
Developing Snail Management in Citrus Groves

Researcher:

Lauren M. Diepenbrock

Contact: ldiepenbrock@ufl.edu

UF/IFAS CREC



Bulimulus sporadicus, a land-dwelling snail, has been having major impacts on several industries throughout central and North Florida including citrus. This pest was identified in 2020 by growers who found it clogging irrigation jets, climbing into trees, and, most recently, consuming young tree foliage in Individual Protective Covers (IPCs). Snails and slugs are notoriously challenging to control through topical pesticides, which can work for many insect and mite pests. To date, the most effective controls for this group of pests come in the form of baits. At the request of growers, we evaluated several pesticides and

molluscicidal baits for the control of *Bulimulus* snails. None of the topical chemistries impacted the snails. Baits with metaldehyde, sodium ferric EDTA, and iron phosphate killed over 90% of snails in laboratory trials. This is promising and we will follow up on this with field trials. Other management options that have not been evaluated here but are used in citrus production elsewhere include weed eradication to reduce alternative food sources and applying copper to trunks. Like many snail species, *Bulimulus* snails prefer to consume decaying vegetation, so weed removal could help reduce population build up.

In areas where snails are already abundant, weed removal could increase pressure on trees and irrigation. In such locations, weed management should be paired with an attractive bait to prevent snails from causing additional problems. Copper is an excellent snail deterrent. In other regions, growers have used copper foil or copper sulfate around tree trunks to deter snails from climbing trees and damaging fruit. Because damage from *Bulimulus* snails is largely in the form of clogged irrigation and direct damage when stuck in IPCs, copper may not be a realistic option to manage the challenges we are currently facing.

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