PhD and Master Scholarships Available!

Research Focus: **Climate change and its effects on vector transmission of plant pathogens**

Macquarie University, Sydney, Australia

Applied BioSciences at Macquarie University is thrilled to announce scholarships for highly motivated and talented candidates interested in pursuing a PhD or Master's degree.

The research focuses on the intricate relationships between plant viruses, their vectors, and the environment, with the ultimate goal of developing innovative strategies to mitigate the impacts of pests and diseases on global food production under current and future climate.

Research Areas:

- **Vector Biology**: Study the role of hemipteran insects such as aphids, whiteflies, leafhoppers, and planthoppers in the transmission of plant pathogens. Investigate how different vectors influence pathogen spread and disease severity.
- **Virus-Vector-Plant Interactions**: Explore how viruses manipulate host plants to become more attractive to vectors, thus enhancing virus transmission. Understand the biochemical and molecular mechanisms involved in these interactions.
- **Environmental Impact**: Analyse how biotic and abiotic factors, including climate change, affect the persistence and epidemiology of vector-borne plant viruses. Examine how temperature, precipitation, and light influence host resistance, vector fitness, and virus transmission dynamics.
- **Disease Management**: Develop strategies to predict and manage disease outbreaks. Investigate methods to disrupt virus transmission and reduce the spread of plant viruses.

For more information and to apply, please contact me: piotr.trebicki@mq.edu.au or please visit our website at http://mq.edu.au/applied-biosciences




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