



Media release

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Investigating manganese toxicity in hill country saves farmers' spending

Ballance Agri-Nutrients trials show hill country farmers should investigate manganese toxicity levels on farms in order to optimise animal performance and fertiliser investment.

As economic conditions for farmers tighten and spending on farm nutrients is more carefully managed, Ballance Agri-Nutrients Head of Agro-Sciences Warwick Catto says taking pasture samples to check for manganese toxicity is an essential part of nutrient planning and optimising investment in fertiliser and lime applications.

"Manganese toxicity levels can be high in the hill country, particularly Central Otago where levels can get high enough to result in a decrease in stock weight gain of up to 40 per cent. To get the best out of their nutrient inputs farmers need to be conscious of the level of manganese in pasture as this in conjunction with soil aluminium levels will help determine the importance of lime inputs relative to fertiliser.

"When farmers are considering whether to spend their money on lime or other fertilisers and in what proportions, it is important to establish the level of manganese toxicity on pasture first. Increased fertiliser and quantity of feed supply alone will not positively improve stock performance if there are high levels of manganese in the pasture or toxic levels of aluminium in the soil impeding root growth."

Ballance Agri-Nutrients has recently completed animal trials which investigate the effect of lime treatment on manganese in hill country pasture. In acidic conditions, such as are found in Central Otago, manganese toxicity is higher as it becomes increasingly available for uptake by plants. The trials found that in regions where manganese is higher than 400ppm - lime should be applied to reduce levels of manganese toxicity. Another key factor is the amount of dead matter found in the pasture which should also be reduced in order to decrease manganese toxicity levels.

Warwick Catto says that Ballance Agri-Nutrients works with farmers to ensure they get the best value from the fertilisers they are using. "Ballance's newly appointed South Island Technical Consultant Jeff Morton and other technical experts are able to use their knowledge to assist you with pasture samples and to analyse your nutrient needs in order to reach your production goals."

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