

Project title: Using pheromones in the management of mirids and vegetable bugs

Position: Doctoral Student

Project start date: 1 April 2024

Location: Hobart, Australia

Institution: University of Tasmania, Tasmanian Institute of Agriculture

Project Description:

The Australian Rubus berry industry is in the midst of a rapid expansion. These gains have been derived in part by the increased utilisation of covered cropping systems. However, these systems coupled with reductions in agrochemical use have created ideal environments for pestiferous insects including sucking bugs such as mirids and pentatomids. Further, due to consumer driven expectations, a return to chemically intensive berry production methodologies is no longer seen by industry as an acceptable method of sucking bug control. This project seeks to advance Australian integrated pest management (IPM) of sucking bugs in blackberries and raspberries by improving sucking bug management through the use of pheromone-based monitoring strategies. In order to provide improved pest monitoring strategies, this project will investigate the use of, and where relevant isolate and field test, the pheromone cues used by two Australian mirid species and Green Vegetable Bug (*Nezara viridula*) for pest control or crop monitoring activities in commercial Rubus production systems.

Funding:

Applicants will be considered for a Research Training Program (RTP) scholarship or Tasmania Graduate Research Scholarship (TGRS) which, if successful, provides:

- a living allowance stipend of \$31,500 per annum (2023 rate, indexed annually) for 3.5 years
- a relocation allowance of up to \$2,000
- a tuition fees offset covering the cost of tuition fees for up to four years

Eligibility requirements:

- Applications are open to Domestic/ International/ Onshore international applicants.
- Understanding of organic chemistry and/or integrated pest management essential.
- English language score must be above minimum entry requirements i.e., IELTS overall score of ≥ 7.0 (no band less than 6.5).
- Peer-reviewed publication track record desirable

Application: Send a letter of motivation and a detailed CV to Stephen.Quarrell@utas.edu.au

Application deadline: 1 February 2024

Further information regarding this project can be found at:

<https://www.utas.edu.au/research/degrees/available-projects/projects/agriculture/management-of-sucking-bugs-in-Rubus>