August CEBRAnar: ***The use of damage functions to estimate consequences from pests, diseases and climate change***

The Research & Innovation Team is excited to bring you our next research webinar showcasing leading researchers from the Centre of Excellence for Biosecurity Risk Analysis (CEBRA) at the University of Melbourne. CEBRA supports both the department and the New Zealand Ministry for Primary Industries' (NZ MPI) vital biosecurity activities by providing evidence-based tools, analyses and advice to improve Australia and New Zealand's biosecurity systems. This month we present:

August CEBRAnar with Christine Li, Research Fellow with CEBRA

Please register for this event which will start at **11am (Canberra time) on Thursday, 25 August 2022 via Microsoft Teams** (details available on Eventbrite).

Quantitative biosecurity risk assessment usually relies on the estimation of consequences from pest and disease incursions. Damages to assets from pests, diseases and other hazards are routinely estimated using data from historical outbreaks, experiments, and expert elicitation. Damage functions can be used to describe these relationships and apply them to contexts where information on potential consequences is limited but necessary to understand. Damage functions are also useful to estimate the impacts of a changing climate on agricultural productivity, labour productivity, critical infrastructure and more.

As part of the department's *Valuing Australia's Biosecurity System* and *Biosecurity Risk from changes in climate, trade and pest and disease pathways* projects as well as the NZ MPI/Scion *Climate change: Trade and Biosecurity* project, CEBRA has developed various damage functions that are being used in the modelling of asset values and vulnerability, changing trade patterns and biosecurity risks under climate change for these projects respectively.

So how are damage functions estimated? How can they be used to estimate potential consequences in different contexts? What are their limitations? Join us to hear Christine Li talk about the use of damage functions to estimate impacts from pests, diseases and climate change.

Please note that this forum will be recorded. A link to the recording will be sent to registered attendees. For all enquiries, please contact the Research & Innovation Section, Biosecurity Strategy and Reform Division.