

Peanut / Ghost snail

Quick guide for Peanut and Soybean
industry stakeholders

Image © Karen Guin



Plant Health
AUSTRALIA

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About this quick guide

Peanut / Ghost snail (*Bulimulus sporadicus*), was detected at the Port of Brisbane in March 2025.

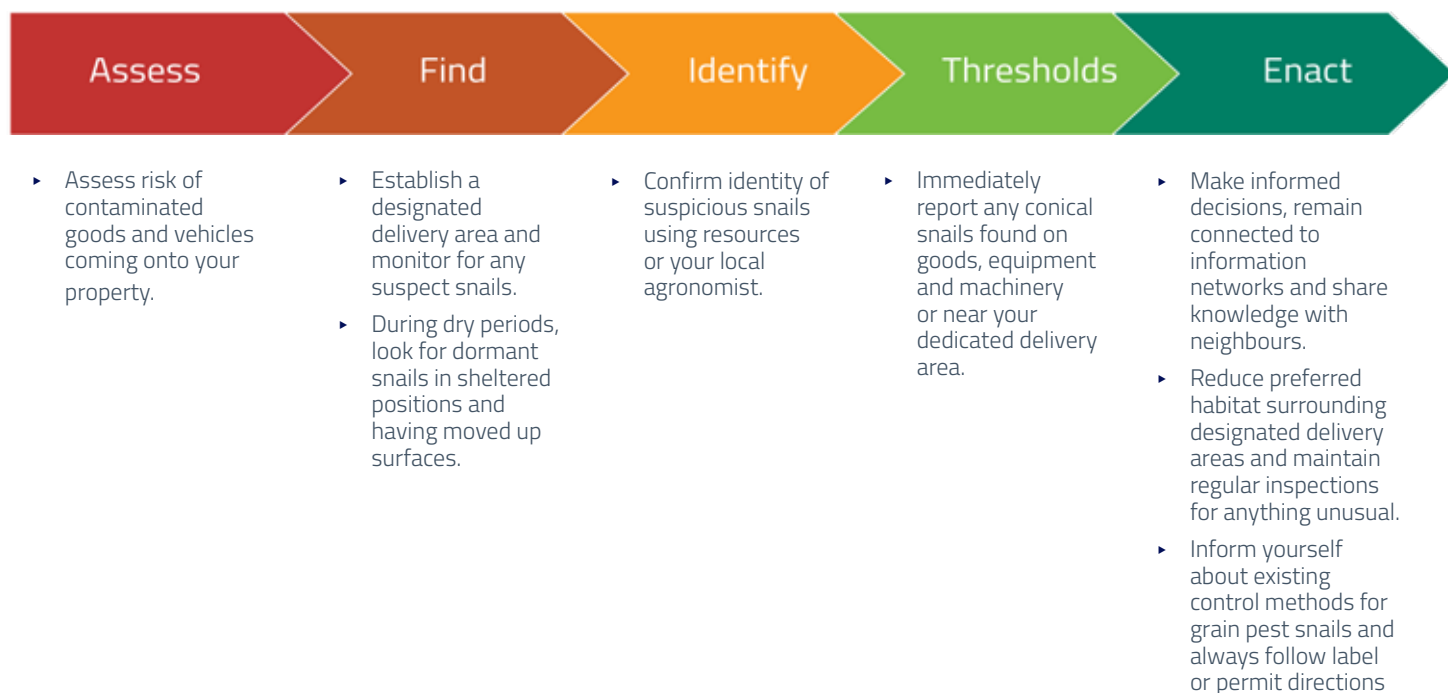
Peanut / Ghost snail is a High Priority Pest (HPP) of the grains industry and can pose a direct risk to soybean and peanut production through crop damage, irrigation clogging, and grain contamination.

As at 14 August 2026, peanut snail is not considered an established pest in Australia. The intended purpose of the quick guide is to provide a reference point and understanding of the exotic peanut snail as well as a baseline for industry to build upon in designing future management strategies and plans for exotic pests within different production systems.

This guide applies the Assess-Find-Identify-Thresholds-Enact (AFITE) framework to help grain growers prepare.

Call the **Exotic Plant Pest Hotline** on 1800 084 881 or **Biosecurity Queensland** on 13 25 23 if you suspect peanut snail on your property.

