

# **Hawaii Coffee Growers Association**

2015 HCA Annual Growers  
Production Report  
&  
HCGA Brazil Trip Report

# Regional Production by Origin

## General Comments:

- Production/Acre remains stable, unknown losses in CBB infested areas.
- CBB continues to move, found on Oahu December 2014.
- Kauai, Molokai and Maui remain un-infested by CBB.
- No significant weather issues affecting 2014/15 crop.
- Weather for 2015/16 crop has so far been normal, good cherry yields expected.
- Industry continues to find hardship with State Plant Quarantine Branch relative to clarity on rules governing green coffee movement island to island. CBB taskforce shipping committee formed to help resolve this.

# Kauai

## Kauai Coffee Co.

- **2014/15 Harvest:** 10.45 mil lbs cherry/2.45 mil lbs. green bean on 2,450 acres.
- Selective top harvest 9/16/14 campaign ended 2/11/15. Latest ever.
- 105% of normal rainfall 2014. Yield below estimate due to natural cycling and other environmental factors (pumps).
- **2015/16 Outlook:** 10.2 mil lbs. cherry estimate on 2,115 acres.
- Acreage reduced due to reservoir shortage and pruning acreage increased.
- Expect limited reservoir water remainder of year. Rain 45% of normal.
- CBB trapping ongoing, no infestation.

## Moloa'a Bay Coffee

- 18,000 lbs cherry on 4 acres, 6 total, all Typica
- 2015/16 looks promising. No CBB.

# Oahu

## Waialua Coffee Estate

- CBB discovered at the farm late 2014.
- Little infestation of the 2014/15 crop, yield: 400,000lbs cherry
- More losses due to storm damage than CBB, (15 -20%)
- March-May 2015 all trees stripped and ground cherry removed.
- March – June 2015, 50+ acres stump pruned (30% of farm)
- Preparation for Botanigard spraying is initiated, equipment and protocol for control program acquired and in place.
- Increased labor force by 5 positions to focus on sanitation.
- Lower yield 2015/16 due to pruning (300,000 lbs cherry)
- Shooting for <5% CBB damage and stable yields by 2017.

# Molokai

## Coffees of Hawaii

- Reported 285,000 lbs. cherry harvested for 2014/15 crop
- Unknown forecast for 2015/16
- No reported CBB infestation
- Under new ownership

# Maui

## **MauiGrown Coffee, Lahaina**

- 345 Acres harvested, 390 acres in production
- 1,750,000 lbs. cherry harvested 2014/15 with (4) varieties
- 20% less than 2013/14 (mechanical harvester breakdown)
- CBB monitoring continues, not yet found on Maui
- Good weather for 2015, expect > 2,250,000 lbs cherry harvest
- Planting new areas (25+ acres over last 2 years)

## **Maui Coffee Association, (Upcountry & Windward Maui)**

- 21,391 lbs. cherry harvested (reported by 14 growers)
- 2014 weather reported to be wetter than 2013 in most areas.
- 2015/16 forecast unknown, expect better due to increased plantings

# Kona

# Ka'u

District Report only (Number of farms unknown)

- 2014/15 reported 3,276,000 lbs. cherry
- Estimated 4,500 lbs/acre
- CBB control becoming more effective with TASC program, CCB damage reported to be holding at least and not getting worse.
- 2015/16 production estimated to grow 20% more cherry over 2014/15 harvest. New plantings continue.



# Other Hawaii regions

- Hamakua
- Hilo

# HCGA Brazil Trip Report

June 21 – July 3, 2015

**Key Focus:** Visit coffee research facilities, coffee farms that principally harvest coffee mechanically. Observe cultural practices that could be used to lessen CBB and other coffee pest issues.

**Participants:** Dr. Tracie Matsumoto (PBARC), Andrea Kawabata (UH extension service), Stuart Nakamoto (UH CTAHR), Tom Greenwell (Greenwell Farms), Jon Ching (Kauai Coffee), Derek Lanter (Dole/Waialua Coffee and Cacao), Kimo Falconer (MauiGrown Coffee).

# Brazil Cultural Methodology

- Largest Coffee producer in the world (>50 Mil. bags = 7 Bil. Lbs. annually)
- Strong research capacity. New varieties, equipment, farming techniques and chemicals introduced annually.
- Farms are mostly mechanized. Hand picking in steep areas.
- Mostly un-irrigated farms but many converting to irrigated.
- Pruning done every third and fourth year, trees trained to have a single trunk.
- Wet season very predictable. Prefer one, single flowering event. Researching chemical removal of flowers.
- After harvest, they sweep the ground and collect any beans on the ground and process them.

# CBB (Broca) control program

- Harvest takes all beans off the tree.
- Coffee on the ground is swept up and collected mechanically. If not collected, it is mulched into the ground.
- Flowering control is crucial. There are better results when there is a known flowering date for CBB monitoring.
- Monitoring begins 60 – 90 days after flowering. At 3% damage, they spray insecticide. (no beauvaria use)
- Only spray the areas that need it, but monitor entire farm.
- Continue monitoring through crop cycle. Longer maturing of cherry 7-9 months.

# Sweeper and Tree Skirt Blower





# Sweeper/blower (3 pt. Hitch)





# Sweepings in windrows





# Bean & Trash pick-up and mulching









# Harvesting (70% mechanized)

- Multiple manufacturers all with slightly different approaches.
- Pruning done more frequently, every 3-4 years. Topped on the 3<sup>rd</sup> year and hedged on the fourth.
- This method allows for increased tree vigor, also allows for best soil management for optimum nutrition. Their most effective way of battling Coffee Leaf Rust and other leaf pests.
- Land is mostly flat, but they are designing machines that can handle up to 30% slope.
- Also terrace planting for extreme slope areas.



Trees pruned after 4<sup>th</sup> year  
Inter-row mulched, trees with single trunk.



# Oxbo (U.S.)







# Jacto









TDI (Zero Harvest method)  
Prunes and harvests all at once. No CBB impact.



# Harvester for slope conditions





# Terrace harvester (extending heads)



# Hand Harvest (30% of acreage)

- Most farms still employ a large labor force for harvesting young trees and sloped areas.
- Branches are stripped for the most part onto tarps then collected.
- Larger trees hand held machines are used to knock cherry off trees, then collected from tarps.





# Key agronomic focuses

- Soil nutrition to for root development to overcompensate for leaf losses due to Leaf Miner, Leaf Rust , Cercospora.
- Monitoring of fields for CBB outbreaks and proper spray timing.
- Although annual rainfall seems adequate, irrigation systems are beginning to be installed



# Coffee Leaf Rust









# Young irrigated field with early signs of rust



# Electrostatic retro-fit of tow behind sprayer





# Electrostatic head to replace conventional nozzles



# Mahalo!

