

MEDIA RELEASE

For immediate use



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New research on post-drought pasture recovery says act now

New research suggests there is no benefit to be gained from holding off applying nitrogen fertiliser for several weeks after 'drought-breaking' rain has fallen.

Farmers can act immediately after such rain, the research suggests, and still get a similar dry matter (DM) response over time, so the recent rainfall in several of the drought regions has opened a small window of opportunity for farmers to boost pasture cover before winter.

Aaron Stafford, Science Extension Manager at Ballance Agri-Nutrients, says farmers desperate for feed need no longer delay applying N fertiliser for several weeks after 'drought-breaking' rain.

'Farmers have traditionally been advised to wait until pasture begins to recover from a drought before applying fertiliser N, but new research conducted at trial sites in the Hawke's Bay and Bay of Plenty suggests there is no benefit gained from holding off.'

To test the theory that N in the form of n-rich urea applied immediately after such rain would likely give poor plant DM responses, Ballance commissioned research involving two experiments in drought-affected land.

Randomised small-plot trials were set up on one Bay of Plenty farm (with a Taupo sandy silt soil) and another in Hawke's Bay (with a Pallic soil).

'In the trials, a DM response to N was noted after the first post-drought rainfall and even if the soil dried up again, as in the Bay of Plenty trial which received only natural moisture, the growth-promoting effect of the nitrogen was not lost, and a "carry-over" N response occurred with further rain.

'At the end of the experiment, total DM responses were similar, regardless of whether N had been applied after the first rainfall with the soil drying out again, or if the N application had been delayed until further truly drought breaking rain had arrived,' says Mr Stafford.

He says that caution must be taken to ensure herbage nitrate levels did not increase to the critical threshold at which nitrate poisoning became a risk. One option was to have supplementary feeds on hand.

Mr Stafford says soil temperatures are holding up well, so farmers should look to apply n-rich urea as soon as possible, before the winter months bring a halt to pasture growth until the spring.

'There isn't a large window where conditions will be suitable for fertiliser application, but for many farmers it will be their only chance to get some cover onto pastures for the winter.

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'From a fertiliser perspective, the key decision facing many will be whether to put on N to promote quick growth, or phosphate, potassium and sulphur (PKS) to maintain soil fertility. The choice will partly depend on cash reserves and partly on the overall fertility status of the farm.'

'My key message is if you are desperate for feed get n-rich urea on straight after the first rainfall arrives. Even if it dries up again, the trials show the N response is not lost, as the residual fertiliser N in the soil gives a carry over pasture response when further rainfall arrives.'

'Applying n-rich urea following post-drought rain will help farmers grow as much grass as possible, as quickly as possible, and so help in returning the farm to better productivity.'

Ballance is working one-on-one with shareholders to assist them with a drought-recovery plan specific to their individual needs. Further fertiliser advice or support is available from Ballance's local Technical Sales Representatives on 0800 222 090.