



GLOBAL
RESEARCH
ALLIANCE

ON AGRICULTURAL GREENHOUSE GASES

**CROPLANDS RESEARCH GROUP:
New Zealand Country Update**



CRG representatives: Mike Beare

NZ Update: Research Projects relevant to CRG

❖ EJP Soil - Soil Carbon Research Call 2021

Project	Description	Countries involved	NZ involvement
COPASOCS	Understanding the impact of Composite Polymer-based Amendments on Soil Organic Carbon Sequestration	Mexico Uganda, Argentina, Russia, Hungary, Italy	<ul style="list-style-type: none">• NZ GRA funding for developing countries
WISH-ROOTS	Tuning the wheat root microbiome to improve soil health and optimize rhizosphere nitrogen cycling and availability	South Africa, China, UK, Italy, Germany, Belgium, Spain	<ul style="list-style-type: none">• NZ GRA funding for developing countries
CropGas	Understanding the effect of conservation agriculture interventions on greenhouse gas emissions	Zambia, South Africa, Malawi, Zimbabwe, UK, Poland, Ireland	<ul style="list-style-type: none">• NZ GRA funding for developing countries

NZ Update: Research Projects relevant to CRG

❖ EJP Soil - Soil Carbon Research Call 2021 – contd.

Project	Description	Countries involved	NZ involvement
TRUESOIL	Understanding trade-offs and dynamic interactions between SOC stocks and GHG emissions for climate-smart agri-soil management	New Zealand, Chile, Ethiopia, Indonesia, France, Spain, Argentina, Portugal, Norway, Ireland, Finland, Germany	<ul style="list-style-type: none">• NZ GRA funding for developing countries• University of Otago
FREACS	Fractionating soils to quantify, map and understand soil organic carbon persistence and storage	New Zealand, France, Finland, Germany	<ul style="list-style-type: none">• Manaaki Whenua
ICONICA	Understanding the impact of long-term phosphorus additions on carbon sequestration and nitrogen cycling in agricultural soils	New Zealand, Ireland, France, Germany	<ul style="list-style-type: none">• Lincoln University• University of Otago

NZ Update: Research Projects relevant to CRG

❖ Crop-Livestock Circularity Call Projects 2021

Project	Description	Countries involved	NZ involvement
CircAgric-GHG	Understanding strategies for Circular Agriculture to reduce Greenhouse Gas (GHG) emissions within and between farming systems across an agro-ecological gradient	South Africa, Norway, Kenya, Spain, Ireland, Italy, Germany, UK	<ul style="list-style-type: none"> NZ GRA funding for developing countries
SENSE	Improving resource use efficiency while mitigating GHG emissions through well-informed decisions about Circularity	Brazil, Uruguay, UK, Netherlands, Germany, Italy, Argentina	<ul style="list-style-type: none"> NZ GRA funding for developing countries
ReLive	Reintegrating Land and Livestock for GHG mitigation and Optimised Circularity	Ireland, Chile, New Zealand, France, Netherlands, Germany, UK, Spain, Finland, Poland, Estonia	<ul style="list-style-type: none"> NZ GRA funding for developing countries AgResearch
INTEGRITY	Ruminant Livestock Systems as a Strategy to Increase Nutrient Circularity and Promote Sustainability in the Context of Climate Change	Argentina, New Zealand, Uruguay, Peru, Spain, Finland, France, Ireland, UK	<ul style="list-style-type: none"> NZ GRA funding for developing countries AgResearch

NZ Update: Other Research Projects and Capability Building Activities relevant to CRG

❖ SLMMAC Projects

- Funding round in 2022 may include projects related to CRG

❖ Sustainable Food & Fibre Futures Projects

- New soil N test methods to improve N fertiliser forecasting

❖ FONTAGRO project in Latin America on Soil Carbon Research

❖ Greenhouse Gas Inventory Research Projects

- Project to develop nitrous oxide emission factors from fertiliser

❖ Capability Building Activities Relevant to CRG

- CLIFF-GRADS Programme, 6 month research visits for PhD students – Ongoing
- NZ GRADS, PhD scholarships for developing country students in NZ - Ongoing

Research and Capability Opportunities

- *Research Opportunities: – identify research opportunities related to mitigation co-benefits for the CRG and Networks to raise during the discussion session*
 1. SLMACC funding round in 2022 – Research activities related to CRG
- *Capability Opportunities: – identify upcoming workshops and training or projects with potential for students*
 1. Potential PhD projects - Research activities related to CRG
 - i. CLIFF-GRADS Programme – Round five opportunities will open in 2022
 - ii. NZ-GRADS Programme