

CBB Discovery in Kona, September 13, 2010

CBB (Coffee Berry Borer) Task Force

What is involved: Dan Kuhn “Chair”

What is the CBB Problem ?



17% infestation last
year harvest, Ranquitte
Haiti

Kona produces around 3.6
million pounds of green beans.
At \$ 9.00/lbs. this amounts to
\$ 32.4 million.

At a 17% loss this amounts to
\$ 5.5 million.

India initial infestation 35%, now
around 2-5%

02/14/2011

Questions - CBB Task Force ?

- Is there a need for a Task Force
- Can it be made to happen
- Can it be effective
- Who would participate
- Can you develop and get consensus
- Can a volunteer effort succeed
- Many more issues to think about !

How do you get a Task Force?

- Should it be appointed and by whom?
- See if the various interest groups will participate.
- Agree among the groups on a makeup of a proposed Task Force and operational goals.
- Interest groups appoint or elect representatives.
Total of 23 Task Force Members.
- Members nominate & elect chair.
- Formation and vote for Executive Committee.

Final Makeup of CBB Task Force

- Even split between Industry, Regulators and Researchers (if possible)
- Hawaii has good research capabilities
 - UH – CTAHR University of Hawaii
 - PBARC Pacific Basin Agriculture Research Center
 - HARC Hawaii Agriculture Research Center
- Regulators
 - DOA Department of Agriculture
 - USDA-APHIS Animal & Plant Health Inspection Service
- Industry Groups
 - HCGA Hawaii Coffee Growers Association
 - HCA Hawaii Coffee Association
 - KCC Kona Coffee Council
 - KPFC Kona Pacific Farmers Cooperative
 - KCFA Kona Coffee Farmers Association
- Science Panel Dr. Yang, Dr. Grace, Dr. Vega +

Members

Bob Smith	KCFA	Kimo Falconer	MAUI
Carol Okada	DOA	Dr. Lylel Wong	DOA
Chris Manfredi	KAUU *	Maria Holmes	MOLOKAI
DeDe Hopkins	HI COUNTY	Dr. Mark Wright	CTAHR
Dr.Chifumi Nagai	HARC	Michael Conway	OAHU
Dan Kuhn	HCGA *	Mike Scharf *	USDA/ APHIS
Dr. Elsie Burbano CTAHR		Dr. Neil Reimer *	DOA
Dr. Eric Jang	PBARC *	Pepe Miranda	KONA
Dr. Gonsalves	PBARC	Roger Kaiwi	KCC
Dr. Bittenbender	CTAHR	Sotero Agoot	KPFC
Jeri M. Kahana	DOA	Tom Greenwell *	HCA
Jim Wayman	HCA *	Wayne Katayama	KAUAI
Dr. Ken Grace	CTAHR *	* Executive Committee *	

Mission Statement

- CBB is one of the **most significant coffee pests** in the world. The discovery of this pest in Kona will change how the coffee crop is cultivated and processed, resulting in added production costs.
- The CBB Task Force is a **voluntary collaborative** effort between industry, government and the scientific community to **stop the spread of the CBB to other coffee growing regions** on the Big Island and through out the State of Hawaii and to develop and coordinate **appropriate pest control**, to mitigate its impact and possible eradication in the affected areas.
- **Appropriate funding has to be found to develop and implement control measures.**

Specific Objectives

- **Communication**
 - Link up with World Experts
 - Farmer Meetings in Kona
 - Miller Meetings
 - Website DOA, CTHAR
 - Visitor Brochure CTHAR, DOA
- **Cooperation among different entities**
 - Industry Groups, Researchers and Government (excellent cooperation)
 - Involve Landowners (Bishop Estate, for example)
 - Involve County, State and Federal entities. (trying for Federal involvement)
- **Site survey**
 - DOA survey of different Islands, HCGA survey on different farms (confirmation of Kona only)
 - Hinterland of Kona, status of infestation (possible areal survey, hiking groups etc. not accomplished)

Specific Objectives

- **Quarantine**

- Hearings and changing from Kona to whole of Big Island
- Specifics and implementation (difficult during Christmas time)
- Fumigation Station (Private vs. State location, expense of fumigation)
- How to treat organic coffee

- **Trap Acquisition and Maintenance**

- HCGA ,HCA and USDA APHIS raise money and acquire traps
- High School Ag- program to make traps (make some money)
- Aquisition of Ethanol and Methanol deployment of traps
- Maintenance of traps

- **Research**

- Don't reinvent the wheel. Collect worldwide data
- Get world experts to participate. ARS, Columbia, Kenya, India, etc.
- Pinpoint relevant research for Kona
 - ProFume protocol, Heat treatment, Freezing protocol, IPM for Kona, Fungus deployment, Find local fungus, Post harvest treatment, Best Traps/ Lure combination, Synchronized flowering, farming and miller protocol etc.

