



Minutes of the Board of Agriculture

I. CALL TO ORDER

With a quorum of the members present, the meeting of the Board of Agriculture was called to order on October 27, 2015 at 9:00 a.m. by Board of Agriculture Chairperson Scott Enright, at the Plant Quarantine Conference Room, 1849 Auiki Street, Honolulu, Hawaii 96819.

Members Present:

Scott Enright, Chairperson, Board of Agriculture (Board)  
Jerry Ornellas, Kauai Member  
Mary Alice Evans, Department of Business, Economic Development and Tourism (DBEDT), Ex Officio Member Designated Representative  
Michelle Galimba, Member-At-Large  
Glenn Hong, Member-At-Large  
Richard Ha, Hawaii Member  
Simon Russell, Maui Member

Members Absent:

Clark Hashimoto, Member-At-Large  
Suzanne Case, Chairperson, Board of Land and Natural Resources  
Dr. Maria Gallo, Dean of the College of Tropical Agriculture & Human Resources University of Hawaii (CTAHR-UH), Ex Officio Member

Others Present:

Nonie Toledo, Nonie Toledo & Associates  
Adrienne Elkind, YC  
James Green, University of Hawaii (UH) College of Tropical Agriculture and Human Resources (CTAHR)  
Jeff Melrose, UH Hilo  
Inga Gibson, Humane Society of the US  
Wayne Borth, UH  
Joyce Wong, Hawaii Department of Agriculture (HDOA)/Agricultural Resource Management (ARM)  
Linda Murai, HDOA/ARM  
Roy Hasegawa, HDOA/ARM  
Randy Teruya, HDOA/ARM  
John Hu, UH  
Neil Reimer, HDOA/Plant Industry Division Administrator  
Amy Takahashi, HDOA/Plant Quarantine Branch (PQB) Acting Manager  
Wil Leon Guerrero, HDOA/PQB

- 1 Jonathan Ho, HDOA/PQB
- 2 Micah Munekata, HDOA/Chairperson’s Office (CHR)
- 3 Jeri Kahana, HDOA/Quality Assurance Division (QAD) Administrator
- 4 Chris Kishimoto, HDOA/PQB
- 5 Lance Sakaino, HDOA/PQB
- 6 Philip Lee, Paradise Fresh Seafood
- 7 Kevin Yokoyama, HDOA/Agriculture Loan (AGL)
- 8 Cas Vanderwoude, Hawaii Ant Lab
- 9 Mitsuko Hayakawa, Private Citizen
- 10 Trenton Yasui, HDOA/PQB
- 11 Nick Dudley, Hawaii Agricultural Research Center (HARC)
- 12 Haunani Burns, Deputy Attorney General
- 13 Margaret Ahn, Deputy Attorney General
- 14 Delanie Prescott-Tate, Deputy Attorney General
- 15 Andrew Goff, Deputy Attorney General
- 16 Derek Lanter, Dole Waiialua Estate, Hawaii Chocolate & Cacao Assoc. (HCCA)
- 17 Mike Duponte, CTAHR
- 18 Phyllis Shimabukuro-Geiser, HDOA Deputy to the Chairperson
- 19 Keevin Minami, HDOA/PQB
- 20 Sandra Hiramatsu, Private Citizen
- 21 Jennifer Appel, Private Citizen
- 22 Zara Berg, Private Citizen
- 23 Isaac Maeda, HDOA/Animal Quarantine (AQ)
- 24 Kaukaohu Wahilani, Private Citizen
- 25 Elaine Kam, Private Citizen
- 26 Victor Renachaw, HCCA/Kakalani Chocolate
- 27 Jan Pappas, Private Citizen
- 28 Darcy Oishi, HDOA/PQB
- 29 Andrew Porter, Coordinating Group on Alien Pest Species (CGAPS)
- 30 Christy Martin, CGAPS

31

32 **II. APPROVAL OF MINUTES FROM 9/22/15 MEETING**

33

34 Chairperson Enright called for a motion to accept the minutes from the 9/22/15 meeting:  
35 Russell/Hong.

36

37 Board Member Ornellas: Page 5 line 23 should read “soil and water” instead of “salt  
38 and water”.

39

40 Hearing no further comments, Chairperson Enright called for a vote to adopt the  
41 September 22, 2015 minutes, as corrected.

