2.4.5 Oats variety trial - Bairnsdale, Vic

Location: Bairnsdale Research Site

Funding:

This was a SFS funded trial

Researchers:

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Committee

Background/Aim:

New oat varieties need to be tested across a number of years before they will be considered in the domestic market. This trial evaluates a number of varieties that are either commercially available or close to commercial release that may be suitable for growing conditions in the south east of Victoria.

Summary of findings:

The variety with the highest yield was Targa at 3.67t/ha

• The site mean was 2.63t/ha

Rainfall:

Avg. Annual: 641.9 mm Avg. G.S.R.: 442.4 mm 2010 Total: 652.2 mm 2010 G.S.R.: 364.2 mm

Yield Potential for SE Victoria: Calculated using WUE values of 15kg/mm/ha Oats, 110mm evaporation and GSR of 30% Dec (15.06) Jan (9.96) & Feb (27.3) + 50% Mar (22.3) (only if >20mm) + April-November (364.2) – 110mm) X 15kg/mm/ha.

Therefore, for the Oats Crop Variety Trial at Bairnsdale the limited yield should be 4.56/ha or 303.8mm x 15kg/mm/ha. The site mean was 2.63 t/ha

Variety: Various

Sowing rate:

215 seeds/m² rate with a desire to

establish 160 plants/m²

Sowing date: 25th May 2010

Fertiliser: At sowing MAP 100kg/Ha

Knockdowns:

• 8th May Round Up Powermax 1.2L/ha

8th May Striker 0.1L/ha

Plot size: 18.0m x 1.10m x 4 reps.

Measurements:

Yield and grain quality components, including protein, test weight and screenings.

Soil Type: Grey Brown

Soil test:

pH=5.1

EC (dS/m) = 0.18

Cation Exchange (meq/100g)=8.94

P (Colwell) mg/kg=38.0 K (Colwell) mg/kg=118.0 Ammonium N mg/kg=9.0

OC%=1.89

Results:

Table 1: Yield and quality parameter data for oat crop variety trial at Bairnsdale. Note due to large variation within these results the trial should be considered demonstration only.

| Variety | Mean Yield (t/ha) | Protein % | Test Weight kg/ hl | Screenings % |
|-----------|----------------------|-----------|-----------------------|--------------|
| Targa | 3.67 | 15.58 | 38.9 | 7.5 |
| Galileo | 2.81 | 15.95 | 41.5 | 6.0 |
| Yiddah | 1.41 | 15.85 | 41.6 | 5.0 |
| Site mean | 2.63 | | | |