RED-BANDED LEAF ROLLER

Lepidoptera: Tortricidae

Argyrotaenia velutinana





Background. The Red-Banded Leaf Roller (RBLR) is an agricultural pest widely distributed throughout the Northeast United States. It feeds on more than 60 species of woody and herbaceous plants. It is primarily a pest of apples and other tree fruits, including grapes, where it causes damage when larvae feed on flower blossoms, clusters, and leaves.

Biology. In Pennsylvania vineyards, RBLR produces two generations each year and is active from April to September. Pupae overwinter in the ground cover and adults emerge during April and May. Adults have a wingspan of 1/2" with wing color patterns ranging from cream and

brownish-yellow to reddish-brown. The most striking feature of RBLR is a reddish-brown band in the middle of the forewings, visible when the wings are folded. Moreover, some adults have a diamond-shaped mark on their wings, also visible when moths are at rest. Egg masses are laid on the undersides of grape leaves. First-generation larvae hatch in spring and crawl to the grape blossoms and newly set berries to feed on. The larvae build webs around their feeding sites for protection against natural predators. Larvae are pale green and can reach up to 5/8" in size. Moths produce the second generation in

mid-July and lay eggs on the upper grape leaves' surface. Hatched second and third-generation larvae feed on grape clusters' structures such as berries and peduncles. Feeding by RBLR on grapes lead to shallow and irregular channels on the surface. Upon completing development, larvae leave the berries and wrap themselves in plant leaves to pupate and overwinter in the leaf litter. Typical methods for RBLR control include the deployment of pheromone traps to monitor their activity and insecticide sprays targeting early larval instars. Read more about RBLR biology and control by visiting the Penn State Extension website.

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