

WINTER WHEAT SOWING RATE TRIAL

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Site Hamilton

These results are related to the terial printed on page 102 of the *1998 Field Day Book*.

BACKGROUND

Sowing rates for wheat in the South West have traditionally been in the order of 100 kg/ha but anecdotal evidence suggests that winter wheat requires a higher sowing rate. Higher plant densities are usually required where stresses such as weed competition and waterlogging is a threat to the crops yield and even though individual plants may tiller less, the increased plant density more than compensates for the decrease in tillers per plant.

AIMS

To determine the optimal sowing rate for winter wheat in the Hamilton area.

METHOD

Six replicates of seven different sowing rate were sown to Paterson Winter Wheat on the 9/6/98.

RESULTS

Sowing Rate (kg/ha)	Yield (T/ha)
60	4.16
80	4.42
100	4.69
120	4.91
140	4.52
160	4.53
180	4.47
Least significant difference 0.73	

While there is little difference between the results it would appear that the best sowing rate for winter wheat in the Hamilton District is between 100 - 120 kg/ha. Interestingly the higher rates were not significantly different from the standard rate in a dry year. What was evident was the increased number of weeds in the plots with the lower rates despite the plots all being sprayed at the same time.