

## 3.2 REPLICATED VARIETY TRIALS

### 3.2.1 Triticale - Gnarwarre

**Location:** Gnarwarre

**Researchers:** Colin Hacking, Wes Amott and Gary Sheppard (SFS Ltd)  
Dr Kath Cooper, Triticale breeder  
Adelaide University,

**Growing Season Rainfall:**  
376mm (April – November)

**Aim:**

To trial 10 commercial and experimental "early flowering" triticale lines with possible suitability to the Geelong environment.

The trial was conducted on raised beds to minimise waterlogging damage. Each variety was replicated 3 times, with each replicate consisting of 1 bed (8 rows per bed) and 15 metres in length.

**Sowing Rate:** 90 kg/ha  
**Sowing Date:** 19<sup>th</sup> June 2000  
**Fertiliser:** 100 kg/ha MAP at sowing  
**Herbicide:** 800 ml/ha Tigrex 28/9  
**Slug control:** Mesurol (recommended rate)  
**Harvest date:** 3<sup>rd</sup> January 2001

**Background:**

Southern Farming Systems is one of a number of organisations sourcing upcoming varieties and breeders lines from the National Triticale Breeding Program based at Adelaide University. These trials provide an opportunity for growers to see how the various varieties perform in their locality, and are important for feedback to the breeder on what maturity and plant type are appropriate to suit a particular environment and cropping regime. Recent releases of triticale varieties have added to the list of options for growers.

All triticales listed below are resistant to leaf, stem and stripe rusts and mildew and have good resistance to root lesion nematodes, providing a good disease break as well as being a productive crop in its own right. Triticale is generally widely adapted, growing well on low to high pH soils and from low to high rainfall. Its tolerance to acid soils makes it worth investigating for this environment. On the down side however, Triticale is highly sensitive to frost, although the risk of damage at flowering can be minimised by choice of seeding date, variety maturity type and by staggering sowing dates.

**Results:**

Variety	Yield kg/ha	Height
Treat	4990	105
TX92-5-2-1	4617	95
Credit	4552	95
TX93-19-1-3	4519	95
TX93-19-2D/3	4390	90
251TYN-42	4105	110
Muir	4094	105
Everest	3989	110
TX94-36-1	3930	105
Tahara	3819	100

There was a significant difference between varieties at the 5% level  
**LSD = 950 kg/ha**

**Conclusions:**

Tahara is one of the most widely grown Triticale variety in the district, however its performance was significantly inferior to that of Treat and Credit, two more recently released lines.

There were two experimental lines that had good agronomic appeal and these were TX93-19-2D-3 and TX93-19-1-3. They were shorter in stature than some of the other material and looked as though they

would have better standability. Both Tahara and Treat were starting to lodge, however Credit was standing quite well at harvest.

On balance, possibly Credit would be the most suitable variety to grow based on this particular trial.

Unfortunately, Abacus was not included in this trial. This variety has performed well in many farmer paddocks.



## Triticale – Background Information

### Credit

Adelaide University released PBR variety. Very tolerant of waterlogging, highly tillering variety. Susceptible to CCN. Australian Field Crops Association have commercial license for *Credit*. Contact Peter Campbell of Waratah Seeds (02) 6929 3715 for details of certified seed growers.

### Treat

Adelaide University released PBR variety. High test weight (average 6kg/hl above *Tahara*), widely adapted, matures a few days earlier than *Tahara*, susceptible to CCN. SGB have commercial license. Contact Peter McCann, Horsham, telephone 03 5382 4966. Seed available 2001.

### Muir

Stronger strawed variety, susceptible to cereal cyst nematode. Popular in NSW and Kangaroo Island, SA. Tolerates waterlogging and high winds. Non-PBR variety.

### Everest

University of New England released, non-PBR variety. Taller variety with high test weight. Susceptible to CCN. Contact Peter Campbell of Waratah Seeds (02) 6929 3715 for details of seed growers.

### Tahara

Most common variety known for its reliability across a wide range of environments. Resistant to cereal cyst nematode (CCN). Can lodge in higher yielding environments. Widely available non-PBR variety. Try and buy clean seed, without contamination of weeds and other cereals, to maximise the disease break efficacy and quality to meet delivery standard.

### TX93-19-2D-3

Adelaide University advanced breeding line in. Dwarf, CCN-resistant, very strong straw, widely adapted and high yielding. Large seed means a relatively low test weight. Performance and suitability for release still being assessed by the breeding program

### Contact:

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### Sponsors:

*The National Triticale Program acknowledges support from growers' levies through the Grains Research and Development Corporation.*

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