



sustainability through
science and innovation

Collecting and sending green peach aphids (GPA) for resistance testing

Sampling/ collecting GPA

- GPAs are often unevenly distributed across a paddock and these patches of aphids can represent different clones (biotypes) of aphids that differ in levels of resistance. It is therefore important to **collect a representative sample of GPA from across a paddock** in order to accurately determine the resistance status of your population.
- If possible, collect **a bulk of >50 individual aphids per paddock**. Try and randomly select **5 sampling points at least 20 m apart**. Collect GPA from 3-5 plants at each sampling point. Where possible, collect **> 20 aphids at each sampling point**. We need at least 50 individual aphids from each paddock to complete resistance testing.
- At each plant, directly remove (cut) leaves that contain GPA, leaving the aphids undisturbed.
- Place the aphids and leaves in a **non-crushable plastic container** with small pinholes in the lid for ventilation. Also **place a piece of tissue into the container to absorb excess moisture** (do not send samples in zip lock bags or in a way whereby aphids can be squashed in the post).

Sending GPA samples

- Samples should be sent via overnight express post. Do not send samples towards the end of the week or over the weekend.
- Once samples have been posted, please notify us via email at sdelittle@cesaraustralia.com. This will ensure samples are processed in a timely manner.

Samples should be addressed to:
resistance testing service

cesar

293 Royal Parade, Parkville
VIC 3052

Data collection

- Adequate collection data is essential for successful resistance testing. To assist us, please print the below '**cesar** GPA resistance testing field recording sheet', fill out all the details and include when posting your sample.





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cesar GPA resistance testing field recording sheet

Collection date.....

Collector name.....

Phone:

Mobile:

Email:

Grower name(s):

Paddock name:

Paddock/Crop Road address:

GPS at collection point (decimal):

Paddock Details

Crop -

Crop growth stage -

Paddock History

Crop Last year -

Insecticide History – Fill in information and then circle any treatments that failed

| | Pre-sowing | Seed treatment | Bare earth (PSPE) | Seedling emergence | Other sprays |
|-----------|--------------------------|--|--------------------------|----------------------------|-----------------------------------|
| | Chemicals / rates / why? | Chemical / commercial or famer treated/rate/why? | Chemicals / rates / why? | Chemicals / rates / timing | Chemicals / rates / timing / why? |
| This year | | | | | |
| Last year | | | | | |

Other notes and details of any control failures:

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