PhD Scholarship MBIE Biocontrol



Background of Scholarship:

Applications are invited for a PhD scholarship opportunity in the Invasomics laboratory at the School of Science, University of Waikato.

New Zealand's primary production and conservation estates are threatened by invasive species. Biocontrol can be an effective, pesticide-free, non-GMO method of controlling damaging invasive



pests, but new biocontrol agents are often ineffective. We need to be able to better predict when they will work well before we release them to be sure that we are not introducing new damaging species.

This project leverages a remarkable 35-year experiment on a parasitoid wasp biocontrol agent (to target the Argentine stem weevil, pictured left; Image: Simon Hinkley, Ken Walker; Museums Victoria) to identify hologenomic factors associated with biocontrol success and failure. We will also use this information to predict the effectiveness of

biocontrol agents that are slated for release in New Zealand, thus improving existing biocontrol systems, reducing uncertainty around proposed systems, and ensuring that effective methods are available to control future pests without increasing pesticide use.

This project is fully-funded by MBIE (Smart Ideas programme) and we are seeking a PhD applicant with skills in population genomics and/or bioinformatics. The successful applicant will be based at the University of Waikato under the Chief Supervision of Dr. Ang McGaughran, and will work together with the project team (Prof Peter Dearden, University of Otago; Mr Mark McNeill, AgResearch; Prof Stephen Goldson, AgResearch/Lincoln University). The main focus of the PhD will be population hologenomics and the position will involve spending time in the Dearden lab at Otago. The successful applicant should be eligible to enrol at the University of Waikato.

Eligibility criteria:

Full-time Domestic/International/PR students

Application documents required:

- CV
- · Contact details of 2 referees
- Interest statement for the position

Contact and email address for applications:

Dr. Ang McGaughran amcgaugh@waikato.ac.nz

Closing date:

An immediate start is preferred. Position will remain open until filled.