

Snails in vineyards are significant pests and the problem is increasing due to white snails infesting new areas. The snail pests can conveniently be grouped into four groups.

1. The common garden snail, *Helix aspersa*,
2. The white snails, *Ceruella virgata*, the common white snail and *Theba pisana* the Italian snail
3. The conical white snails. There are two major pests, the small pointed snail *Cochicella barbara* in which the ratio of the length to diameter is 2 or less and the pointed snail, *Cochicella acuta*, in which the ratio of the length to diameter is greater than 2. *Cochicella barbara* is the more common and is becoming a pest in some vineyards.
4. The small brown snail, *Microxeromanga vestita*, This snail is particularly common in the irrigated orchards in the Riverland-Mildura area.

The main damage from snails is due to contamination either directly with the snails being present on the fruit or more likely the skin of the fruit being damaged and becoming infected with fungi.

ERADICATE has been shown to be effective on all these pests but in order to control the snails it is necessary to understand the lifecycle of the snails and their ecology. The lifecycle of the small brown snail and the white snails in vineyards appear to be typical of snails of the Helicidae family. The eggs hatch in late autumn to early spring, the snails grow during spring then towards the end of spring, they cease feeding, climb up into the vines and aestivate (ie they stop feeding, close themselves off with a layer of mucus and slow their metabolism down). At the first autumn rains they descend to the soil, start feeding and mate. Subsequently they lay eggs and the lifecycle starts again. The period of aestivation depends on the season and location.

It is important that good hygiene is practised throughout the vineyard. All rubbish, such as packing material/pallets should be removed. All prunings should be removed and it is important to minimise leaf litter/grass consistent with overall vineyard practice. Leaf litter will reduce moisture lost but significantly increase the snail problem. The vine trunk is an important access point for snails to climb up into the vine, and removing vine branches that touch the ground are good ways to reduce the number of snails in the vines.

The best time to apply baits is after the snails have ceased aestivating but before mating. There is a fairly small time window, the dates of which varies from season to season but is normally about the end of March to April. The second best period to apply baits is in spring when the snails are on the soil and feeding. This is usually a much larger window of time but snails often climb the trees or vines before aestivating.

It is recommended to apply **ERADICATE** at a rate of 5 kg/ha for mild infestations (up to 150m²) and up to 15 kg/ha for very severe infestations (more than 800m²). One application should be made when the snails return to the soil after aestivation in March/April and another one or two if required during the winter early spring. In early spring the baits are likely to be consumed more quickly than in winter when the snails are less active.



Theba pisana



Cochlicella barbara

