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GETTING THE MOST OUT OF FERTILIZERS

By Geoff Thomas, SAGIT Project Manager

Just what happens to fertilizer when it is applied to the soil? Work by Mike McLaughlin and his team at the University of Adelaide and CSIRO Land and Water is investigating this very question

It is a good example of how SAGIT funding supports some of the fundamental research issues as well as projects with more immediate outcomes for farmers.

With the rapidly increasing costs, improving fertiliser efficiency is an important issue. The fact that world rock phosphate supply is diminishing rapidly is further good reason for this research.

The work looks out how the "goodies" are released from granules and fluids, in what form, and how they become available to plants. This applies not just to phosphate but also to trace elements.

Of particular interest are the insoluble forms of phosphate and micronutrients, how the water in soil around the granules behaves, and how this compares with fluid fertilizer.

Already there is evidence to confirm that zinc and manganese don't move away from the granule and point of application, and are also less available in both alkaline and non-alkaline soils compared to the same nutrients applied in fluid form

This research is not only important in improving the efficiency of fertiliser use on farm but particularly as the basis for advising manufacturers on new products and formulations which will have greater availability and value.

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