

New Improvements on Coffee Berry Borer Management

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Research has been ongoing since 2010 when the Coffee Berry Borer (CBB) was first identified in Hawaii. CBB has the ability to decimate a coffee crop if left unmanaged. Proper control involves using an integrated pest management (IPM) approach where field sanitation, monitoring, spraying and timely harvests are of utmost importance.



CBB evacuating from coffee raisins collected in a bucket.

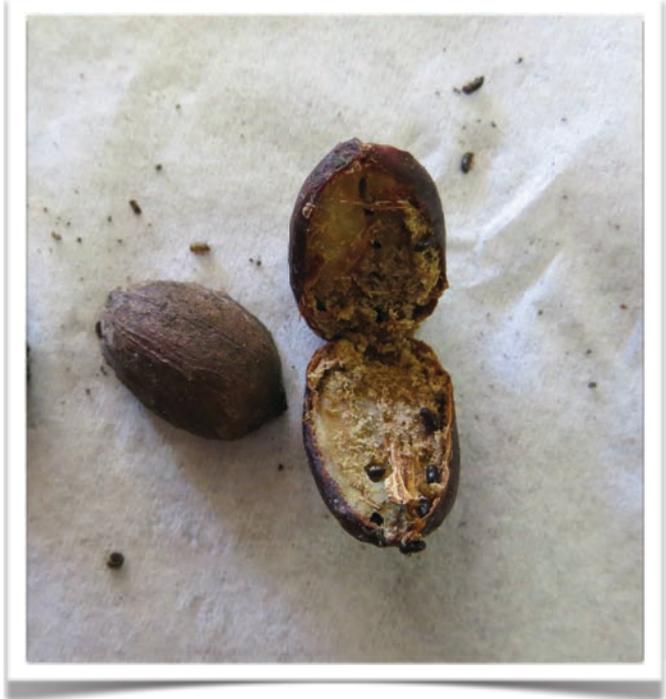
In January 2014, USDA-Agricultural Research Service-Pacific Basin Agricultural Research Center (ARS-PBARC), USDA Risk Management Agency, UH CTAHR, and the Risk Management Hawaii program co-hosted the 2014 CBB Summit. The purpose of this event was to review and improve upon the 2013 CBB IPM recommendations to include new and updated information from the CBB research and educational communities in a revised 2014 edition. During this day-long gathering, researchers and educators from USDA-ARS-PBARC, UH CTAHR, Hawaii Department of Agriculture, and the coffee industry, discussed projects and results as well as modifications to previous recommendations. This 2014 CBB IPM Recommendation publication will be available soon. As a result of this year's Summit, please find some important and updated CBB recommendations and tips below.

In 2013, on behalf of the Hawaii coffee industry, U.S. Senator Mazie Hirono and Secretary of Agriculture, Thomas Vilsack secured \$1 million in funding to support continued CBB research, education and outreach efforts. United States Department of Agriculture (USDA) and University of Hawaii College of Tropical Agriculture and Human Resources (UH CTAHR) researchers, extension specialists and agents, technicians, and other personnel have been determined to provide growers with better knowledge and improved techniques for management of CBB.



A CBB damaged coffee bean.

1. Field sanitation and cleanliness – Avoiding dropping coffee cherries and leaving as few cherries and raisins as possible in the field at the end of harvest, is still the most important technique for growers and pickers to manage CBB.
2. Trapping is a monitoring tool only and is one of three methods for monitoring along with sampling and grower observation.
3. Early season spraying with *Beauveria* and then monthly sprays thereafter with a rate of 32 oz. per acre, significantly reduces CBB damages over the entire season.
4. Save time and money! Spraying *Beauveria* (32 oz. per acre) monthly, during the afternoon hours and under reduced sun UV and increased humidity, is just as effective as bi-monthly *Beauveria* sprays done in the afternoons.
5. Manufacturers of Botanigard and Mycotrol, approved of tank mixing Pyronyl Crop Spray with *Beauveria*, but NOT Evergreen. Please visit <http://www.bioworksinc.com/products/shared/botanigard-es-tank-mix-compatibility.pdf> to view the full BioWorks, Inc. compatibility chart for *Beauveria*.
6. Lining burlap bags with a plastic trash bag may help prevent CBB escape without increasing temperature in the bag. However, do not leave bags in direct sun.
7. Stop the spread of CBB to locations outside of the Big Island. Quarantine regulations require that all unroasted coffee, coffee plants and plant parts including skins and seeds, used machinery and supplies shall be treated and inspected prior to shipment or transport from the Big Island. Also, remind farm guests and visitors of the risk of CBB hitchhiking and to change into clean clothing, footwear, etc. before entering an off-island farm or home with coffee trees.



A family of CBB and damages they have caused to coffee parchment.

For additional information on CBB, please contact Assistant Extension Agent for Coffee and Orchard Crops, Andrea Kawabata at andreak@hawaii.edu or 808-322-4894.

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