THE 2019 HAWAIʻI CACAO SURVEY RESULTS
In February 2019, the Hawai‘i Cacao Survey was sent to farmers and chocolate manufacturers throughout the state by email and social media. Topics covered by the survey include farm size, location, yields, future planting intentions, and farmer concerns.

The summary of survey results is shared with the DOA, CTAHR, and other agencies, in addition to survey respondents and grower organizations. Requests for results and other inquiries related to the survey can be sent to Eli Isele (elihu@hawaii.edu).

Mahalo nui to Dr. Skip Bittenbender, who started the survey in 2011, conducted it each year until his retirement in 2018, and generously shared his work with us so that it can be continued. In 2019 and 2020, the survey is being conducted as a collaboration between UH-CTAHR and O‘ahu RC&D.

You can participate in 2020 Hawai‘i Cacao Survey at the following link: https://www.surveymonkey.com/r/hicacao
Q1 In 2019 (please only one answer).
Results provided as a percentage of the 94 total respondents.

- 17%: My trees are not bearing yet.
- 12%: I will plant my first cacao trees.
- 12%: I will harvest cacao.
- 55%: I do not farm, only process or make chocolate. (You will go to Q. 22)
- 4%: I am a Hawaii cacao to chocolate supporter or consultant. (You will go to Q. 22)
Q2 My cacao farm is on:
Results provided as a percentage of the 76 total farm respondents.
Q3 The average elevation (feet above sea level) of my cacao farm. Results provided as average elevation of respondents per island.
Q4 What spacing do you use for your trees?

Results provided in average tree spacing (in feet) of respondents per island.
Q5 What percentage of the trees in your orchard are grafted?

![Bar graph showing the percentage of grafted trees in orchards across Hawaii's islands.](image-url)
Q6 How do you determine the amount of fertilizer and soil amendments for your trees? Please check all that apply.
Q7 Did you need to protect the young trees from wind and/or sun damage after planting? What did you use? Please check all that apply.

- Nothing, wind and sun are not a problem.
- Cages with film.
- Cages with shade cloth.
- Banana intercrop for sun and/or wind.
- Panax for wind.
- Pigeon pea for wind and/or sun.
Q8 What type of windbreaks do you use to protect your trees after they are established? Please check all that apply.
Q9 Are or will your trees be grown in full sun or shaded?  
*Results provided as percentage of respondents by island.*
Q10 What types of shade plants are you using? Please check all that apply. 
*Results provided as percentage of respondents.*
Q11 How do you manage Chinese rose beetle on your farm? Please check all that apply. *Results provided as percentage of respondents.*
Q14 In 2018, what months did you harvest? What month was your biggest harvest?
Q15 How many acres or trees were harvested in 2018?
Results provided in acre equivalents.
Q16 How many acres or trees were too young to harvest in 2018? Results provided in acre equivalents per island.
Q17 If you harvested cacao in 2018, how much did you harvest?
Results provided in pounds of dry bean per island.

- Hawaii: 31,198 pounds
- Kauai: 922 pounds
- Maui: 57 pounds
- Molokai: 0 pounds
- Oahu: 11,702 pounds
Q17 2018 Average Yield.

Results calculated in pounds of dry bean per acre.
Q18 How much cacao will you plant in 2019? Results provided in acre equivalents.
Q19 In the next five years how much cacao do you expect to plant? Results provided in acre equivalents per island.

- **Hawaii**: 49 acres
- **Kauai**: 24 acres
- **Maui**: 4 acres
- **Molokai**: 0 acres
- **Oahu**: 9 acres
Q20 If you will plant trees in the next five years, what percentage of those trees will be grafted?

- Hawaii: 13%
- Kauai: 37.5%
- Maui: 10%
- Molokai: 0%
- Oahu: 33.3%
The 2019 Hawai‘i Cacao survey Results

Q22 Please rate the importance of these issues for your farm or business.
Q24 Please indicate your preferred methods for receiving new information and extension services related to cacao: