Preliminary wheat trial results: 2013 irrigation plots

Wheat trials were laid out in a commercially planted irrigated wheat field outside Lichtenburg in the Northwest province of SA. The cultivars used were SST 843 and recommended agronomic practices for irrigated wheat production were followed throughout.

Novell Terra

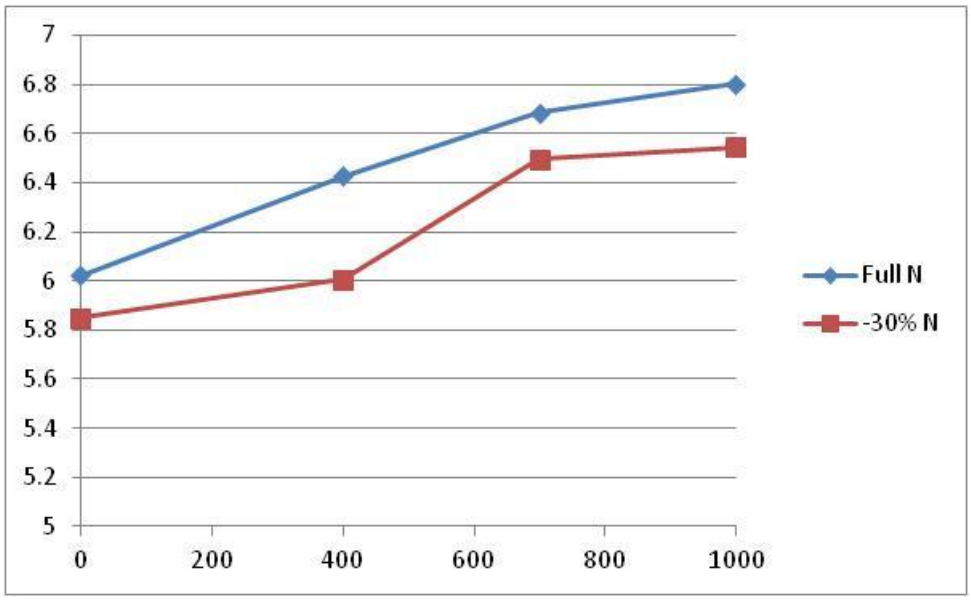
Fertilizer application of N were 190 kg N/ha for the 'Full" treatment and 145 kg N/ha for the '-30%' treatment.

The Novell Terra treatments were sprayed at early tillering stage of wheat development in designated plots via calibrated knapsack sprayer.

At maturity plots were harvested by hand, threshed and grain weighed.

Results show that reducing N application reduced grain yields as can be expected. The application of Terra increased grain yields at both N treatments and in effect in part compensated for the reduced N applied. The responses in average grain yields peaked at the 700ml/ha application.

	Nitrogen fertilization			
Terra (l/ha)	**Full**	**-30%**	**Average**	
0	6.024	5.850	**5.937**	a
400	6.428	6.005	**6.217**	b
700	6.686	6.495	**6.591**	c
1000	6.804	6.544	**6.674**	c
Average	**6.486**	**6.224**	**6.355**	
	a	b		
LSD (0.05) for Nitrogen fertilization			0.241	
lSD (0.05) for Terra application			0.203	
LSD (0.05) for N x Terra interaction			0.326	
CV%			8.60%	

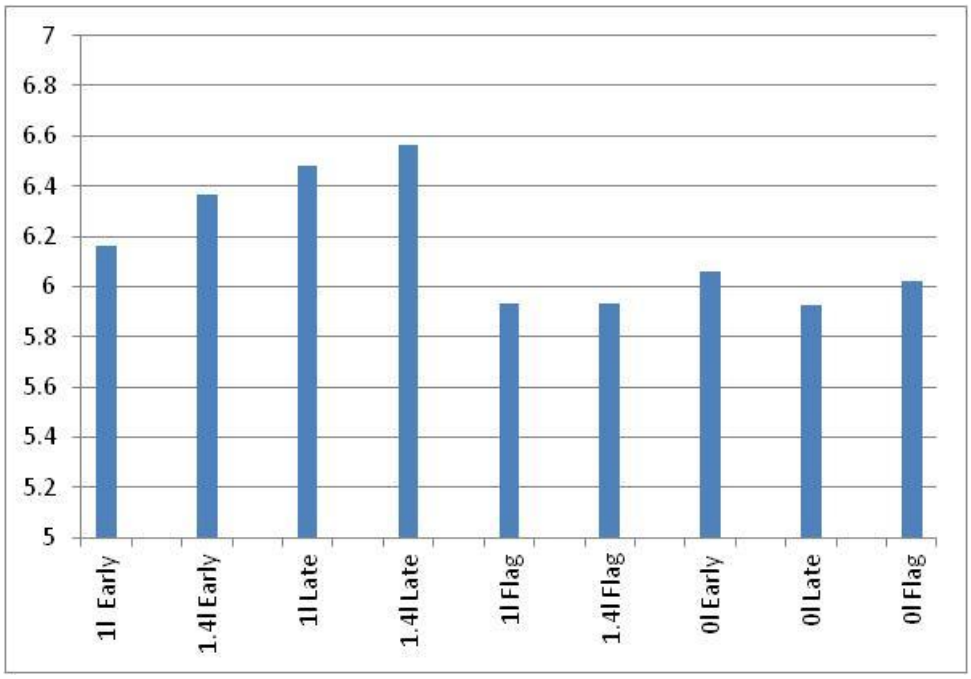


Alpha foliar application

The trial testing Alpha foliar sprays were in the same field as the Terra trial. Foliar applications at indicated application rates were applied to designated plots at early tillering, late tillering and flagleaf stages of wheat development.

Response to the foliar application were found at the late tillering stage of development and at 1000 ml/ha application rate. Insignificant responses were measured at early tillering and flagleafstage. A higher application rate also did not showed an additional increase in yields.

Alpha foliar	**Growth stage of application**				
Application (ml/ha)	**Early tillering**	**Late tillering**	**Flagleag stage**	**Average**	
0	6.061	5.926	6.024	**6.004**	a
1000	6.165	6.481	5.932	**6.193**	a
1400	6.365	6.562	5.931	**6.286**	a
Average	**6.197**	**6.323**	**5.962**	**6.161**	
	ab	b	a		
LSD (0.05) for	Growthstage			0.283	
LSD (0.05) for	Application level			0.283	
LSD (0.05) for	Growthstage x Application level			0.490	
CV%				3.40%	


7
6.8
6.6
6.4
6.2
6
5.8
5.6
5.4
5.2
5
1l Early
1.4l Early
1l Late
1.4l Late
1l Flag
1.4l Flag
0l Early
0l Late
0l Flag