42

43 Vote: Approved, 7/0.

44

45 **III. COMMENTS FROM THE GENERAL PUBLIC ON AGENDA ITEMS (ORAL OR**  
46 **WRITTEN)**

1  
2 Chairperson Enright stated that the Board will take public comments on the agenda  
3 items as they come up during the meeting.  
4

5 **IV. INTRODUCTION AND COMMENTS**

6  
7 Chairperson Enright moved on to Communications from Divisions section.  
8

9 **V. COMMUNICATIONS FROM DIVISIONS AND ADMINISTRATION**

10  
11 **A. AGRICULTURAL LOAN DIVISION**

12  
13 **1. Request for Approval of One (1) Direct Ownership Loan, One (1)**  
14 **Direct Operating Loan and One (1) Farm Sustainable Project Loan to**  
15 **Yoric Taaroa and Emily Taaroa.**  
16

17 Presentation made by Kevin Yokoyama, HDOA/AGL, as submitted. Staff recommends  
18 approval.  
19

20 Chairperson Enright called for a motion to entertain this request: Galimba/Russell.  
21

22 Chairperson Enright opened the floor to questioning by the Board.  
23

24 Hearing no questions or comments, Chairperson Enright called for a vote on the  
25 question.  
26

27 Vote: Approved, 7/0.  
28

29 **B. AGRICULTURAL RESOURCE MANAGEMENT DIVISION**

30  
31 **1. Request for Consent to Sublease Between the Hamakua**  
32 **Agricultural Cooperative and Douglas Beatty; Lots 07 and 08,**  
33 **TMK: 3<sup>rd</sup> Div/4-3-003-004 (por.), Opihilala & Hauola, Hamakua,**  
34 **Island of Hawaii**  
35

36 Presentation by Joyce Wong, HDOA/ARM, as submitted. Staff recommends approval.  
37

38 Chairperson Enright called for a motion to entertain this request: Ornellas/Galimba.  
39

40 Chairperson Enright opened the floor to questioning by the Board.  
41

42 Hearing no questions or comments, Chairperson Enright called for a vote on the  
43 question.  
44

45 Vote: Approved, 7/0.  
46

1                   **2. Request for Consent to Sublease Between the Hamakua**  
2                   **Agricultural Cooperative and Tetsuya Fujibayashi, dba Paradise**  
3                   **Green, LLC; Lot 10, TMK 3<sup>rd</sup> Div/4-3-005:017 (por.),**  
4                   **Opihilala & Hauola, Hamakua, Island of Hawaii**  
5

6 Presentation by Joyce Wong, HDOA/ARM, as submitted. Staff recommends approval.  
7

8 Chairperson Enright called for a motion to entertain this request: Russell/Ha.  
9

10 Chairperson Enright opened the floor to questioning by the Board.  
11

12 Hearing no questions or comments, Chairperson Enright called for a vote on the  
13 question.  
14

15 Vote: Approved, 7/0.  
16

17                   **3. Request for Consent to Sublease Between the Hamakua**  
18                   **Agricultural Cooperative and Pacific Gateway II Corporation;**  
19                   **Lots 05, 06, 07, and 09, TMK 3<sup>rd</sup> Div/4-3-005:017 (por.), and**  
20                   **Lot 08, TMK 3<sup>rd</sup> Div/4-3-005:019 (por.), Hamakua Agricultural**  
21                   **Park, Pohakuhaku, Hamakua, Island of Hawaii**  
22

23 Presentation by Joyce Wong, HDOA/ARM, as submitted. Staff recommends approval.  
24

25 Chairperson Enright called for a motion to entertain this request: Galimba/Ornellas.  
26

27 Chairperson Enright opened the floor to questioning by the Board.  
28

29 Board Member Evans: I am familiar with Pacific Gateway on Oahu in Kalihi Palama. Is  
30 this a training program for farmers?  
31

32 Ms. Wong: Yes, they will be providing training and guiding them. They will be  
33 suggesting ways to be more profitable.  
34

