INCREASING NITROGEN USE EFFICIENCY IN DAIRY PASTURES FIELD DAY*

Nitrogen (N) inputs are expensive and there is a fine balance between too much, leading to wastage & loss, and production constraints from too little. Combined with increased weather variability, N fertiliser decisions are difficult!

So how do we better predict/manage N requirements? Can we account for soil N supplied through mineralisation? Do slow release fertilisers work? What impact does irrigation have on efficiency? Is remote sensing technology an option for better monitoring N?

The Queensland University of Technology has been conducting research into these questions over time at a study site on the property of Wayne & Paul Clarke, Dobies Bight (Casino). Most recently this work has been undertaken through the nation-wide More Profit from Nitrogen Program.

Dr David Rowlings will present the practical outcomes of the research to date. His farm scale work suggests that small improvements in Nitrogen Use Efficiency (NUE) can provide substantial productivity and profit gains, providing win-win opportunities for farmers in both environmental and business sustainability improvements.

Other presenters for the day include:

- QUT researcher, Dr Johannes Friedl talking on the use of the trace isotope $^{15}$N to investigate nitrogen cycling in dairy pasture systems and how this information may inform N fertiliser decisions - source, rate & timing.
- QUT researcher, Dr Daniele De Rosa will discuss spatial and temporal variability of pasture yield, water and nutrients, including the use of unmanned aerial vehicles to remotely sense plant status information.

*This field day will be presented in partnership with DeLaval who will also be conducting sessions on robotic dairy technologies installed, commissioned and operating on the Clarke property in recent years.

RSVP easy! Text name & email address to: David Rowlings 0449 170 861

Lunch provided & supported by DeLaval

This event is supported by funding from the Australian Government Department of Agriculture and Water Resources as part of its Rural R&D for Profit program, Queensland University of Technology, Dairy Australia and the NSW Department of Primary Industries as part of the More Profit from Nitrogen Program.