CDFA Reaches Consensus On Species Identifications From Armored Scale Found On Mexican Avocados Entering State

After more than a week of consultations between state, federal, and university entomologists, the California Department of Food and Agriculture (CDFA) has reached a consensus on species identifications from armored scale insects found on Mexican avocados entering the state since February 1, 2007.

That’s positive news because armored scales are notoriously difficult to identify. They possess a limited number of morphological characters and, consequently, classification using available taxonomic keys is not always possible.

Upon closer examination of the specimens previously thought to be *Hemiberlesia neodiffinis*, then later San Jose Scale, experts now believe that they are encountering an **undescribed species** of the genera *Abgrallaspis/Diaspidiotus*, morphologically similar to San Jose Scale. These specimens are now being referred to as **“San Jose Scale-like”** armored scale insects.

The Commission has been very aggressive in pushing to resolve these difficulties in identification. Chief among our action steps was requesting a research proposal from University of California entomologists Drs. Richard Stouthamer and Joseph Morse. The proposal, outlining a four-to-six month project, came to me this week. The study’s construct calls for researchers at UC-Riverside to collaborate with CDFA and U.S. Department of Agriculture (USDA) entomologists, utilizing joint genetic and morphological studies, to characterize the scale species intercepted on Mexican avocados. Researchers will seek to determine the following:

- **The identity of the species being detected**
- **Whether the species is already present in the U.S. and/or California and if it is related to any other armored scale insects already present on California avocados**
- **Whether specimens constitute a single undescribed species or a complex of cryptic species**

The Commission Board is expected to approve the $25,000 project later this month.

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Since February 1, 2007 when Mexican avocados began entry in California for the first time ever, approximately 84 shipments have been inspected at CDFA checkpoints. Of these, 11 shipments (13%) were found to contain actionable insects, mostly “San Jose Scale-like” or undescribed species. In addition, two known species have been detected, *Acutaspis albopicta* and *Aulacaspis tubercularis*. In every instance, truckloads containing invasive species were either rerouted out of state or fumigated.

To put this risk in perspective, it’s important to know that armored scale insects account for nearly 80% of all actionable (A-rated) species intercepted at non-cargo terminal points such as airports, nurseries, and postal/parcel facilities by CDFA inspectors. In 2004 (latest available data), nearly 500 A or Q-rated scale insects were detected during terminal point inspections.

During the month of February 2007, a total of 17 shipments of Mexican avocados were sent through the federally-operated Otay Mesa facility, slightly less than 17% of the total loads entering California from Mexico. After the detection of live scale insects by CDFA, the number of trucks arriving through that port of entry dropped significantly. Even though the number of trucks coming through Otay has been a small percentage of the total loads coming into the state to begin with--and the number is even less now after the detections and our pressure--we are still very concerned that the jurisdictional issue between CDFA and USDA has NOT been resolved. In fact, USDA has yet to officially respond to CDFA’s request for modification of a Cooperative Agreement that would allow federal inspectors to turn scale-infested shipments over to CDFA for disposition.

**WE NEED YOU**

That’s why we need your help. To keep the pressure on USDA, CAC has launched a Legislative Action Center which can be found at: [http://www.avocado.org/growers/legislation.php](http://www.avocado.org/growers/legislation.php).

California legislators have been quick to contact USDA officials on this issue, but grower letters underscoring the urgency of this matter will help keep key legislators motivated to support our industry.

That’s it for now. More next week.