35 Board Member Evans: Will farmers profit from this?  
36

37 Ms. Wong: I am not sure if they'll get paid.  
38

39 Chairperson Enright: I believe that the agriculturalists will share in revenue stream from  
40 sale of produce.  
41

42 Hearing no further comments, Chairperson Enright called for a vote on the question.  
43

44 Vote: Approved, 7/0.  
45

1                   **4. Request for Consent to Waive Performance Bond**  
2                   **Requirement for General Lease No. S-3115;**  
3                   **Kuahiwi Contractors, Inc.; TMK 3<sup>rd</sup> Div/9-5-015:003;**  
4                   **Hionaa-Kaalaiki, Ka'u, Island of Hawaii**

5  
6 Presentation by Joyce Wong, HDOA/ARM, as submitted. Board Member Galimba  
7 asked to recuse herself on this board action as she is part-owner of Kuahiwi  
8 Contractors, Inc., the applicant in this matter. Chairperson Enright acknowledged and  
9 accepted the request.

10  
11 Ms. Wong: The staff recommends approval of the request.

12  
13 Chairperson Enright called for a motion to entertain this request: Evans/Ornellas.

14  
15 Chairperson Enright opened the floor to questioning by the Board.

16  
17 Hearing no questions or comments, Chairperson Enright called for a vote on the  
18 question.

19  
20 Vote: Approved, 6/0, Galimba recused.

21  
22                   **5. Request for Approval to Issue a Non-Exclusive Term Easement**  
23                   **For Construction Access to Na Pua Makani Power Partners, LLC;**  
24                   **TMK (1) 5-6-008:006, For Construction of Wind Turbines,**  
25                   **Kahuku Agricultural Park, Koolauloa, Oahu**

26  
27 Presentation by Randy Teruya, HDOA/ARM, as submitted. Staff recommends  
28 approval.

29  
30 Chairperson Enright called for a motion to entertain this request: Evans/Galimba.

31  
32 Chairperson Enright opened the floor to questioning by the Board.

33  
34 Board Member Evans: Exhibit A, is the red line the proposed easement?

35  
36 Mr. Teruya: Yes.

37  
38 Board Member Evans: And C-301? Is that the parcel adjacent to the 232 acres?

39  
40 Mr. Teruya: The end of red line is the end of the interior roadway. The land area just  
41 adjacent to the end of that red line is part of the 232 acres that is currently under DLNR  
42 inventory. That would be the access point into the 232 acres for Na Pua Makani.

43  
44 Board Member Galimba: Have they gotten the lease from DLNR yet?

45

1 Mr. Teruya: My understanding is that lease negotiations are continuing and they are  
2 close to finalizing a long term lease with the Department of Land and Natural Resources  
3 (DLNR).

4  
5 Board Member Russell: How did you arrive at \$500 per month?

6  
7 Mr. Teruya: Estimate on roadway maintenance, clearing of vegetation and shrubs  
8 along the roadway shoulders. Monthly fee is not for the entire length of the roadway,  
9 just the area that Na Pua Makani will be using.

10  
11 Board Member Russell: Will Na Pua Makani be required to make repairs if they  
12 damage the road?

13  
14 Mr. Teruya: Yes, that is part of the terms of the easement document.

15  
16 Hearing no further comments, Chairperson Enright called for a vote on the question.

17  
18 Vote: Approved, 7/0.

19  
20 Chairperson Enright called for a 5 minute recess at 9:23 a.m.

21  
22 The meeting was reconvened at 9:28 a.m.

## 23 24 C. PLANT INDUSTRY DIVISION

### 25 26 Plants

27  
28 **1. Request to: (1) Allow the Importation of Genetically Modified**  
29 **Tissue-Cultured Banana Plants, (*Musa spp.*) (cv. Williams), by Permit,**  
30 **for Greenhouse and Field Research on Resistance to Banana**  
31 **Bunchy Top Virus, by the University of Hawaii at Manoa; and (2)**  
32 **Establish Permit Conditions for the Importation of Genetically**  
33 **Modified Tissue-Cultured Banana Plants, (*Musa spp.*) (cv. Williams),**  
34 **by Permit, for Greenhouse and Field Research on Resistance to**  
35 **Banana Bunchy Top Virus, by the University of Hawaii at Manoa.**

36  
37 Presentation by Lance Sakaino, HDOA/PQB, as submitted. Staff recommends  
38 approval.

