



Shot Hole Borer Update

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There has not been significant movement of the shot hole borer (SHB) since the infestation was discovered near Santa Paula (Ventura County) in late 2015. The first week of March, the Commission learned that a single beetle specimen captured in a trap in San Luis Obispo (SLO) County on February 25, was identified as a Kuroshio SHB. The Commission immediately contacted the nearby avocado growers and arranged to meet with them and SLO County Ag Commissioner and UC Cooperative Extension representatives. Additional traps were provided to the

county and we discussed where to place the traps to serve as an early warning to our growers.

Since that time, no additional specimens have been captured in SLO County and we do not have any evidence that the beetle has become established there. However, the Commission would encourage all growers to be vigilant and pay close attention to their trees for any signs of beetle activity. Harvest season is a good opportunity to look at each tree. The Commission has numerous resources available to growers on our website (www.californiaavocadogrowers.com/growing/pshbkshb) and on Dr. Akif Eskalen's lab website (eskalenlab.ucr.edu/avocado.html).

Hero® Insecticide Available

The California Department of Pesticide Regulation (DPR) issued a Section 18 Emergency Exemption for the use of Hero® EW Insecticide against the SHB on Monday April 11, 2016. This section 18 is effective for one year and expires on April 8, 2017. Our application was originally submitted to DPR on September 1, 2015 and, although the review took longer than we anticipated, the outcome is favorable for growers. The section 18 label can be downloaded from the DPR website or the Commission's grower website, and a copy must be in the possession of the user at the time of application.

While not a panacea, the section 18 for Hero® EW is intended to provide those growers fighting infestations with a tool to help reduce beetle populations and prevent nearby trees from becoming infested. Hero® EW is to be applied as a surface spray to the trunk and main branches of a tree. It is not systemic.

We believe that there are three ways that Hero® EW will target SHBs. First is by direct contact with the females guarding galleries at the time of application. After building the gallery and laying eggs, the female is frequently found guarding the gallery with her posterior protruding from the entrance. Second is residual contact with newly emerged beetles. It is believed that when a new beetle emerges from a gallery she walks on the tree surface for some time, presumably determining if the tree is suitable to continue the next generation of beetles, which will bring her into contact with spray residues. Third is residual contact with new fly ins. As with newly emerged beetles, when beetles travel to a new host tree they spend some time walking on the surface before deciding to build a gallery or find another potential host tree.

Under the section 18, growers are allowed to make up to five applications to their trees per year, with applications spaced no less than 15 days apart. Since this registration allows for Hero® EW only to be applied as a trunk and main branch surface spray, all applications must be made with a hand held sprayer so that the spray is directed only at the target surfaces.

To use Hero® EW under this section 18 emergency exemption, you must obtain a permit from your County Agricultural Commissioner prior to application. This is critically important to ensure that all of the use restrictions governing the section 18 are followed and to properly record and report usage statistics as required by the section 18. The Commission has discussed the section 18 with the San Diego and Ventura County Ag Commissioners and they are supportive of our efforts to provide growers with this tool. They want to cooperate with growers on ensuring that all of the section 18 rules are followed and that growers can use this product in a practical manner.

The Commission is working with UC Riverside researchers to compile usage recommendations for Hero® EW. If you are planning to make an application of Hero® EW we would appreciate your contacting us so that we can observe some of the early applications and use this information to help educate all growers. Because of the cost and labor involved with application, and to prevent undue disruption of existing Integrated Pest Management (IPM) programs, the Commission does not recommend the prophylactic use of Hero® EW to try to prevent infestation, except on trees surrounding a known infested area. 🍌



Photos provided by Akif Eskalen