



Department
of Agriculture

STATE OF HAWAII

COFFEE BERRY BORER PESTICIDE SUBSIDY PROGRAM 2019-20 ANNUAL APPLICATION

For Subsidy For Purchases made July 1, 2018 through June 30, 2019

Form PPC19-01 expires 6/30/2020

USE THIS AS A GUIDE TO THE ONLINE APPLICATION

Available online at <https://www.surveymonkey.com/r/NDWKVK5>

Aloha Coffee Farmers,

The Hawaii Department of Agriculture (HDOA) Coffee Berry Borer (CBB) Pesticide Subsidy Program was established by Act 105, Session Laws of Hawaii 2014, to assist Hawaii coffee farmers with the cost of pesticides containing the fungus, *Beauveria bassiana* (i.e. BotaniGard® and Mycotrol®) known to control CBB. In 2017 the Hawaii Legislature extended the program through 6/30/2021.

Currently, applications are accepted until 6/30/2020 for **purchases made from 7/1/2018 through 6/30/2019**. For purchases made during this time period, reimbursement is available for up to 50% of out-of-pocket costs for *Beauveria bassiana* products and depending on number of applicants and available funds, up to a maximum of \$600 per acre and \$6,000 per farm. Any applications received or postmarked after 6/30/2020 will not be eligible for reimbursement.

If you have eligible purchases and wish to apply for the subsidy, please complete Section I (Farm Owner/Manager Information) and II (Program Impact). If you already applied for the subsidy for this year and would like to provide information on CBB management on your farm, please do for research and extension purposes.

It will take about 20 minutes to complete the application. You will need to provide your contact information, tax map key (TMK) number, total harvested cherry yield for 2018/19 season, 3 #s from your harvested cherry CBB% damage from mid 2018/19 season, and other general production and economic information about your farm. If you own more than one farm, one application is required for each GET tax entity.

If you are using this as a guide to complete the online application, once you start the online application, you cannot save your responses and return at a later time. Be sure to click the "DONE" button at the end to record your responses. You will be contacted and provided an appointment date and time.

If you choose to complete the application on paper, contact the CBB Pesticide Subsidy Program office at 808-323-7578 or email at hdoa.cbb@hawaii.gov to schedule an appointment.

Bring these required documents to your appointment: original receipts, a Driver's License or State issued ID, your State of Hawaii General Excise Tax ID Number, and your Social Security Number or Federal Tax ID. If your name is not listed as an owner or lessee on the TMK information provided by the County Real Property Tax Office, you will need to provide a copy of your lease.

Thank you for taking the time to share your experience managing CBB.



HAWAII DEPARTMENT OF AGRICULTURE
COFFEE BERRY BORER PESTICIDE SUBSIDY PROGRAM 2019-20 ANNUAL APPLICATION
 For Subsidy For Purchases made July 1, 2018 through June 30, 2019

| | | | | |
|--|---|--|---|---|
| Section I. Farm Owner/Manager Information | | | | |
| Applicant Name: (please print first name & last name) | | | | |
| Farm Owner Name(s): | | | Date: | |
| Farm/Business Name: | | | Doing Business As: | |
| Phone Number: | | Preferred Contact Method: | | <input type="checkbox"/> Phone <input type="checkbox"/> Email |
| Email Address: | | | # of Acres in Coffee: | |
| Farm Address: | | | Tax Map Key #(s): | |
| City: | State: | Zip: | | |
| Mailing Address: (if different from farm address) | | | | |
| City: | State: | Zip: | | |
| Farm Manager (If other than owner) | | | | |
| Farm Manager Name: | | | | |
| Phone Number: | | Email Address: | | |
| Mailing Address: | | | | |
| City: | State: | | Zip: | |
| <p>Hawaii Department of Agriculture shall maintain the confidentiality of the information submitted pursuant to the CBB Pesticide Subsidy Program to the extent permitted by law. The disclosure of government records in the State of Hawaii is governed by chapter 92F, Hawaii Revised Statutes.</p> <p>I understand HDOA requires original documentation of costs for purchasing pesticides that contain <i>Beauveria bassiana</i>, a fungus know to control the coffee berry borer, and that HDOA may contact me with important information about CBB. Information gathered for Program Impact will not be shared on an individual level; only summarized results will be shared with the State Legislature, CBB Task Force, UH CTAHR, coffee growers, and coffee organizations.</p> <p>Further, I shall indemnify and hold harmless the State and County of Hawaii, its officers, agents, and employees from all claims arising out of or resulting from the pesticide purchased.</p> | | | | |
| Applicant Signature: | | Date: | Rate the Process: 1 (easiest) to 5 (most difficult) | |
| HDOA CBB Subsidy Program: Phone (808)323-7578 email: hdoa.cbb@hawaii.gov Mailing Address: PO Box 226, Captain Cook, HI 96704 82-6130 Mamalahoa Hwy, Rm #7, Captain Cook, HI 96704 NOTE: Incomplete or incorrect information may lead to a delay in processing the application. | | | | |
| For Office Use Only: Time/Date Received | | TMK(s) Verified by/on | | Grower Survey completed: <input type="checkbox"/> |
| Receipt(s) Total | | x | 0.50 | Approved Reimbursement Amount: |
| V8 <input type="checkbox"/> | Copied Original Receipts <input type="checkbox"/> | Government ID on file <input type="checkbox"/> | Approved Date: | Date Submitted for Reimbursement: |