39  
40 Chairperson Enright called for a motion to entertain this request: Evans/Ornellas.

41  
42 Chairperson Enright opened the floor to questioning by the Board.

43

1 Board Member Evans: I have worked with Dr. Steven Montgomery through the years.  
2 He is a very thoughtful, careful scientist. Based on his support for this, I will be voting  
3 yes.

4  
5 Chairperson Enright invited Dr. John Hu to address the Board.

6  
7 Dr. Hu: We had planned to bring in 100 lines, about 300 plants. But after preliminary  
8 greenhouse testing, we expect to have no more than 5-10 lines go to the fields. Based  
9 on our previous experience, most will be eliminated during greenhouse experiments.  
10 Most will be sick, won't have the resistance needed for the field test. We are talking  
11 about only 5-10 lines at the very most to go to the field.

12  
13 Board Member Russell: I am affected by the banana bunchy top virus (BBTV)  
14 personally, so anything you do is of interest to me. Are there any varieties of top  
15 resistant bananas that we know of?

16  
17 Dr. Hu: As far as I know, no Musa (banana) has resistance. Some of the banana plant  
18 varieties will be more tolerant than others. Eventually, they will all come down with it.

19  
20 Board Member Russell: So these varieties you are bringing in, are they resistant to  
21 BBTV?

22  
23 Dr. Hu: Lines we want to bring here are transformed with BBTV gene, which was  
24 developed in my laboratory. We sent the gene construct to Africa for the  
25 transformation, but the virus gene is from Hawaii. The question we want to ask is if the  
26 transformed plant lines will be resistant to BBTV. We hope that some of them will be.

27  
28 Board Member Russell: So at the present time there are no banana trees resistant to  
29 bungee top?

30  
31 Dr. Hu: Yes.

32  
33 Board Member Russell: Is it safe to say that no one has ever eaten a banana that is  
34 resistant to BBTV?

35  
36 Dr. Hu: That's true. Recently, BBTV has been a severe disease in Africa. For me,  
37 banana is a fruit. Over there, banana is a much more important crop.

38  
39 Board Member Ha: How long have you been working on this issue?

40  
41 Dr. Hu: More than 20 years. HDOA came to my laboratory more than 20 years ago  
42 after the Rainbow papaya had been developed, asking if I could do something for the  
43 banana growers. Nobody has done this kind of work. Because banana does not have  
44 the resistant gene, we wanted to try a biotech approach. We are still in the research  
45 stage. For certain viruses, we do not have a sure answer.

1  
2 Board Member Hong: There are 100 lines of banana plants transformed with your gene  
3 in Africa. Is there a reason why it was done in Africa?  
4

5 Dr. Hu: Banana transformation is very difficult. Only a few laboratories in the world can  
6 do it, Belgium, France, and Australia. In Africa, Dr Tripathi is working on the Williams  
7 banana variety. Africa contacted UH to see if they could use my gene constructs for  
8 their growers, due to the severity of the BBTv problem there. We will do the biology  
9 part.  
10

11 Board Member Hong: Are you working with apple banana?  
12

13 Dr. Hu: Yes, for many years.  
14

15 Board Member Hong: There is an issue raised by Ruth Gay regarding the taste of the  
16 apple banana.  
17

18 PQB's Mr. Sakaino: I think she was concerned with the taste and the variety. In  
19 regards to research, it is totally different from what we are trying to do here.  
20

21 Board Member Galimba: Can you explain gene silencing and what was used with  
22 papaya?  
23

24 Dr. Hu: The term is relatively new, being used only 4 years ago and is now a popular  
25 technology. Papaya used a coat protein gene to fight virus infection. Because people  
26 are worried about virus proteins being placed in plants and possible allergies, now,  
27 through gene silencing, we do not express the protein, just put the virus gene construct  
28 to activate the plants' own mechanism to resist infection. No need to worry about  
29 allergy issues at all.  
30

