





Technical Bulletin for: Grape Root Borer

Vitacea polistiformis (Harris) • Lepidoptera: Sesiidae • VITPOL



DISTRIBUTION	Native to the eastern United States, primarily found in the southeast.
HOSTS	Grape
DESCRIPTION	
ADULT MOTH	Brown with thin yellow bands, forewings are brown while hind wings are translucent.
LARVAE	White with brown heads, 20mm at maturity.
EGGS	Tiny and dark brown.
LIFE HISTORY	The eggs are deposited on leaves, stems or on the ground by the female, which can lay about 300-400 eggs. This species overwinters as larvae in two different stages of development. The life cycle usually takes two years to complete, and almost all of this is spent as larvae feeding on grape roots. They bore into the roots and crown below the soil surface, reducing the productivity of the vine. Young larvae are spread throughout the root zone while older larvae are found on larger roots close to the trunk. Ninety per cent of the pupae are within 35cm of the trunk and the mean depth in the soil is 9-10cm. A lack of plant vigor is usually the first sign of the presence of this pest. Another indication is the presence of cast pupal skins protruding from the soil near the base of the trunk in late July and August.

MONITORING INFORMATION

LURE ACTIVE INGREDIENT, SUBSTRATE & FIELD LIFE	(E,Z)-2,13-Octadecadienyl acetate and (Z,Z)-3,13-Octadecadienyl acetate on red rubber septum. Field life: four (4) weeks.	
TRAP TO USE	Paper or Plastic Delta	
MONITORING STRATEGY	Use one trap per acre. Traps should be placed on the edge of a vineyard. They should be put out in early June and monitored once a week until no moths are caught. Check with Cooperative Extension or Master Gardener for local information and recommendations.	
CULTURAL & PHYSICAL CONTROLS	Cultural methods for control of grape root borer include mounding soil under vines just after pupation in order to reduce adult emergence. Proper weed management is also important for reducing potential egg laying sites and to increase larval mortality due to desiccation.	

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