

WHEN ARE SNAILS AND SLUGS READY TO BE CONTROLLED? LESSONS LEARNED FROM 2022!

Key points:

- Understand when slugs and snails are actively feeding and breeding: this underpins successful management.
- Multiple bait applications are required to reduce snail numbers in the autumn. Rolling in early autumn, prior to bait application, assists control.
- Protect susceptible seed/seedlings from slugs by applying baits after sowing and before crop emergence.
- Ensure susceptible crops are established quickly so they “outgrow” slug and snail feeding.
- Where conditions are dry or ≥ 20 mm of rainfall is expected, using a long-lasting, attractive and palatable product such as AgNova’s METAREX INOV® will allow seeding to continue.
- Enhance your canola yields and return on investment by using METAREX INOV to aid crop establishment.

Following a very long, wet spring in 2022 that favoured slug and snail breeding, large numbers of snails were detected in grain samples at harvest. Large populations of slugs were observed, with black keeled slugs still laying eggs in late November. These observations from industry highlighted the ability of snails and slugs to increase numbers in favourable conditions. Further, contrary to previous knowledge, black keeled slugs breed late into spring when conditions are favourable.

Growers across large areas where slugs caused damage in 2022 (Rural Business, December 2022) are again expecting high pressures in 2023.

Garden snails have been observed mating over the summer in SA, as part of an AgNova project monitoring their reproduction in vineyards to improve bait timing. Results indicate garden snails are opportunistic breeders, hence multiple applications of baits within a season will be required.

Early baiting in January 2023 of active vineyard snails after rain south of Horsham in western Victoria resulted in a moderate kill. A week later at Swan Hill, marked vineyard



MA Nash 2012

Figure 1: Dead slug on METAREX INOV

snails did not feed on bait, instead they moved up off the soil surface on to plants, posts and stubble. The same response was observed south of Warooka SA; Italian snails moved up, showing no interest in baits. Conical snails are not taking baits either. These observations highlight the need to get the timing of bait applications right, due to snails not yet breeding, and so, not actively feeding in summer. The current message has been to roll paddocks to reduce snail numbers, prior to baiting once snails have mated, but before egg laying occurs.

Timing of controls is critical for success. Growers need to monitor the state snails are at and apply bait accordingly. In 2023, this may mean baiting once heavy dews and cooler temperatures occur, when round snails are actively feeding and then again in later April, when conical snails are actively feeding.

Taking longer to grow than grey field slugs, black keeled slug numbers are expected to be greater again in 2023. In 2022, black keeled slugs were observed in April, but a large number also emerged mid-late May causing a “black wave of doom” in areas that had not encountered slugs previously. There is an expectation after floods in 2022 that slug “patches” may shift, causing damage to new areas. Slugs observed on the soil surface are only the active proportion of the slug population; the total number is often much greater. This highlights the need to not be complacent: use long-lasting baits for sustained control where monitoring of establishing crops every 3–4 days is not possible.

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Numbers of grey field slugs have built up in canola, as shown by spring monitoring (Fig. 1). Interestingly, the presence of frogs and carabid beetles are suspected to have limited slug numbers in the spring at some sites, and in southwest Victoria, slugs were not as bad as expected in 2022. Proactive growers applied bait after seeding to protect seed and seedlings, but where bran-based pellets were used, they are having to reapply after substantial rainfall. Those using an all-weather product, such as METAREX INOV, were controlling slugs even after 50–80 mm of rain.

Long-term monitoring is vital to understand when snails and slugs are ready to take baits, so management can be proactive to achieve the best results.

SW Vic Slugs 2020 - 2022
(numbers are Sep - Nov decile)

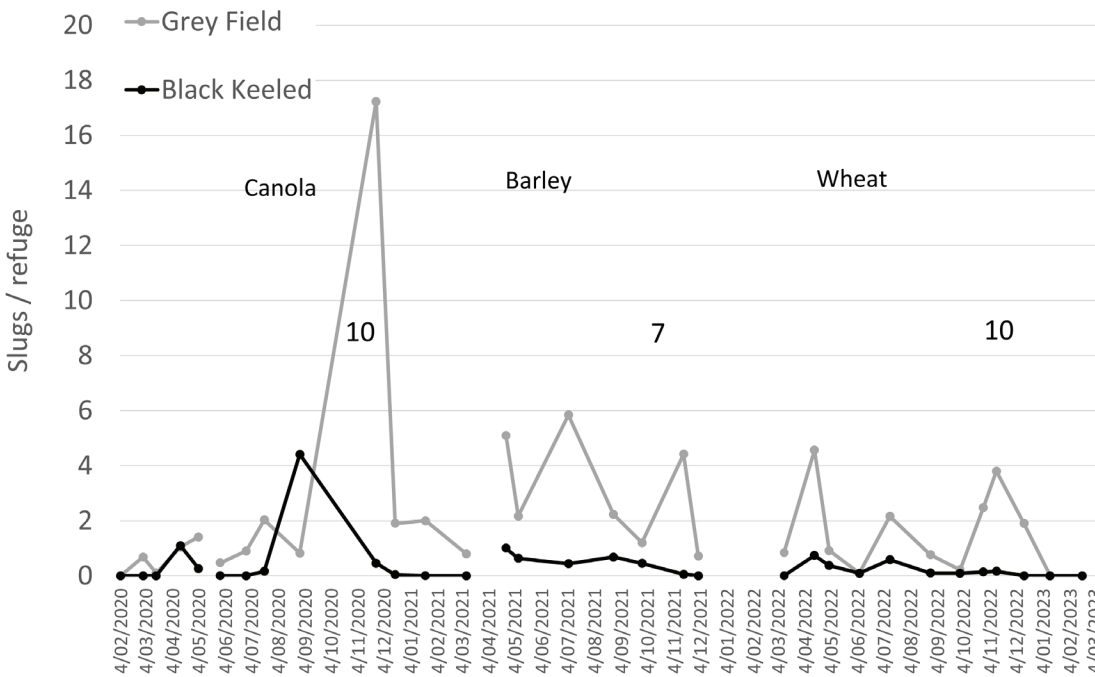


Figure 2. Black keeled and grey field slug activity as quantified using mats placed on the soil surface since 2020 in a paddock in southwest Victoria