

5. CEREAL VARIETY TRIALS

5.1 BARLEY VARIETY DEMONSTRATION - GNARWARRE

A State States

Design:

Fertiliser:

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Location: "South Roxby" Gnarwarre

Background:

The demonstration blocks are designed to view commercial varieties on a relatively large scale. They are used to complement the varietal evaluation work being undertaken by Department of Primary Industries.

Aim:

To assess a number of commercial barley varieties for yield and grain quality.

Results:

Table 56: Barley Variety Demonstration Results Yield % Gairdner Variety **Yield Tonnes/ha Protein %** Test Weight kg/hl W 13586 5.60 99 10.7 65.8 Baudin 5.11 90 65.8 10.5 Sloop (Vic) 4.50 80 9.6 67.8 Gairdner 5.66 100 92 66.8

Discussion:

Gairdner still remains a good performing variety, although both W 13586 and Baudin yielded well. The variety Sloop (Vic) had the highest grain test weight, however yield was down compared to Gairdner.

There was no significant disease pressure in the trial, so varietal response to disease could not be assessed.

Please consult your agronomist and seed supplier for further information about the barley varieties.

Barley Varieties:

W13586 - 1747

Gairdner/Keel backcross from SA. Targeting export malt and domestic breweries. Similar maturity to Gairdner and suited to the med-high rainfall zone. Resistance to CCN and powdery mildew. Improved SFNB resistance but susceptible to leaf rust. Yield is similar to Gairdner.

Baudin

Stirling/Franklin backcross. Shorter than Gairdner with improved grain size, excellent straw strength and head retention . Excellent malting quality. Susceptible to leaf rust although slightly improved net blotch (Spot form) resistance. Some data suggests that Gairdner still has a yield advantage in a high rainfall environment.

Sloop Vic

Released in 2002 from the Victorian Barley Breeding Program and the Malting Barley Improvement Program. Yield and quality the same as Sloop and has markets for malt and unprocessed malt. It has CCN resistance, moderate resistance to powdery mildew and excellent grain size. Also has Boron tolerance.

3 x 1.7 metre wide beds of each variety were

sown with a plot length of 57.5 metres. The inside

bed was harvested using a plot harvester. A nearest neighbour design was used to compare

Disease Control: 145 ml/ha Folicur ® at GS32

varieties to a standard check.

Planting Date: 25th June 2003

100 kg/ha MAP at sowing plus 100 kg/ha Urea at GS31

Gairdner

Released in 1997 and related to Franklin and Onslow is adapted and widely grown in mod-high rainfall zones. Susceptible to leaf rust and Net Blotch (spot form).

Please check 2004 disease updates for further information regarding varieties.