31 Board Member Galimba: Does gene silencing prevent bunchy top virus from  
32 reproducing?  
33

34 Dr. Hu: It's something like immunization, like the flu shot, every year you get the shot  
35 for antibodies to protect you. Plants do have their own mechanisms to protect  
36 themselves. We are trying to activate their resistant mechanisms, called gene silencing.  
37 Once the mechanism is activated against BBTv, they will be resistant to virus infection.  
38

39 Board Member Russell: Any examples of virus becoming resistant via mutation?  
40

41 Dr. Hu: It is a possibility. This was a concern with the Rainbow papaya from day one.  
42 If the virus changed, it could be possible. Even if we have resistant varieties, it is not a  
43 silver bullet. Other factors can reduce the pressure of infection, sanitation practices,  
44 removing any diseased plants, etc. We are reducing the chance to mutate. The  
45 possibility does still exist.



1  
2 Board Member Russell: The State has not removed diseased plants. My neighbor has  
3 BBTV and won't get rid of it. If I am growing a resistant variety and my neighbor has  
4 BBTV, this will create an issue.

5  
6 Dr. Hu: That's why you want to grow resistant plants. Their plants will be sick, and  
7 yours will be the only one available.

8  
9 Hearing no further questions from the Board, Chairperson Enright opened the floor to  
10 public testimony.

11  
12 The Board received and considered written testimony in opposition to the import permit  
13 request from approximately 151 individuals.

14  
15 The Board received and considered written testimony in support of the import permit  
16 request from one individual.

17  
18 Jennifer Appel: There are significant vector issues that have come from UH Waimanalo  
19 field station. There's a banana growing operation nearby. There are other possibilities  
20 out there in terms of methods. I am 100% for the greenhouse so it doesn't escape.

21  
22 James Green, UH student: The gene constructs have been in the Hawaii environment  
23 before. We have not seen any ill effects. Working with new plants is the way to go.  
24 Based on past experiences there is nothing to fear.

25  
26 Mitsuko Hayakawa: I am concerned with genetic modification (GMO) coming to Hawaii.  
27 There are a lot of issues and controversies. If there are alternative methods, that would  
28 be preferred. I know this is just for research and pretty well contained, but can't control  
29 insects and soil. We've seen what has happened with papaya and we would appreciate  
30 alternative methods.

31  
32 Elaine Kam: I am concerned with GMO. I hope you have the wisdom to protect us from  
33 the negative aspects of these new types of things

34  
35 Dr. Wayne Borth: I work with Dr. Hu. I wanted to clarify one thing. We did not receive  
36 an import permit regarding 4 years of apple banana BBTV research because all those  
37 plants were generated in house using local banana. We did not import anything.

38  
39 Sandra Hiramatsu: I was ill over 20 years ago. I then became a vegan, so plants are  
40 important to me. I am against seedless things. I believe in rights of people to make  
41 their own gardens. If we have a lot of things that affect the air which is most  
42 fundamental to our life, then I am against things like GMO. GMO is different than  
43 traditional ways of hybrid growing or grafting. As a vegan I don't want anything to have  
44 animal in it. The public has the right to know. We should have the right to choose  
45 things. Please postpone this issue and think of people.

1  
2 Jen Papas: On the Olelo TV channel yesterday, a physician from the Autism Center  
3 talked about leaky gut and gastrointestinal issues with kids with Autism. He didn't say a  
4 thing about GMOs and said there have been no studies around diet and autism. I would  
5 be for biotechnology as far as studying it goes. But regarding food, we really need to  
6 think what we are doing. I do not feel that this is a science that we know the long term  
7 effects of and modifications could have long term effects. We have no studies to tell us  
8 what the truth is. There is worry that GMO's are being pushed through at such a rapid  
9 rate. People deserve the right to choose. We must be careful at a local level at what  
10 we are allowing in this State.

11  
12 Kaukaohu Wahilani: I am opposed to GMO. The best teacher is Mother Nature.  
13 Hawaii is the number one testing ground for GMO. I love bananas. Nature has been  
14 doing this for ions. I am all for food, all for organic, all for nature. I have been eating  
15 bananas since I was a baby. It doesn't sit well with me and generations to come. I  
16 hope we do the right thing. We must take care of the aina.

17  
18 Board Member Galimba: I would like someone to address the question of whether the  
19 Board meeting notice was proper.

