

YUNA

TRIAL RESULTS 2010



TOPIC: FROST

**Group: Yuna
2010**

ABSTRACT

The northern ag region of WA has many areas that are prone to frost. This damage occurs mainly in wheat but lupins and barley are also susceptible. Level of yield loss is very erratic within a paddock and between years which makes conducting trials very difficult. However, several farmers conducted replicated trials in wheat on their farms with various treatments conducted at each site. Three significant frosts occurred in succession on the 13th 14th and 15th of September.

Below are the results of two trials that were conducted to determine if any specific treatments reduced the impact of frost. There have been findings that Wyalkatchem is generally more frost prone than other varieties.

If you are cropping a high frost risk area, good management would suggest minimising input costs (e.g. fertiliser) in these areas.

TRIAL DETAILS

Property	Ashley Eastough, Yuna.
Soil type	Yellow sand
Crop	Fortune Wheat.
Treatments:	Stubble Retained 50 and 100kg seeding rates, Stubble Burnt 50 and 100kg seed
Replicates:	3 reps
Sowing date	20/5 – Dry
Seeding rate	As above
Fertiliser (kg/ha)	80kg 70Maprite/18MaxAm/12MoP Blend + 50L UAN (58N, 9.3P, 20K, 15S)
Paddock rotation	2009 Wheat
Growing Season Rainfall	May to October 160mm + 30mm in March

RESULTS

Eastough Frost Trial 2010		
Treatment	Yield kg/ha	% of untreated
Stubble Retained 100kg Seed	1.93	100
Burnt 100kg Seed	1.92	100
Stubble Retained 50kg Seed	2.06	107
Burnt 50kg Seed	2.2	114
LSD 0.05	0.37	19
CV		9.1

DISCUSSION

- Due to the large LSD there were no statistically different treatments. However there seems to be a trend that the lower seeding rate improved yield.
- There was no significant yield difference between retaining stubble and burning the stubble at both seeding rates.