Section VI
Pests of Turf and Ornamentals

AMBER SNAIL MANAGEMENT IN NURSERIES

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Amber snails (Succineidae) are small semi-aquatic snails that are established in many nursery production sites and considered plant shipment contaminant pests. The goal of this research was to investigate strategies to disinfest nursery plants prior to shipment. Two separate chemical trials were conducted: Trial 1, in September of 2010; and Trial 2 in March of 2011. In each trial, six treatments were compared to an untreated control for their effect on snail mortality 24 hours after treatment. The treatments were carbaryl, methiocarb, cinnamon oil, metaldehyde, capsaisin + mustard oil, and limonene. In Trial 1, each treatment had five replications which consisted of four-inch containers filled with potting mix simulating a nursery plant. One day prior to treatment 20 snails were applied to the potting media of each container. In Trial 2, each treatment had eight replications and naturally infested nursery plants were used. In Trial 1, carbaryl and methiocarb, provided effective control of amber snails within 24 hours (90% and 88% mortality respectively). Two of the botanically-based products, limonene (78%) and capsaisin + mustard oil (71%), demonstrated good activity against the snails. Percent mortality of metaldehyde (37%) and cinnamon oil (27%) were not statistically different than the untreated control (17%). In Trial 2 with the naturally infested plants, only carbaryl, methiocarb, and metaldehyde were significantly different from the untreated control.