20  
21 Deputy Attorney General Haunani Burns: The meeting notice was properly posted and  
22 timely filed with the Lt. Governor's office as required by statute. All of the legal  
23 requirements under the Sunshine Law were met.

24  
25 Board Member Russell: As an organic farmer, I have to test my banana if a GM variety  
26 is out there. Testing banana will be tough on my bottom line.

27  
28 Hearing no further comments, Chairperson Enright called for a vote on the question.

29  
30 Vote: Approved, 6/1, Board Member Russell voting against.

31 **Invertebrate and Aquatic Biota**

32 **2. Request to: (1) Allow the Importation of Japanese Flounder**  
33 **(Hirame), *Paralichthys olivaceus*, an Animal on the List of Restricted**  
34 **Animals (Part B), by Permit, for Food Preparation and Live Display,**  
35 **by Paradise Fresh Seafood, Inc.; and (2) Establish Permit Conditions**  
36 **for the Importation of Japanese Flounder (Hirame), *Paralichthys***  
37 ***olivaceus*, an Animal on the List of Restricted Animals (Part B), by**  
38 **Permit, for Food Preparation and Live Display, by Paradise Fresh**  
39 **Seafood, Inc.**

40  
41 Presentation by Trenton Yasui, HDOA/PQB, as submitted. Staff recommends approval.  
42

1 Mr. Philip Lee, Paradise Fresh Seafood: Paradise Fresh Seafood tries to serve seafood  
2 as fresh as possible. In the case of Hirame, customers ask for fresh fish because of the  
3 texture.

4

5 Chairperson Enright called for a motion to entertain this request: Russell/Ha.

6

7 Chairperson Enright opened the floor to questioning by the Board.

8

9 Board Member Russell: I see a question was posed to you regarding the drainage from  
10 the tanks. How does water get cleaned?

11

12 Mr. Lee: The water gets pumped out by a valve under the tank to the municipal sewer  
13 system. We make our own new water.

14

15 Board Member Russell: There is no chance of release into the ecosystem?

16

17 Mr. Lee: No.

18

19 PQB Inspector Mr. Yasui: The fish that will be imported are 3-5 lbs. The opening in the  
20 drain hole is only 1-2 inches, so they will not be able to fit through it to escape. The  
21 advisory subcommittee had some concerns about the potential for eggs. This was  
22 addressed by a requirement in the permit conditions that requires all effluent to be  
23 sufficiently screened to prevent accidental release and requires discharge into  
24 wastewater system or municipal sewer system.

25

26 Board Member Hong: Can Hirame survive in Hawaiian waters?

27

28 Mr. Yasui: The literature suggests that the water here is too warm.

29

30 Board Member Evans: I understand that drain water is screened and filtered. Are there  
31 any parasites that could come with Hirame that might survive? We have native flounder  
32 species that may be susceptible to that parasite.

33

34 Mr. Yasui: There could be potential effects or parasites. This permit request was  
35 reviewed by the advisory subcommittee and those concerns were not raised.

36

37 Board Member Galimba: Can you get Hirame locally?

38

39 Mr. Yasui: There is a company in Kona that does produce it.

40

41 Mr. Lee: The Hirame to be imported is raised in different waters, given different feed  
42 and is bigger than the ones from Kona. Taste of the fish is also different.

43

44 Board Member Evans: Can Dr. Reimer explain the drainage water issue?

45

1 Dr. Neil Reimer, HDOA/PQB: There was a concern brought up about water drainage.  
2 Mr. Lee clarified that the water drained from the tanks will be going into municipal  
3 sewage system and the sewage treatment plant, which would address the drainage  
4 water and the eggs. Drainage water is not going directly to the ocean.

5  
6 Hearing no further comments, Chairperson Enright called for a vote on the question.

7  
8 Vote: Approved, 6/1, Board Member Hong against.

