GRAPE MEALYBUG

Hemiptera: Pseudococcidae

Pseudococcus maritimus





Mealybugs cause significant damage to grapevines by contaminating grape clusters with their honeydew, where black sooty mold can grow. Their infestation can reduce fruit quality and impact crop value. Additionally, mealybugs can transmit viruses that cause grapevine leafroll disease, which is a severe threat to grapevines. The grape mealybug has two generations annually and lays yellow-orange eggs within an egg sac. Eggs and young nymphs ('crawlers') overwinter in or near a cottony egg sac under loose bark, or

Center for

Pollinator

esearch

upper portions of the trunk. In spring, most crawlers move toward the base of vine spurs and onto green shoots, which mature from mid-May to early June. After the eggs hatch in mid-June - July, the oldest crawlers move out to the green portions of the vine to feed on foliage, while adult females appear in late summer and early fall. Some females lay eggs in the fruit clusters, while others lay overwintering eggs in old wood.

As immature insects, male and female mealybugs are similar, but

© Bruce Brethauer 2015 (Flickr)

as adults, they are different. Males spin a cocoon and develop wings after the third nymphal instar. In contrast, adult females (pictured) remain wingless and have a white, flat, oval-shaped body with a waxy covering and wax filaments sticking out from the circumference of the body. Longer filaments from the posterior end give the mealybugs the appearance of having "tails."

By Laura Laiton Jimenez

February 2023

This publication is available in alternative media on request.

Penn State is an equal opportunity, affirmative action employer, and is committed to providing employment opportunities to all qualified applicants without regard to race, color, religion, age, sex, sexual orientation, gender identity, national origin, disability or protected veteran status. U.Ed SCI 19-93



ennState