

SAGIT column for Stock Journal - note this is part 1 of 2-part series

Suspension fertilisers producing high yields

Suspension fertilisers under trial on Eyre Peninsula continue to perform well on soils with a high capacity to fix phosphorus.

The officer-in-charge of Minnipa Agriculture Centre, Dr Bob Holloway, said this week that the suspensions were being trialled as an alternative to the more expensive clear fluid fertilisers, such as ammonium polyphosphate.

“The mechanisms which make fluid fertilisers more effective in some circumstances are under further investigation but are thought to include greater diffusion in the soil and less fixation of phosphorus, compared to granular forms,” Dr Holloway said.

“While clear fluid fertiliser, such as ammonium polyphosphate, has been shown to increase yields on phosphorus-responsive soils, it is more expensive than granular fertiliser and this is a barrier to the wider use of clear fluid fertilisers.

“As well, the mixing of other nutrients in clear fluids can result in precipitation and application difficulties.

“We have therefore been trialling suspension fertilisers based on mixing standard granular, or powdered MAP or DAP, with a clay such as bentonite, and adding trace elements.

“Experimental suspension fertilisers from commercial companies have also been included in the trials.”

Dr Holloway said that to assist the project and the research, a special suspension fertiliser mixing plant had been obtained from a US manufacturer thanks to support from SAGIT.

“The idea is make larger amounts of our own brews based on MAP and DAP and add various trace elements such as manganese, copper and zinc,” Dr Holloway said.

“It is also hoped small amounts of suspension fertiliser can be produced for farmers to try.

“A key to the performance of suspension fertilisers is the mixing process.”

Next week: yield results from the 2002 and 2003 trials.

ENDS
BobHok