

Consultant’s Update

Ridge Quest



An adult female dogwood borer resting on an apple leaf.

Insect of the Week

Dogwood Borer



----- KELSEY BENTHALL

Dogwood borer continues to be a persistent and economically important pest in Michigan orchards, especially in high-density plantings on clonal rootstocks. Commonly used Malling rootstocks (particularly M.9, M.26, and other dwarfing types) are prone to forming burrknots. Burrknots are rough, warty-looking growths comprised of root tissues found at the base of trees. These structures on the above-ground portion of the rootstock are the primary entry point for dogwood borer larvae and the center of most infestations. Dogwood borer larvae will move out of burrknots and feed on the cambium, which can lead to partial girdling, reduced yield, and tree death. Michigan growers with older blocks or trees that sustained winter injury may see damage to softer tissues or in injured bark away from burrknots.

Adult moths' wings are clear, and their bodies are blue to black with yellow bands. Adults typically begin emerging in early June in Michigan (1270 degree-days base 40°F), with flight extending through August and often peaking in mid-July. Females lay eggs on trunks near burrknots or bark cracks. After hatching, larvae tunnel into burrknot tissue, leaving behind reddish-brown frass.

Larvae overwinter and resume activity whenever temperatures rise above roughly 40 to 50°F – meaning warm spells in late fall or early spring can allow for unexpected damage. American plum borer larvae are found in similar habitats to dogwood borer larvae. Color and the number of crochets (small hair-like structures) on the prolegs help distinguish between the two species. Dogwood borer larvae are white to cream-colored and have one row of crochets, while apple plum borer larvae are dusky purple to gray in color and have two rows of crochets.

Delta traps baited with dogwood borer pheromone should be placed in orchards from late May to early June. The bottom of the delta trap should be level and approximately 4 to 6 feet above the ground to best track adult flight.

Management options for Michigan orchards include trunk applications between pink and mid-June, with a follow-up spray in early July if new activity is detected. Mating disruption should be implemented alongside a spray program where pest pressure is high or where burrknot development is widespread.

From The Orchard

The latest local news

----- CHANDRA BUNKER

Codling moth flight began several weeks ago in blocks without mating disruption or in areas with higher trap counts. In orchards that have had mating disruption in place for multiple years, many have not yet established a biofix. Growers who did biofix earlier will likely be approaching their first treatment timing by next week. One of the key advantages of codling moth mating disruption is improved timing efficiency. When treatments are required, applications are targeted to peak activity periods rather than covering extended windows, often reducing the total number of sprays needed. Obliquebanded leafroller (OBLR) adults are beginning to fly in the Grand Rapids area, though trap counts remain low. However, larval activity has been prolonged this season, with emergence occurring over the past month or more. I am still seeing larva emerging, but it should start tapering off as larvae begin to pupate and transition into the adult flight phase. Plum curculio (PC) has been increasingly difficult to monitor. Activity began a couple of weeks ago with the onset of warmer temperatures. Because PC is not easily captured in traps and instead causes damage directly to nearby fruit, in-field scouting remains critical. In some orchards, activity has been observed intermittently throughout the season. Recent research indicates the presence of two distinct plum curculio strains. The northern strain has a single generation per year, while the southern strain, now expanding northward, can remain active throughout the season. We will cover this in more detail in the next edition of our newsletter.