

USING FERTIGATION AS A TOOL TO MITIGATE NITROGEN LEACHING UTILISING THE INCREASED EFFICIENCIES OF WATER AND NUTRIENTS

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A study of past & current international research was conducted to show how this will be achieved in New Zealand farming conditions.

Nitrogen leaching is one of the biggest issues facing farming in NZ today. With more land being irrigated, we need to find a solution to this problem, not just for dairy but for arable farming as well. This will allow farmers to continue to grow food in a sustainable & profitable manner. Fertigation has been used extensively overseas to grow all types of crops from Pastures & Lucerne in Middle East to Potatoes in the Mid West, USA & Sugar Cane in Australia. Universities across the globe have completed numerous research papers showing the benefits of growing crops utilising fertigation to obtain the same yield with less water & nutrients, resulting in “Maximum Economic yield.” Combining the research papers and practical in field experience, this paper will outline how fertigation along with other existing technology already effectively operating in agriculture, can provide a real solution to the N leaching problem whilst keeping NZ farming sustainable and profitable.

Editor’s Note: A manuscript has not yet been submitted for this presentation.