Silicon to save wheat industry

EHSAN Tavakkoli has the potential to save the Australian wheat industry millions of dollars.

His research involves using silicon to enhance disease resistance in wheat and could dramatically reduce costs through a reduction in herbicide and fungicide treatments.

The Iranian postgraduate student at the University of New England, is looking at the potential of silicon in wheat to enhance disease resistance.

"Silicon has been used for centuries in the prevention of plant diseases in agriculture," Mr Tavakkoli said.

"We are only now working to acquire a more precise understanding of its role in plant physiology," he said.

"Wheat farmers could easily incorporate silicon in their disease management strategies.

"This would mean an increased resistance to plant diseases and a reduction in the need for fungicides."

"Integrating silicon agriculture into fertiliser treatments would be very cost-effective."

"Silicon can reduce wheat farmers' costs, increase their profit margins, and help them meet growing pressure for more environmentally friendly, sustainable agriculture."

"So far I have studied the disease-resistant response to silicon application of a wide range of Australian and Iranian varieties of wheat. I now plan to investigate the mechanisms through which silicon enhances plants' defensive response against disease, and to examine the response of wheat to different silicon sources."

He said this keenly awaited results of his research would be available to governments and farmers at the conclusion of his PhD project in 2009.

Rain staying on the plains

NSW Department of Primary Industries' DPI beef cattle research herd at Trangie has received official recognition for a milestone status.

The program's final report titled ‘From Soils to Sales’ by Michael Bill Hoffman and Alistair Rayner, NSW Department of Primary Industries, will be presenting ‘Understanding perspectives provided by Trevor Jorgensen, Delungra and Rob Perkins, Ebor.'