The information provided by the applicant for the following questions is voluntary, however, it is vitally necessary for assessing the effectiveness of the CBB Subsidy Program and for HDOA's report to the Legislature.

Section I. Farm Owner/Manager Information (continued)

1. **How did you learn about this program?**
 - CTAHR
 - HDOA
 - Applied previously
 - Other Farmers
 - Coffee Organizations
 - Vendors
 - Processors
 - Other (please specify) _____

2. **Have you attended a CBB Integrated Pest Management workshop? Check all that apply.**
 - In the past 6 months
 - In the past 1 - 2 years
 - Never
 - In the past 7 to 12 months
 - In the past 3 or more years
 - Other (please specify) _____

3. **Have you received the 2016 CBB Integrated Pest Management document from the University of Hawaii?**
 - Yes
 - No

4. **Where do you get information to control CBB? Select as many as you use.**
 - www.hawaiicoffeeed.com website
 - Your coffee organization webpage/newsletter
 - CTAHR workshops
 - Your coffee organization workshops
 - Talking with CTAHR staff
 - Talking with other coffee growers
 - Talking with HDOA staff
 - Talking with processors/millers
 - HDOA webpage for CBB
 - Other web based information
 - 2018 CBB Conference
 - Other (please specify) _____

Section II. Program Impact

Part 1. Information About Your Coffee Farm

1. **What was your total cherry yield in lb.s for 2018-19 harvest season?** _____

2. **What percent do you sell as:** % cherry _____ % parchment _____ % green _____
 % roasted _____ % not sold _____

3. **What is the average elevation in feet of your farm?** _____

4. **Estimate the total number of coffee trees on your farm** _____

5. **What is the normal tree spacing on your farm (e.g. 8 by 8 ft.)?**
 _____ Feet between trees in the row. I do not have clear rows.
 _____ Feet between rows. Other (specify) _____

6. **Estimate the number of grafted trees on your farm** _____

7. **What varieties of coffee do you grow? If multiple varieties, indicate the % of each variety (to equal 100%).**
 % Kona Typica _____ % Caturra _____ % Catui _____ % Others (specify) _____

8. **What pruning method(s) do you use?**
 - Kona style - each tree pruned every year
 - Stumping by rows (Beaumont/Fukunaga style)
 - Stumping by blocks (dividing farm into 3 or more blocks to better manage CBB)
 - Hedging - top and/or sides cut
 - Other (please specify) _____

Section II. Program Impact

Part 2. CBB Damage

1. **At peak of 2018-19 harvest, what were 3 of your Harvested Cherry CBB % Damage numbers?**
 (Check your Mill receipts or Estate harvest records; do not estimate) _____

Section II. Program Impact**Part 3. CBB Management Strategies****Strategy 1. Sanitization**

Three strategies are recommended to reduce CBB damage: sanitation, sampling/monitoring, and using insecticides. The following questions ask about your use of these strategies.

1. After the 2018-19 harvest season was completed, what percent of your harvested trees were strip picked (all immature, ripe, over-ripe and dried cherries (raisins) were removed and destroyed)?

90-100% 50-89% 1-49% 0%

Comment _____

2. After the 2018-19 harvest season was completed, when did you strip pick your trees (all immature, ripe, over-ripe and dried cherries (raisins) were removed and destroyed)? Check all that apply.

when 5-10% of harvest remained after harvest after pruning
 Pre-season green pinhead berries begin of harvest I don't strip pick my trees
 Other (please specify) _____

3. What was the frequency of your harvest in 2018-19 harvest season?

every 1-2 weeks every 3-4 weeks depended on labor availability
 every 5-6 weeks Comment _____

Section II. Program Impact**Part 3. CBB Management Strategies****Strategy 2: Sampling and Monitoring**

How you monitor CBB on your farm.

