In support of the AFIA's push for more R&D into the fodder industry, it is interesting to note that the top performing lines were advanced lines of both the public and private breeding organizations. The SARDI lines are well represented here and also performed well in terms of quality (IVD).

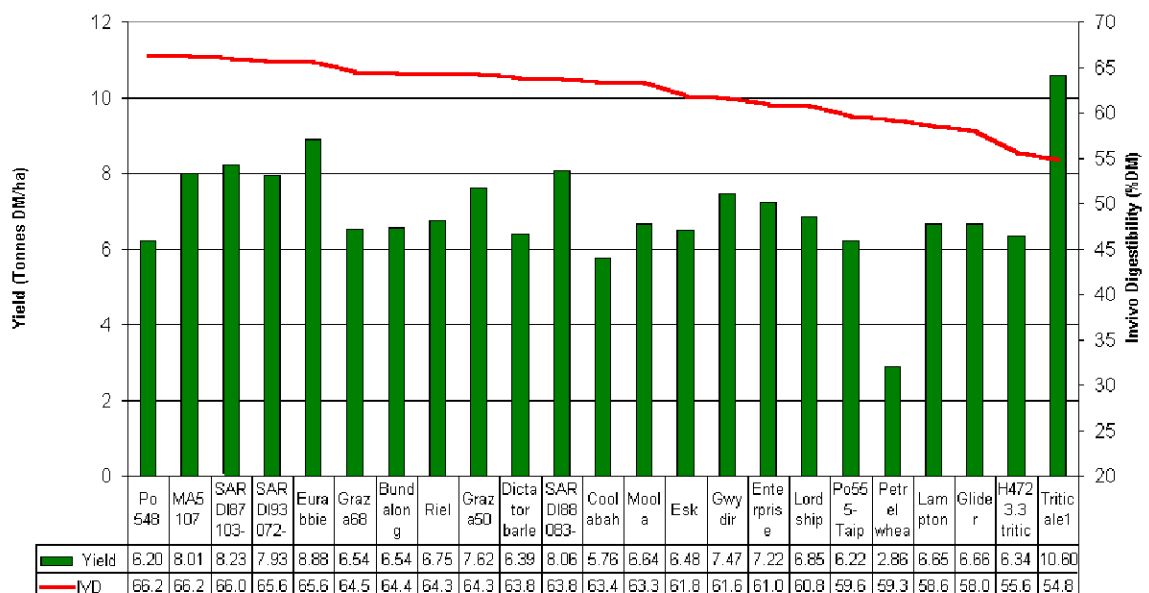
The variation in production of cereal varieties is much lower this year than last. The key reason for this is the common maturity of cutting time for each line. Last year our cuts for each line were made at the same time and not at the same milky dough stage. The comparisons this year should be more equitable for each line.

AFIA Cereal Trial Results - Elmore 2001
Yield and InVivo Digestibility



Highly digestible varieties in the 2001 trial included many experimental and advanced lines as well as Eurabbie and the Grazer lines.

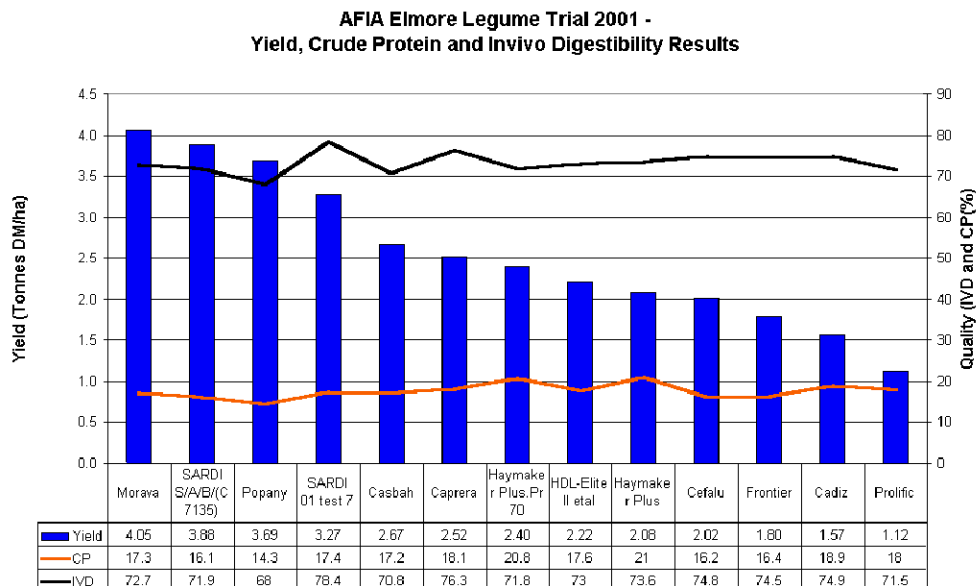
AFIA Cereal Trial Results - Elmore 2001
Yield and InVivo Digestibility



Legume Results

While it may not be a fair comparison, the vetch plots appear to have out-performed the small seeded clover varieties in 2001. A better winter, or even a wet winter, would have altered the results considerably due to the water logging tolerance of some of the clover varieties.

Morava vetch again has done well in our trial with a yield of 4.05 mt/ha. Some of the new vetch lines from the SARDI program appear to have done well in the conditions of this season as well.



In the trial. Energy levels appear to have been consistently high across all varieties and treatments.

Phosphorus Trial on Oats

The P trial has shown a response to the P treatments as expected in a soil with a low Olsen P. The decline in the average production of the oats under the 30 kgP/ha treatment is difficult to explain. Even if the Olsen P was as high as 10, our recommendations for the application of P would have been between 20 and 30 units (kg/ha) of P. If a production of between 6 and 8 mt/ha of oats is expected P is required to maintain soil P levels at a rate of 4kgP/mt of production. The results, while interesting, need to be put under trial again next year to assess the effect of the higher rates of P on hay production. *Sarah Rigby – Territory Manager Hi-Fert P/L*

There appears to be a response to P in oats upto a level of 20 units then a decline. This may be an anomaly however is consistent with similar trials in WA. Further trials will be conducted in 2002 to confirm this response. Quality results in this trial are inconclusive. *Colin Peace Executive Officer AFIA*