This quick guide has been developed on the AFITE strategy shown below:



Assess: Know your risk

Proximity to the outbreak

Peanut snail is not established in Australian cropping regions, but the Port of Brisbane detections are a signal that there is a heightened level of risk of spread, especially for operations in south-east Queensland. The primary pathway into farming areas is through human-assisted movement via contaminated carrier materials similar to those identified for Red Imported Fire Ants (RIFA) rather than unaided natural dispersal.

High-risk carrier materials identified for RIFA that are likely to be encountered by grain businesses include:

- fertiliser and seed bags, pallets and agri-chemical shuttles being delivered on farm from Brisbane and surrounding areas
- agricultural machinery, equipment and break bulk deliveries sourced from Brisbane and surrounding areas
- mulch, compost, soil, potting media and/or landscape supplies from Brisbane and surrounding areas suppliers
- shipping containers
- vehicles that have recently been in Brisbane and surrounding areas.

Seasonal risk factors

- Peanut snail is most active in warm, humid conditions. Peak activity in QLD would be expected to align with the wet season (November–April).
- Unlike temperate snail species, peanut snail can aestivate for months. During hot, dry periods they often seek shelter or climb up surfaces to escape these conditions, become dormant and remain hidden inside their shells to limit their exposure to elements and drying out. Surveillance should continue even in dry periods.
- Activity resumes rapidly after rainfall or irrigation.

Assess your risk now

There is a heightened risk of spread of the exotic peanut snail through human-assisted movement following recent detections at the Port of Brisbane.

Any farm inputs, (e.g., machinery, fertiliser, etc.) that have links to the Port of Brisbane and/or southeast Queensland (SEQ) areas should be checked thoroughly for the presence of peanut snails.



Image: © Douglas Meyer / iNaturalist

Find: Surveillance in agricultural settings

Unlike common Australian grain snails (common vineyard snail, pointed snail) that are most visible at dawn and dusk, peanut snail may be active any time conditions are humid.

Where to look on your property

- In the first instance inspections for peanut snail should focus on designated delivery/receival areas. Inspect regularly and thoroughly after any delivery from SEQ.
- Like other snail, peanut snail is attracted to calcium rich materials such as concrete surfaces and besser blocks due to their limestone content.
- If left undetected and allowed to established, peanut snail may also be found:
 - around irrigation infrastructure congregating around sprinkler jets, drip emitters and pivot arms seeking moisture
 - shed and machinery storage areas under and behind equipment, especially imported or second-hand machinery
 - mulched garden beds, fence lines and road verges adjacent to paddocks
 - seedling rows and crop canopy having climbed plants and structures to avoid dry soil during the hotter months
 - any area with retained stubble, leaf litter, or dense ground cover.

Monitoring method

Dedicate an area for receiving farm deliveries so you can better target your monitoring efforts and make it easier to detect hitchhiker pests.

- Familiarise yourself with the signs and characteristics of peanut snail and their eggs.
- Look for snails in the morning or after rain/irrigation, when they are most active.
- Exercise caution when bringing farm inputs, machinery, material, contractors, and visitors originating from the Port of Brisbane or Brisbane onto your farm.
- Carry out regular inspections of designated delivery areas as human-assisted movement remains the most likely means by which peanut snail will spread in significant numbers.
- Check irrigation equipment, particularly emitters and filters, for snail aggregation or blockage.
- Traps baited with yeasty substances such as vegemite, beer, or dry yeast mixed with water, in suspected hotspots can be useful to determine snail presence.

Low activity period

During hot and dry periods, peanut snails ability to rest in an inactive state in sheltered locations and by hiding in its shell for months means it can be easy to overlook.

Look around designated delivery areas, check surrounding areas including under logs, leaf litter, irrigation pipes and debris even when no snail activity is obvious. Do not conclude an area is clear after a single inspection.

Identify: Positively identify suspected peanut snail

Peanut snail can be confused with several other species present in Australian grain regions. Correct identification is essential before reporting. Use a hand magnifier if available.

