

UC Pest Management Guidelines

AVOCADO

BROWN GARDEN SNAIL

Scientific Name: *Helix aspersa*

(Reviewed: 7/01, updated: 7/01)



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DESCRIPTION OF THE PEST

The brown garden snail is about 1 inch (2.5 cm) in diameter at maturity and has a distinct color pattern. It is most active during the night and early morning when it is damp. In southern California, particularly along the coast, young snails are active throughout the year. Mature snails hibernate in topsoil during winter.

Snails are hermaphroditic; all snails of reproductive age lay eggs up to six times during a season, depending on local climate and available moisture. After mating, they lay about 80 eggs at a time into a nest in the topsoil. Eggs are white, spherical and about 0.12 inch (3 mm) in diameter.

DAMAGE

The brown garden snail is rarely a problem in mature orchards where a natural leaf mulch is present. The mulch creates a very loose, dry environment that the snails have a difficult time crawling over. Until a mulch develops, there can be extensive damage to blossoms, leaves, and young fruit, particularly in wet springs.

BIOLOGICAL and CULTURAL CONTROL

Snails are not a common problem in young orchards. The [predatory decollate snail](#), *Rumina decollata*, has been used successfully in citrus groves, but it takes 4 to 10 years to become established. They are available commercially and can be used in some areas to start populations in groves. However, in 10 years, there should be sufficient leaf mulch to preclude the brown garden snail problem. Barrier trunk treatments that repel snails can be made with a commercially available [band of copper foil](#) wrapped around the trunk. Alternatively a slurry containing tribasic copper sulfate can be sprayed on trunks to act as a barrier. Geese and ducks have been used in some groves successfully, as long as coyotes are controlled. Frequent microsprinkler irrigations encourage brown garden snail populations. It is best to extend the interval between irrigations as much as possible if snails

are a problem. Skirt pruning to reduce the avenues for canopy entry can also reduce damage. Trim back any branches touching the orchard floor.

ORGANICALLY ACCEPTABLE METHODS

Biological and cultural control and possibly the use of iron phosphate.

MONITORING and MANAGEMENT DECISIONS

In young orchards, brown garden snail populations build in late winter and spring. If cultural practices are not keeping snails at subeconomic levels, it may be necessary to apply metaldehyde bait to reduce populations, especially during wet springs.

TREATMENT

Pesticide (commercial name)	Amount/Acre	P.H.I.+ (days)
A. RUMINA DECOLLATA# (Decollate Snail) COMMENTS: May take several seasons to obtain control. These snails may be released only in the following California counties: Fresno, Imperial, Kern, Los Angeles, Madera, Orange, Riverside, San Bernardino, San Diego, Santa Barbara, Tulare, and Ventura. For additional information on releasing these snails, see UC IPM Pest Management Guidelines: Citrus .		
B. METALDEHYDE G	20-40 lb	
COMMENTS: Restricted entry interval: 12 hours. Use the higher rate for heavy infestations.		
C. COPPER BANDS# COMMENTS: Place copper foil band around the tree trunk at a height of 1-2 feet above the ground. Overlap the copper foil on the tree trunk about 8 inches so it will slip and allow for trunk growth.		
D. IRON PHOSPHATE (Sluggo) G	Label rates	0
COMMENTS: Apply using standard fertilizer spreader. If ground is dry, wet it before applying bait. Reapply as bait is consumed or at least every 2 weeks. Check with your organic certifier to determine if this product is acceptable for use on organically certified produce.		

Acceptable for use on organically grown produce.

PRECAUTIONS

PUBLICATION



UC IPM Pest Management Guidelines: Avocado
UC ANR Publication 3436

Insects and Mites

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