9  
10 **D. QUALITY ASSURANCE DIVISION**

11  
12 **1. Request for (1) Preliminary Approval of Proposed Hawaii**  
13 **Administrative Rules “Hawaii-Grown Cacao and Hawaiian**  
14 **Chocolate” and (2) Approval to Hold Public Hearing.**

15  
16 **The summary of the proposed rules is as follows:**

- 17  
18 **a. Definitions--Establishes definitions for cacao, chocolate,**  
19 **geographic regions, and cacao blend chocolate.**  
20 **b. Labeling Requirements--Specifies requirements for labeling of**  
21 **Hawaii-grown cacao and Hawaiian chocolate, including product**  
22 **blended from cacao various geographic regions. Also includes**  
23 **labeling violations.**  
24 **c. Recordkeeping--Establishes recordkeeping requirements**  
25 **pertaining to the weight and geographic origins of cacao beans**  
26 **purchased and sold.**  
27 **d. Penalties--Establishes penalty provisions for violations.**

28  
29 Presentation by Jeri Kahana, HDOA/QAD, as submitted. Ms. Kahana provided updated  
30 copies of section 2 for the Board with editorial change. Staff recommends approval.

31  
32 Chairperson Enright called for a motion to entertain this request: Hong/Galimba.

33  
34 Chairperson Enright opened the floor to questioning by the Board.

35  
36 Board Member Ornellas: I applaud your efforts. We saw what happened with coffee.  
37 The area of concern is that we have hundreds of thousands of cacao plants in Hawaii  
38 and no one came before the Board requesting a permit to import seeds or pods. Lots  
39 have slipped through the cracks without any request to the Board. We need to look at  
40 where these seeds are coming from.

41  
42 Board Member Evans: Regarding the proposed regional definitions, industry is  
43 recommending breaking down labeling by island. Does that mean that they won't be  
44 able to ship plants between islands?

45

1 Ms. Kahana: I think the industry wants to showcase Cacao from their specific region.  
2 They could blend if they want, similar to coffee.

3  
4 Board Member Evans: Is it 51% is Hawaii grown?

5  
6 Ms. Kahana: Yes. The 51% is from Hawaii and can blend with non-Hawaiian cacao.

7  
8 Board Member Evans: Varieties the same?

9  
10 Ms. Kahana: It is an option for the manufacturers of the chocolate.

11  
12 Board Member Evans: Is labeling more of a branding than a botanical thing?

13  
14 Ms. Kahana: Yes.

15  
16 Board Member Russell: I have a 12 acre farm in Hana. Where does the 51% number  
17 come from? Is it from USDA?

18  
19 Ms. Kahana: It came from industry. They did not want blending under 51%.

20  
21 Board Member Russell: Is it true to label something as Hawaii grown it must be 51%  
22 according USDA law?

23  
24 Ms. Kahana: Yes. I believe the “Made in USA” requires that.

25  
26 Board Member Russell: Would you like to change the wording from region to  
27 indicators? I know in international law they use a term called geographic indicators,  
28 which may help our producers sell to the rest of the world and avoid counterfeiting.

29  
30 Ms. Kahana: We can consider that.

31  
32 Derek Lanter, Dole Waialua Estate/HCCA: We looked into indicators early on in  
33 development of labeling and marketing. An indicator is a higher level on an  
34 international level than a local level. We felt the need to address the local level to get  
35 protection for the local market. Geographic indicator would be another stage moving  
36 forward. We are following the coffee industry. There are many similarities as to how  
37 the rules will apply.

38  
39 Board Member Russell: Are you prepared to sell internationally and the geographic  
40 region can be easily transformed into geographic indicators.

41  
42 Mr. Lanter: Later we could consider a process to get something like a “parmesan” or  
43 “champagne” appellation. There are members that would like to see it happen. The  
44 51% is needed to use a Hawaii brand term. We can still pursue higher levels at the  
45 regional level. We need to make sure we can protect the integrity of the product.

1  
2 Board Member Russell: Who does the monitoring of blending?  
3  
4 Ms. Kahana: The measurement and standards branch, similar to coffee.  
5  
6 Hearing no further comments, Chairperson Enright called for a vote on the question.  
7  
8 Vote: Approved, 7/0.

9  
10 Chairperson Enright called for a 5 minute recess at 10:40 a.m.

11  
12 The meeting was reconvened at 10:45 a.m.