Feature	Peanut snail (<i>Bulimulus sporadicus</i>)	Peanut snail eggs
Visual	 Image: © Jaxshells.org	 Image: © Jaxshells.org
Shape	Slim, elongated cone (5-7 whorls)	Spherical
Colour	Tan to light brown, faint banding	Solid white
Size	Juvenile 1.6mm, average adult 20mm, max. size measured 30 mm	1mm in diameter
Body colour	Pale brown to off-white; darker near eyestalks	
Key identification features	- Shell noticeably elongated and pointed. - Shell generally larger, around 15mm to a maximum of 30mm.	- Eggs are small (~1mm), shiny white spheres in clusters, buried 1–2cm deep in moist soil or leaf litter in clusters of 10 to 50. - Eggs are small (~1mm), shiny white spheres in clusters, buried 1–2cm deep in moist soil. - Eggs hatch in approximately 2–4 weeks depending on ground warmth and moisture.
Origin	South America / West Indies (exotic - REPORT)	

Adults are hermaphrodites and can multiply rapidly in agricultural or garden settings.

Other identification features of peanut snail

- Climbing behaviour: peanut snail readily ascends plants, fences, buildings and equipment – a key behavioural clue.
- Large aggregations around irrigation emitters are a strong indicator.

Snail identification steps to aid reporting

Take clear, close-up photos of the suspect snails, their shell, and a wider shot photo for environmental context. If possible, sample collect 1 to a few snails and keep in a closed plastic container for closer inspection and accurate identification.

Thresholds: When to act

Important: No locally validated action thresholds have been established specifically for peanut snail in Australian grain crops. The information below draws on overseas experience in soybean and peanut crops (from USA) and general grain snail thresholds from Australian broadacre research by the Grains Research and Development Corporation (GRDC).

Situation	Indicator / Threshold (indicative only)	Sensitivity	Recommended action
Any suspected peanut snail detected anywhere near farm delivery areas or on farm	1 or more snails suspected to be peanut snail	CRITICAL	REPORT IMMEDIATELY to Exotic Plant Pest Hotline 1800 084 881. Report a pest or disease concern - DAFF. Report a biosecurity pest or disease using the QLD Department of Primary Industries (DPI) Pest or Disease portal.
Irrigation infrastructure	Any aggregation of snails on or near emitters / drip lines	High	Manually removed and keep for inspection. Report if peanut snail is suspected. Inspect full irrigation system.
Seedling/establishment phase (soybeans, peanuts)	Any feeding damage or snail presence in seedling rows (equivalent: $\geq 5/m^2$ for pulses/oilseeds, adapted from GRDC grain snail guidelines)	High	Inspect delivery areas; consider molluscicide bait if chemical control available. Report any suspected peanut snail.
Grain quality / harvest	Presence of snail shells in grain sample. Peanut snail shell size (~15-30 mm) is noticeably larger than most grain; peanut-size shells are a key risk for peanut growers	High	Adjust harvester sieves; use grain rollers. Report any suspected peanut snail.

Report any suspect peanut snail

Unlike established grain snail pests, any presence of peanut snail must be reported.

Upload photos to QLD DPI via the [Report a Biosecurity Pest or Disease portal](#). You can also call the Exotic Plant Pest Hotline on 1800 084 881.



Enact: Management and control options

Farm Biosecurity - Prevention first

1. Establish a dedicated delivery area for all farm inputs - record origin of all goods received.
2. Continue to request supplier declarations including plant health certificate for any goods originating or transported through RIFA quarantine zones – especially pallets, mulch, soil, packaging, landscaping supplies and machinery.
3. Continue to inspect and clean all machinery before it enters production areas (wash down hitch points, undercarriage, crop residues).
4. Alert staff, contractors and agronomists to the heightened risk - share identification information.

Control options

During the early stages following introduction to the farm, peanut snails would be expected in small numbers and in isolated aggregations originating from the movement of high risk material.

- Reduce habitat around delivery zones and around pressurised irrigation infrastructure: clear weeds, leaf litter and mulch near crop edges and irrigation infrastructure to reduce refuges to make it easier to find.
- Irrigation hygiene: regularly check and clear irrigation emitters; consider raising drip lines above ground level where feasible.

Additional control options are available for established snails found in crops, such as:

- Stubble management: rolling/crushing stubble in hot conditions (>35°C) can kill active snails; effectiveness depends on temperature and ground contact.
- Harvest management: if contamination is detected, adjust harvester sieve size and consider snail crusher grain rollers – consult your agronomist for peanut snail shell dimensions vs. your grain.