Specific Objectives

- **Sanitation Measures for Kona**
 - Deal with wild coffee in gulches and hinterland (eradicate)
 - Deploy 3-5 person with supplies and truck for 5 years
- **Quarantine Facility in Kona**
 - Marshaling Yard, public land vs. private
 - Fumigation and heat treatment or freezing (organic coffee)
 - Lessen cost of treatment
- **Legislative Lobbying for Control Measures** (difficult times to raise money)
 - HB 1553 introduced but died in finance committee
 - Federal delegation (trying)
 - Specialty Crop Grant PBARC (in the mill Dr. Matsumoto)
 - State Barrel Tax (slight possibility)

\$ Expended towards CBB

Expenditures By Agencies And Groups / Oct. 2010 - Jan. 2011

HCGA	Early work CBB, Elsie Burbano	Expended	\$ 2000	
	Trap construction	"	\$ 1000	
	Travel funds	"	\$ 600	
				\$ 3,600
HCA	Trap construction	"	\$ 1000	
	Travel Funds	"	\$ 500	
				\$ 1,500
KCC	Trap construction	"	\$ 1000	
				\$ 1,000
USDA Aphis	Field Survey	Expended	\$ 25,533	
	Travel	"	\$ 6,659	
	Supplies	"	\$ 1,055	
				\$ 33,249
UH/CTAHR	Research funds:	Expended and Committed		
	Dr. Russell Messing (PI)			\$ 40,000
	methods of field sanitation, alternate host plants of CBB, use of low-toxicity compounds such as neem to prevent oviposition)			
	Dr. Mark Wright (PI)			\$ 50,000
	(CBB lifecycle in Hawaii, improved traps, possible use of traps for population control)			
	Note: Additional \$38,000 committed for FY2012			
	Dr. H. C. Bittenbender (PI)			\$ 24,000
	(Development of Best Management Practices for coffee, organization of workshops for coffee industry)			
	Note: Additional \$22,000 committed for FY2012			

\$ Expended towards CBB

Expenditures By Agencies And Groups / Oct. 2010 - Jan. 2011

	Dr. Loren Gautz (PI)	\$ 30,000	
	(Development of heat and fumigation quarantine treatments, improved sanitation methods)		
	[Note: Additional \$30,000 committed for FY2012]		
	CBB Brochure	\$ 2,000	
	Website	\$ 5,000	
	Travel (other than above)	\$ 2,000	
	Other administrative time	\$ 5,000	
			\$ 158,000
DOA	Expended		
	Survey work (3000 man-hours)	\$ 72,000	
	Lab work for identification (1000 man hrs.)	\$ 24,000	
	Travel	\$ 6,000	
	Beauveria (50 man-hrs.)	\$ 1,500	
	Other	\$ 3,000	
			\$ 106,500
PBARC	Expended		
	Trapping/detection	\$ 10,000	
	Beauveria bassiana fungus work	\$ 50,000	
	Flowering control	\$ 10,000	
	Field work	\$ 10,000	
	Travel	\$ 10,000	
	Other	\$ 30,000	
			\$ 120,000
	Total estimated expenditures towards CBB control:		\$ 423,849

Timeline

November 13, 2010 until February 2011

- CBB discovered in Kona by Elsie Burbano, UH PhD candidate; September 13, 2010
- Consideration for forming a response group
- HCGA hires UH expert to go to Kona for Farmers Meeting along with CTAHR
- Formation of CBB Task Force middle of September
- First CBB Meeting Oct. 14 (subsequent Dec.29, Feb.3)
- Vote for chairperson Oct.6
- Executive committee formed meeting Nov.1 (Dec.7, Jan.26)
- Quarantine implementation by HDOA (early December)
- Farmer Meeting in Kona (farm protocol)
- Miller Meeting in Kona (miller protocol)
- Trap construction, \$ by HCGA, HCA, KCC
- High School AG-program builds traps (makes some money)
- Importation of Beauveria fungus cleared by HDOA
- CBB Symposium

What has not been done !

- Find Funding for:
 - Continued Research
 - Sanitation Control Measures for Kona
 - Survey “Wild Coffee”
 - Public quarantine facility “ Set Up”
- Emphasize to protect the Neighbor Islands and Kau.

- Special thanks to all the CBB Members especially
 - Tom Greenwell, Dr. Eric Jang, Dr. Dennis Gonsalves, Dr. Ken Grace, Dr. Bittenbender, Dr. Elsie Burbano Dr. Lyle Wong, Dr. Neil Reimer, Mike Sharf, Carol Okada.
- Continue the effort (don't get accustomed to the situation)