

RB21000 Integrated pest management approaches to address pest challenges in Raspberry and Blackberry

This national project (2023-2027) aims to boost integrated pest management (IPM) in raspberry and blackberry (Rubus) crops and help growers meet the challenge of modern growing systems and pests.

The project team works with growers, advisors, and suppliers to develop and implement new practices to establish a more profitable and sustainable industry.

An important component of this work is the development of new biocontrol options for damaging pests such as green vegetable bug (GVB).

This project has been funded by Hort Innovation, using the raspberry and blackberry research and development levy, contributions from the Australian Government and co-investment from the University of Tasmania, Agriculture Victoria, and NSW DPI.

Hort Innovation is the grower owned, not-for-profit research and development corporation for Australian horticulture.



Please reach out for more information or to help this survey if you have GVB in your garden or farm.

Contact us

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For more information about the project



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Image credit: Photo of southern green stink bug (*Nezara viridula*) by Johnny N. Dell, Bugwood.org



AGRICULTURE VICTORIA

We need your help to sustainably manage green vegetable bug (GVB)

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RASPBERRY AND
BLACKBERRY FUND

UNIVERSITY OF TASMANIA
TIA
Tasmanian Institute of Agriculture



How to help with this national survey

1. Inspect your vegetable garden or crop for the presence of green vegetable bug (GVB) (note that nymphs are not green in colour).
2. Collect GVB adults and nymphs, place them in a sealed plastic bag and pack into a sturdy rigid or unbreakable container or tube to prevent crushing (not glass).
3. Add a moist paper towel in the pack and label with location details and the host plant the GVB was collected from (do not include plant material).
4. Email Hasan.Rahmani@agriculture.vic.gov.au to arrange free shipping.

What are we doing?

The project is investigating the potential contribution of the parasitic fly *Trichopoda giacomelli* to *Rubus* integrated pest management (IPM) systems. *Trichopoda giacomelli* is a highly specialised biocontrol agent of GVB that was released in northern NSW and Queensland in the 1990s.

Image credit (right): Photo of *Trichopoda giacomelli* adult fly on a flower by Tim Mullaney.

While the biocontrol agent has established in those areas, its current geographic range is unknown.

This project aims to map the spread of the parasitoid in Australia by collecting GVB specimens and examining them for evidence of parasitism (e.g., parasitoid eggs on the external surface, see image below).

Understanding where *T. giacomelli* occurs, and where it could spread to, is an important step in assessing the potential for the parasitoid to control GVB in *Rubus* growing districts across Australia.

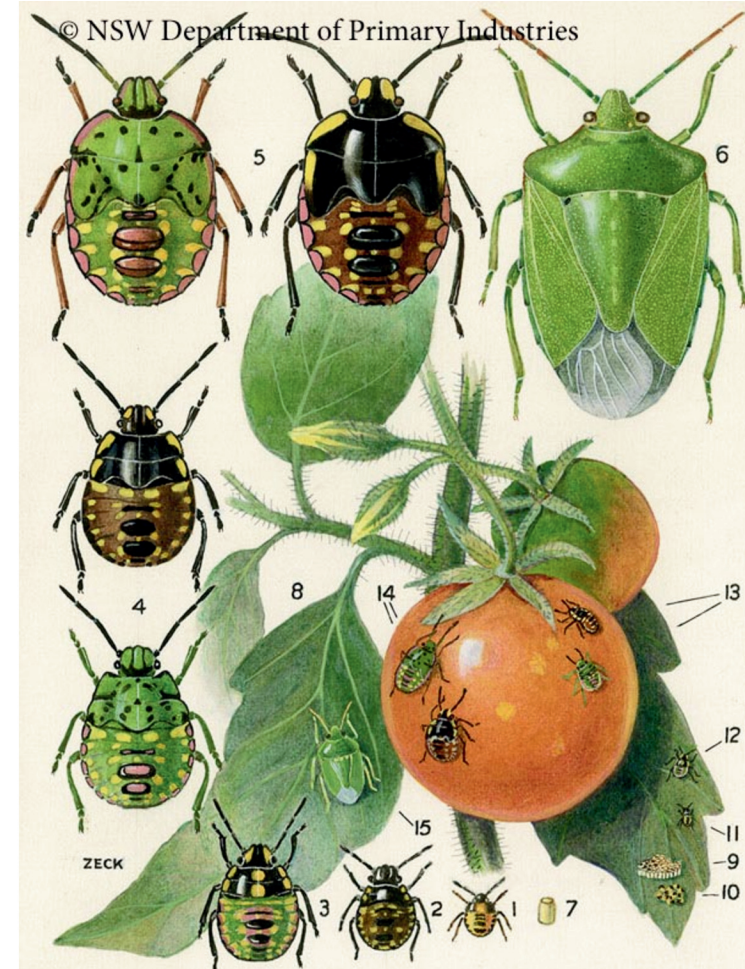


Image credit: Illustration of Green vegetable bug lifecycle by EH Zeck. Reproduced with permission from NSW Department of Primary Industries.

The Green vegetable bug (*Nezara viridula*, GVB)

Green vegetable bug *Nezara viridula* (GVB) is a cosmopolitan pest of fruit, vegetables, and field crops. Immature and adult bugs feed on vegetative buds, developing and mature fruits, and seeds, causing reductions in crop quality and yield.

Adults are green and about 15 mm long. They release a strong odour when disturbed. The smaller nymphs (immatures) have variable green, yellow and black markings. Eggs are normally laid in clusters.