1. What method(s) did you use to monitor CBB on your farm in the 2018-19 season? Select all that apply.

30 tree sampling method Observation Trapping
 None Other (please specify) _____

2. If you used a sampling method to monitor CBB, when did you start?

1 month after the first flowering 3 months after the first flowering
 2 months after the first flowering 4 months after the first flowering
 I did not sample Other (please specify) _____

3. If you used a sampling method to monitor CBB, how often?

Every 3 weeks. Every 5 weeks. Every 8 weeks. I did not sample
 Every 4 weeks. Every 6 weeks. Every 10 weeks.
 Other (please specify) _____

4. If you used a sampling method, how useful was it as a decision tool for spraying (to spray or not)?

Very effective Somewhat effective Not effective at all
 Effective Not very effective
 Other (please specify) _____

Section II. Program Impact**Part 3. Management Strategies****Strategy 3. Spraying**

Spraying commercial *Beauveria bassiana* and other insecticides.

1. Did you spray commercial insecticides that contain *Beauveria bassiana* ?

I use BotaniGard® ES I use Mycotrol® WPO
 I use BotaniGard® 22WP I use Mycotrol® ESO
 Other

2. When did you start spraying in the 2019-20 season?

January March May July September November
 February April June August October December
 I spray year-round. Comment _____

3. How many times do you think you will spray *Beauveria bassiana* in the 2019-20 season?

- 1 to 2 3 to 4 5 to 6 7 to 8 9 to 10
 Other (please specify) _____

4. How many weeks between *Beauveria bassiana* sprays?

- 2 weeks 3 weeks 4 weeks 5 weeks 6 weeks
 I schedule the spray based on a sampling results.

Comment _____

5. How much BotaniGard® or Mycotrol® product are you applying per acre (per application)?

- less than 32 oz. per acre 32 oz. per acre more than 32 oz. per acre
 less than 1 lb. per acre 1 lb. per acre more than 1 lb. per acre

Comment _____

If the current program to reduce the cost of BotaniGard® or Mycotrol® were discontinued, and you had to pay full price,

6. how would you adapt?

- Continue same best practices for CBB control Spray less than 32 oz. per acre
 Spray less frequently Spray fewer times per year
 Manage CBB with intensive sanitation only
 Other (please specify) _____

7. How effective is spraying BotaniGard® or Mycotrol® for you?

- Very effective Somewhat effective Not effective at all
 Effective Not very effective
 Other (please specify) _____

8. If you tried other products, how effective were they in controlling CBB?

| | N/A - Did not try | Very effective | Effective | Somewhat effective | Not very effective | Not effective at all |
|------------------------|-------------------|----------------|-----------|--------------------|--------------------|----------------------|
| Admire Pro | | | | | | |
| Pyronyl or Evergreen | | | | | | |
| BAM | | | | | | |
| Garlic Barrier | | | | | | |
| Kaolin clay | | | | | | |
| Movento | | | | | | |
| Pyganic | | | | | | |
| Surround WP | | | | | | |
| Other (please specify) | | | | | | |

Section II. Program Impact Part 4. Farm Costs and Profits

Questions related to the impact of CBB on your farms costs and profits

1. How is CBB impacting your other farm costs compared to before CBB infested your farm? Please rate the following six

| | N/A or no impact | 1=Least impact | 2 | 3 | 4 | 5 | 6=most impact |
|------------------------------------|------------------|----------------|---|---|---|---|---------------|
| Hired labor (including to spray) | | | | | | | |
| Farmer/Operator labor | | | | | | | |
| Fertilizer (to offset CBB \$ loss) | | | | | | | |
| Insecticides | | | | | | | |
| Equipment | | | | | | | |
| Fuel and utilities | | | | | | | |
| Maintenance on trees and farm | | | | | | | |
| Contract farm/processing work | | | | | | | |

2. What % of your household (or business) income is coffee? _____

3. How much Revenue, Expenses, and Net Profit for coffee did your farm have in 2017? (check 1 box per column)

| | Revenue | Expenses | Net Profit |
|------------------------|---------|----------|------------|
| less than \$1,000 | | | |
| \$1,000 - \$9,999 | | | |
| \$10,000 - \$24,999 | | | |
| \$25,000 - \$49,000 | | | |
| \$50,000 - \$99,999 | | | |
| \$100,000 - \$249,999 | | | |
| \$250,000 or more | | | |
| I prefer not to answer | | | |

In anticipation of the end of the CBB Subsidy after 2021, I am increasing coffee revenue to offset *Beauveria bassiana*

4. costs by: (check all that apply)

- Increasing coffee price
- Increasing fertilizer
- Other (please specify) _____
- Planting coffee in under-utilized areas
- Diversifying crops
- Keeping my CBB low

Section II. Program Impact

Part 5. Farmers' Comments

1. What other pests of coffee are causing concern? Check all that apply.

- Black Twig Borer
- Little Fire Ant
- Cercospera
- Anthracnose
- Mites
- Coffee Root-knot Nematode
- Slugs and snails (Rat Lung Worm)
- Green Scale and Sooty Mold
- Banana Moth
- Other (please specify) _____

2. Do you have observations on CBB control that you want to share?

3. What research do you want done about the CBB problem or other pests & diseases of coffee?

Thank you for participating and sharing your experience with CBB!