Biosecurity for researchers

Source: Jeremy Jones, University of New England NSW

NATIVE AUSTRALIAN BEES

Field research and biosecurity

Research sites and field work are integral to agricultural research, but researchers need to be aware of the biosecurity risks when working with stingless bee hives and solitary/semi-social bee hotels or nests. Biosecurity best-practice needs to manage weeds as well as pests and diseases of bees, plants and animals, as you move on and off sites.

The top tips for reducing field research biosecurity risks

1. Work with the property owner to develop practices to safeguard the site.

Check the owners requirements:

- Do they have a wash down facility you can use for you and your vehicle?
- Are there any declared pests, quarantined areas or other issues on the property that may require extra measures?
- Is there a property plan with designated roadways to the site?
- Are there requirements for using the property vehicles when visiting the site?
- Is there a designated parking area?
- Are there procedures for notifying the grower as you enter and leave the site?

2. Employ a 'keep it clean' policy when conducting on site research.

Apply this to vehicles, machinery, footwear, clothing, equipment and tools.

- Locate wash down facilities on the property or use a car/truck wash prior to travelling to other sites.
- Ensure you follow policies and quarantine regulations for movement or disposal of bees, waste or equipment (particularly if moving material between regions or states).

Stingless bee hive

Source: Dr Jenny Shanks, Plant Health Australia

3. Ensure the whole team knows what to do.

- Involve staff or co-workers in determining biosecurity measures to assist them to understand and manage the risks.
- Review, evaluate and update biosecurity practices/protocols as needed.

4. Consider the location of your field site.

- If possible, locate sites near an access road to reduce on-site vehicle movement through a property. The location is even more important if field demonstrations will be held.

5. Consider the risks of experimental material.

- Monitor trial material for introduction of a new pest.
- Follow up and report any unusual symptoms in your bees.

6. Carry a vehicle biosecurity kit at all times.

- Contents include provisions for keeping hands, equipment and vehicles free of pests.
- Incorporate a foot bath at site access points.

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Source: Jeremy Jones, University of New England NSW

NATIVE AUSTRALIAN BEES

Movement of native bees as biosecurity risk

Interstate movement of stingless bee colonies, and solitary and semi-social nests need to be carefully considered as there are many biosecurity risks associated with this. Moving native bees out of their natural environment into an area where they do not usually occur increases the chances of disease outbreak.

This is a major biosecurity risk as it decreases the chances of controlling the disease if it continues to spread throughout new regions. This can also result in competition for resources, or even outcompeting the species that were already present in the new area. Moving native bees out of their natural environment may also result in interbreeding with other species already present in the new area.

What do you risk by not considering native bee hive biosecurity?

- Introducing a new pest to an area with associated control and management issues (possibly long term).
- Negative feedback for your organisation.
- Failure to take on responsibility and 'duty of care'.
- Reluctance of meliponary or bee hotel owners to participate in future trials.

If you see anything unusual, call the Exotic Plant Pest Hotline.

EXOTIC PLANT PEST HOTLINE
1800 084 881

A bee hotel

Source: Dr Jenny Shanks, Plant Health Australia

Basic vehicle biosecurity kit:

- stiff brushes and a scraper for cleaning boots and equipment
- dustpan and brush.
- rubber boots, boot covers and/or a spare pair of boots
- disposable gloves
- plastic tray and/or bucket (for use as a footbath and to clean equipment)
- hand sanitiser or hand wash
- strong plastic bags for disposable items/dirty clothing/shoes
- 5L water.

An example of a vehicle biosecurity kit

Source: Farm Biosecurity Program

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