Chemical control of snails in agricultural crops

Table 1. Molluscicide options for snail management

Active ingredient	How it works	Key advantages	Limitations / considerations
Metaldehyde	Kills snails after ingestion	Most widely used option; range of products available; cost-effective.	Works best when snails are actively feeding; some cheaper pellets break down after rainfall; performance varies between formulations.
Methiocarb	Fast-acting carbamate molluscicide	Strong knock-down effect; good weather and mould resistance.	May present higher risk to birds, mammals and beneficial insects; generally reserved for severe infestations or targeted use.
Iron phosphate / Iron EDTA	Disrupts calcium metabolism, causing snails to stop feeding	Lower risk to livestock, pets, birds and beneficial insects; highly specific to snails and slugs.	Usually more expensive per hectare than metaldehyde-based baits.
Co-formulated baits	Combine molluscicide and insecticide actives	Can control snails and other pests such as slaters, millipedes and earwigs in a single application.	Assess suitability, cost and stewardship requirements before use.

Best practice baiting strategy

Principle	Recommendation
Time applications carefully	Apply baits in late summer to autumn, before egg-laying begins and prior to crop emergence where possible.
Reduce alternative food sources	Control summer weeds before baiting to encourage snails to consume pellets.
Maximise bait encounters	Target 40-80 bait points/m ² using a well-calibrated spreader. More bait points generally improve control.
Target active snails	Bait when conditions are warm and humid and snails are actively moving and feeding.
Monitor populations	Assess snail numbers before sowing and use economic thresholds to guide baiting decisions.

Key messages for Growers

- Always follow label or permit directions for specific molluscicides.
- Baits are most effective when snails are active in moist conditions.
- Snails must physically encounter a pellet, so bait density and spreader calibration are critical.
- Metaldehyde products remain the mainstay for broadacre snail control.
- Iron-based baits provide a lower-risk option where protection of livestock, pets or beneficial species is a priority.
- Consider co-formulated baits where snail infestations occur alongside other surface-feeding pests.
- Monitoring snail numbers before planting helps ensure baiting is both effective and cost-efficient.

Remember: Successful snail management will be achieved through an integrated approach combining monitoring, weed control, residue management and timely baiting.

Pesticide Disclaimer: PHA and its Member organisations seek to avoid including information regarding unregistered pesticides or unregistered use of pesticides in this quick guide. However, it's possible that occasionally, summaries of research may unintentionally include such information. Any research regarding pesticides or their use reported in this guide does not constitute a recommendation for that particular use by PHA and its Member organisations.

All pesticide applications must accord with the currently registered label or permit for that particular pesticide, crop, pest and region. Individuals who use pesticides are responsible for ensuring that the intended use complies with current regulations and conforms to the product label. Before purchasing or using any pesticide, always read and carefully follow the label directions.

Check the Australian Pesticides and Veterinary Medicines Authority and select product registrations listed in the Public Chemical Registration Information System Search (PubCRIS) for current information relating to product registration.

Reporting and key contacts

Queensland

Biosecurity Queensland
Call 13 25 23 or complete the simple **online form** on the Report a Biosecurity Pest or Disease portal.

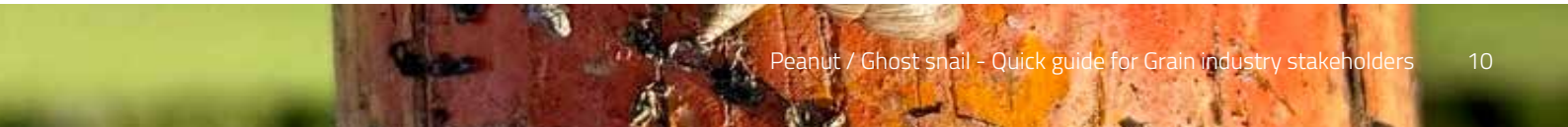
All states and territories

Call the **Exotic Plant Pest Hotline on 1800 084 881**.

Key resources (click to view)

Business Queensland - Ghost Snail	Ghost Snail Advisory Note
PIRSA South Australia - Ghost Snail Factsheet	PIRSA Advisory Note
Citrus Australia - Pest Alert (<i>Bulimulus sporadicus</i>)	Pest Alert
UF/IFAS Ghost/Peanut Snail ID Tool	Uni Florida - Snail Pest Identification
GRDC Snail Management Guidelines (adapted for grain)	Nail the Snails

Disclaimer: Information in this guide is provided for preparedness purposes only. It draws on international research and publicly available Australian biosecurity advice current as of mid-2026. No guarantee is made as to the accuracy or completeness of this information. Growers/agronomists should seek specific professional advice and confirm chemical registration status through the APVMA PubCRIS database before applying any pesticide. All pesticide use must comply with current label and permit directions.





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