



<b>Title</b>	<b>Discovery of new nitrification inhibitors to mitigate nitrous oxide emissions in grazed pastures</b>
<b>Project Timeframe</b>	Aug 2017 – Dec 2020
<b>Countries Involved</b>	New Zealand (Lincoln University, University of Auckland, University of Otago, AgResearch Ltd., Ravensdown Ltd.) China (Chinese Academy of Sciences) UK (Bangor University, Rothamsted Research)
<b>Aims</b>	To discover potential new nitrification inhibitors by screening tens of thousands of natural and synthetic compounds for their nitrification inhibition properties and testing their efficacy in reducing nitrous oxide emissions from soil.
<b>Research Highlights</b>	<ul style="list-style-type: none"> <li>Identified a set of promising compounds that have the potential to be used in developing nitrification inhibitors, which may outperform dicyandiamide (DCD).</li> <li>Strong relationships have been developed with multiple institutions within New Zealand and international research groups in China and the UK.</li> </ul>
<b>Future Work</b>	<ul style="list-style-type: none"> <li>Further research is required to enable the realisation of the ultimate outcome of pastoral farmers adopting the new nitrification inhibitor technologies to mitigate nitrous oxide emissions.</li> <li>Other funding is sought for further research and development to enable the delivery of the new technology to end users.</li> </ul>
<b>Key Research Output(s)</b>	Publications are being written and will be made available closer to the technology delivery.