

## Scientific Conference: Adaptation of Agroecosystems to Climate Change

Global climate change is causing significant impacts on agro-ecosystems worldwide. Rapid changes in temperature and precipitation patterns, and the intensification of climatic extremes (e.g. heat waves, storms, droughts, etc.) threaten the medium-term viability of agroecosystems and sustainability of rural communities. In this context, it is essential to anticipate climatic risks in order to implement adaptation strategies for agriculture and forestry at various scales.

Ongoing research activities and collaborative projects between New Zealand (e.g. Crown Research Institutes), French research organisations (e.g. CNRS<sup>1</sup>, INRAE<sup>2</sup>) and universities aim to answer these questions for those two countries and in the Pacific territories. Institutionally, scientific cooperation between France and New Zealand on this topic has been consolidated with the agreement signed between Science NZ and INRAE.

**The conference will be held at the University of Canterbury (Christchurch) on the 30<sup>th</sup> of November and 1<sup>st</sup> of December 2022 with the aim to:**

- present research and share the knowledge between New Zealand and French teams working on climate change impacts and adaptation of agro-ecosystems;
- discuss issues & adaptation strategies for agriculture & forestry in both countries
- explore future joint research projects and initiatives on adaptation of agroecosystems to climate change.

The program will include key note presentations and scientific sessions on the first day (30 November) and a field trip to Waipara vineyards on December 1st.

It is the intention of the organisers to publish the proceedings of the conference as a special issue of a scientific journal.

*This free event is organised by **FAST!** (<https://www.francenzst.org/>) in collaboration with CNRS, INRAE, University of Canterbury, Science NZ and the French Embassy.*

**Registration:** <https://forms.gle/En1F8JmY9K5mtF6W8>

<sup>1</sup> French National Centre for Scientific Research

<sup>2</sup> French National Research Institute for Agriculture, Food and Environment

30 November -Wednesday			
Scientific Presentations			
	Name	Institutes	Title
Welcome - Registration - COFFEE			
10:00	Mihi		
10:15	FAST! - INRAE- CNRS - EMBASSY	Welcome and introductory speech	
10:35	Jean François Soussana	INRAE	Key note speaker: Towards climate neutral and resilient land-based systems
11:15	Nicholas Cradock- Henry	GNS	Key note speaker: Possible, plausible, preferred: adaptation and long-term futures for agroecosystems
COFFEE			
12:00	Penny Tricker	Plant&Food	Climate Change and the Cropping Systems and Environment Group
12:20	Iñaki Garcia de Cortazar-Atauri	INRAE	Assessing crop climate suitability under current and future climate change conditions. Some examples in France
LUNCH TIME			
13:45	Hervé Quénot	CNRS	IRP VINADAPT : High-resolution scenarios for adapting agrosystems to climate change
14:05	Amber Parker	Lincoln University	Using temperature-based models to understand climate change impacts for grapevines
14:25	Clémence Vannier	Landcare Research	The future of New Zealand agriculture: Modelling pathways to sustainability, resilience and profitability in 2050
14:45	David Evison	University Canterbury	The role of planted forests in adaptation to climate change in New Zealand
15:05	Peter Clinton	SCION	The Future Management and Ecology of planted forests
COFFEE BREAK			
15:45	Sandra Lavorel	CNRS/Landcare Research	Nature's Contributions to climate change adaptation in the Mackenzie Basin
16:05	Andrew Allan	Plant&Food	The climate crisis, and its effect on perennial plants, requires the use of new breeding technologies
16:25	Christian Zamit	NIWA	Climate change and water resource supporting primary sector- Current and Future directions
16:45	Ronaldo Vibart	Agresearch	Climate change and livestock
17:05	Tim Payn	SCION	Forest and climate change
18:00	Reception at the Staff Club of the University of Canterbury		

1 December - Thursday

Officials: 9h30 - Institutional meeting  
in Lincoln

Scientists: 10h- Field Trip in Waipara  
vineyards

Officials of New Zealand and French research organisations:

- Dr Susie Meade: Principal advisor of the New Zealand Prime Minister's Chief Science Advisor
- Dr Anthony Scott: Chief Executive Science New Zealand Inc
- Dr Jean-Marc SOUSSANA: Deputy Director of International office, INRAE
- Dr Jean-Paul Toutain: Regional Director CNRS Representative Office for OCEANIA
- Dr Jean-François HOCQUETTE: In charge of the INRAE's relations with Oceania
- Dr Jean-Michel Carnus: In charge of the INRAE's relations with New Zealand

Contacts:

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## Christchurch – University of Canterbury *Engineering Core, Lecture Theatre E12*

