

Snails and Slugs

These pests are mollusks and related to clams, oysters, mussels, shellfish, and barnacles. Snails have distinct shells and slugs appear not to have shells, but actually have a small rudimentary shell plate on the upper side near the head. They come in colors of grey, orange, and black. Both feed on various plants at night or on cloudy days especially in moist well-watered environments. They injure plants by biting tissue with rasping mouths located underneath their bodies. Often the silvery, slimy trails of snails and slugs are seen on walks, grass, soil, and foliage before their damage is found. Some crawl on houses and damage painted siding. Like other mollusks, snails and slugs need to be moist all the time. They avoid direct sun and dry places and hide during the day in damp places such as under flowerpots or in thick ground covers.

Controls

Discourage snails and slugs by removing foliage to improve ventilation and air movement. There are several methods of control and there are tradeoffs with each. The best control results when two or more methods are used in concert.

Handpicking

Handpicking is tedious, and works for only very sparse populations. Start handpicking in the daytime to reduce the population, then visit the garden at night with a flashlight. Crush or place captured snails in a sealed plastic bag and discard.

Trapping

- Non-chemical control may be achieved by laying one-inch thick boards on moist garden soil. The next morning the underside should be heavily laden with these slimy culprits.
- Overturned unglazed flower pots make excellent traps (place them on the shady side of the plant). Make sure the pots are cool and dark, and that the ground is uneven, so the snails can crawl under the rim. Pots that are heated and dried by the early sun will not attract them. Destroy the trapped snails by shaking them from the pot or crushing them against the sides with a stick. If you replace the pot without removing the bodies, the pot will be particularly attractive to other snails.

- Inverted melon rinds or grapefruit halves (after you have eaten the contents) may also be used. Snails like the moisture, and shade.
- Beer-pan traps are the most intriguing. Place small cans in the ground with the lip at soil level, spaced at 3 to 10 foot intervals. Fill can to almost one-half with beer. Empty the traps and refill twice weekly.

Barriers

- Copper strips may be wrapped around planting boxes, pots, or tree trunks. The snail/slug slime causes a flow of electricity, which repels them.
- Paint a bordeaux mixture (copper sulfate and hydrated lime) onto surfaces. One treatment lasts about one year.
- A one-inch high, three-inch wide band of natural diatomaceous earth (not pool-grade) can be put around the garden. It ruptures cell cuticles, drains the snail/slug of bodily fluids, thus causing dehydration and death. Wear a dust mask when applying, and use with caution as it kills beneficials such as bees.

Chemical Baits

- Baits containing metaldehyde or carbaryl, are sold as ready-to-use baits. These are most successful when distributed in infected areas just after a rain or after watering when the snails/slugs are most active. These baits can be hazardous to non-target organisms such as dogs, cats, wildlife, and children. Place the bait in traps to minimize these risks. Avoid using around vegetables.
- Baits containing iron phosphate are safer around pets and wildlife. The iron phosphate does not kill instantly, but it causes the snails/slugs to stop feeding and eventually die. It is more effective against snails than against slugs. It may be used around vegetables.



Baits are most effective if applied when snails/slugs are active, not during hot, dry weather or when it is cold. Irrigate before applying to promote activity, and apply bait in the late afternoon or evening.

Natural Enemies

- Ground beetles, pathogens, snakes, toads, turtles, and birds are natural enemies of snails/slugs, but usually are not enough of a control.
- Ducks, geese, or chickens are good controls, but they could also eat seedlings.

Salt is not recommended as a deterrent for snails/slugs because it will raise the salinity of the soil.



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