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## New App for CBB Monitoring and Control: BEST BEANS

### Summary

Coffee Berry Borer (CBB) was found in Hawaii in 2010. Since then, coffee production on Big Island includes monitoring CBB populations and management of CBB damage. Research on CBB has produced data on the CBB populations in Hawaii. Researchers have collected thousands of CBB in traps. Coffee berries have been picked and dissected to see the position of living and dead CBB. This information has been used to make recommendations for integrated pest management (IPM) of CBB.

The guidelines for monitoring and control are based on the data collected at specific locations. Each farm should be monitored for CBB activity. However, the time and labor of monitoring are also a significant cost for growers. For example, sprays of the insect-pathogenic fungus, *Beauveria bassiana*, are recommended when CBB infestation is over a certain threshold. Sometimes, *B. bassiana* is sprayed on a calendar schedule because it is consistent, but it may be more effective at times of high CBB flight activity.

An App has been developed locally to help record data for conditions on farms. This phone app, called BEST BEANS, has the potential to save time and allow spray decisions to be based on farm conditions. Two videos about use of BEST BEANS were shown. A link for a survey with ten questions was posted in the chat box; participants had time to fill it out and submit it during the meeting. These answers will help with further development.

Development of BEST BEANS App is a work-in-progress because the software will need to be updated as the phone operating systems are upgraded. The long term plan is to have the BEST BEANS App maintained by a private company, Smart Yields. The basic version of BEST BEANS App may be available without cost, but subscriptions are encouraged to integrate local weather data with the App recommendations. Subscriptions may include a weather sensor that can upload weather data from the location. Stay tuned for further updates.