

BUILDING A BUZZ FOR BENEFICIAL BUGS

Building a Buzz for Beneficial Bugs (BABFBB) is a State NRM funded project involving the promotion of beneficial insect biodiversity as an alternative to pesticide usage in Horticulture systems.

NACC NRM was a successful applicant of a State NRM funded Community Stewardship Grant in 2020. Building a Buzz kicked off at the start of 2021 with consultations from Professor Geoff Gurr at Charles Sturt University, David Knowles (Entomologist), local representatives from DPIRD, and two NAR growers, Bao Duy Nguyen of Sun City Produce, and Jack Davoren of Chally Bridge Farms.



The project had two demonstration sites with insect-attracting flowering plants sown adjacent to the horticulture crops, and native vegetation shrub and tree windbreaks. Insect monitoring was done with sticky traps over the growing seasons in 2021 and 2022, and were identified by David Knowles and DPIRD entomologists. There was a 'insect hotel' community awareness workshop at the Mingenew Expo 2021, where the NACC NRM team won 'Best Education or Information Display'. There was a soil health webinar for horticulture growers in October 2021, and the insect biodiversity poster was published in February 2022. The project wrapped up with a field walk of the demonstration sites and an insect identification workshop in August 2022.



The research Building a Buzz was inspired by was done by Professor Geoff Gurr and Hort Innovation. Geoff said these kinds of projects are important for giving growers the confidence and practical tools to implement new approaches to pest management. "Research like that my group has conducted with Hort Innovation have revealed scope to suppress pests effectively using nectar plants to promote biological control. The benefits can outweigh costs by seven to one! Now we need to get word out there and help more growers benefit from these new approaches."

Jack Davoren, a flower, fruit and vegetable grower (Chally Bridge Farms) in Isseka, hosted a demonstration site with insect-attracting flowering plants alongside his brassicas and cut flowers both years of the project. Jack thinks projects like Building a Buzz are key in providing alternative solutions.

"There is a lack of information out there for new techniques for people trying to do things differently to the industry standard, such as myself. I liked being involved in this project to learn and test the research firsthand. And it was great to have access to experts in the field such as Geoff. I wouldn't know where to start looking for information on alternative pest control without this project."



Jack said a highlight of the project was 'being able to showcase the demonstration site and show other people that 'this stuff' actually works!' Jack also said his main takeaway from the project will be when he harvests his 'cut flowers' he will always leave some flowers in the system. The flowers he leaves will provide a suitable environment (shelter, nectar, pollen) for the beneficial insects to thrive and continue to control the pest insects. He learned during the project that the flowers he grows as a cash crop work just as well as the flowers in the project, to attract and give shelter to beneficials. He was pleased to learn that he was already on the right track of having a 'bug friendly' farm.



The Field Walk at the demonstration sites was a highlight of the project for the NACC NRM team and the stakeholders involved.

David Knowles (Spineless Wonders) said he thought participants recognised the potential of encouraging friendly local native insects in order to benefit many aspects of farming practice ranging from pollination, pest control to decomposition related nutrient recycling services.

Another stakeholder who was impressed with the Field Walk was Geoff Gurr. Geoff said people need to be made aware that there are solutions to pests that don't involve pesticide use. "It was great to see lots of TAFE students attend the Building a Buzz event in Geraldton as they are the new generation of growers that will shape the future of horticulture in Australia."



Bao Duy Nguyen (Sun City Produce), a cucumber, capsicum and tomato grower hosted the second demonstration site at his Walkaway farm. In 2021 Bao sowed the insect attracting flowering plants in rows on each side of the cucumber growing tunnel. After attending the Soil Health Webinar in October 2021, Bao learned from Joel Williams (integrated Soils) that he could improve the soil around the cucumbers and have a better result at attracting beneficial insects if he sowed the plants inside the growing tunnel. Bao altered his demonstration site to this setup in 2022.



Bao wanted to get involved in Building a Buzz for Beneficial Bugs as he was already trying to reduce his pesticide usage by using biological services to release beneficial insects inside his tunnels such as hoverflies. He was finding them helpful but wanted to learn more about attracting beneficial insects naturally and how to keep them around.

Bao believes projects such as Building a Buzz for Beneficial Bugs are important in offering new tools for farmers.

"It builds motivation for me to continue doing what I'm doing. These projects connect growers to people with the answers to our questions, such as Geoff and David."

Bao said a highlight of the project was visiting Jack's farm on the Field Walk.

"It was so interesting to see how the demonstration site was set up on such a different system and environment to my farm."

Bao also said the SNAP technique he learned from Geoff will be something he will continue doing and expanding on in this horticulture system.



Thank you to our growers, stakeholder, NACC NRM team members and everyone involved throughout the two years of Building a Buzz for Beneficial Bugs .