13  
14 **E. ANIMAL INDUSTRY DIVISION**

- 15  
16 **1. Request for (1) Approval to Adopt Proposed Amendments to**  
17 **Chapter 4-29, Hawaii Administrative Rules, entitled “Dogs, Cats,**  
18 **and Other Carnivores,” Relating to Rabies Quarantine and**  
19 **concerning Definitions, Other Requirements, Movement of Dogs and**  
20 **Cats Originating in Hawaii, Movement of Dogs and Cats Requiring**  
21 **Urgent Diagnostic, Medical or Surgical Procedures not Available in**  
22 **Hawaii, Fees, and Guide and Service Dogs; and (2) Submission of**  
23 **Hearings Officer’s Summary of Public Hearings Testimony on**  
24 **Proposed Amendments to Chapter 4-29, and Hearings Officer’s**  
25 **Recommendations**  
26 **(See attached summary)**

27  
28 Presentation by Dr. Isaac Maeda, HDOA/AQ, as submitted. Staff recommends  
29 approval.

30  
31 Chairperson Enright called for a motion to entertain this request: Evans/Galimba.

32  
33 Chairperson Enright opened the floor to questioning by the Board.

34  
35 Board Member Ornellas: Are we changing service dog to service animal?

36  
37 Dr. Maeda: We want to come back with a second set of amendments. There are other  
38 changes we would like to make, and at that time we will address this change.

39  
40 Hearing no further questions from the Board, Chairperson Enright opened the floor to  
41 public testimony.

42  
43 Inga Gibson, Humane Society of the US presented testimony, as submitted. She said  
44 that a few changes are requested to bring Hawaii animal laws in compliance with USDA  
45 laws. Because Hawaii is rabies free, the State allows puppies to be imported under 6  
46 months of age. We are proposing that Hawaii comply with USDA rules that no puppies

1 be imported under 6 months of age. Right now, there are no laws in Hawaii that  
2 regulate breeders. There is no rule that consumers know the origin. Adding a definition  
3 of “resale” will address this. Adding a new fee for resale will help offset administrative  
4 expenses. We suggest adding a requirement that cats be sterilized prior to import to  
5 address potential threats cats pose to native wildlife. Add a requirement that animals  
6 imported into Hawaii have a microchip implanted and registered with local humane  
7 society in order to track that animal. We do not believe that animals should be bred  
8 while in animal quarantine. Please consider making these changes.

9  
10 Hearing no further comments, Chairperson Enright called for a vote on the question.

11  
12 Vote: Approved, 7/0.

## 13 VI. OLD BUSINESS

### 14 1. Plant Quarantine Branch Status Report on Ohia Rapid Death (aka 15 Ohia Wilt) Caused by a Fungus, *Ceratocystis fimbriata*, found on the 16 Island of Hawaii.

17  
18 Informational status report given by Lance Sakaino, HDOA/PQB. Handouts were  
19 distributed to the Board. Mr. Sakaino said that HDOA gave a talk to Hawaii Floriculture  
20 & Nursery Association to provide them with current information. As of August 20, 2015,  
21 16 random cinder samples have been gathered and tested by Dr. Lisa Keith. No  
22 *Ceratocystis* was detected. On August 26, 2015 random soil samples were taken from  
23 Hamakua coast. No *Ceratocystis* was found. Several nurseries use soil from the  
24 Hamakua area. No fungus found on that site. Polynesian Culture Center wanted to  
25 import 200 logs to build a Tongan village. Sampling was conducted by taking cuts from  
26 bark and shaving every 3 feet. The samples were found to be positive for *Ceratocystis*.  
27 These logs were from the Kona side which was not previously infested. Kealakekua  
28 and Hoolaulea are now 2 sites infected on the Kona side. Dr. Lisa Keith is working with  
29 in-vitro fungicide with Syngenta and testing a soil drenching treatment. The only way to  
30 test a plant is to kill it and analyze sections. Work is still being done by Dr. Keith on  
31 moisture content and moisture percentage. If moisture content is 20% or lower, maybe  
32 the fungus can't live. We are working as fast as we can. So far, only logs for  
33 Polynesian Culture Center were rejected. There is a new order from Aulani, but the  
34 logs will be checked before shipping.

35  
36  
37 Chairperson Enright opened the floor to questioning by the Board.

38  
39 Board Member Galimba: Did you come up with a permitting process?

40  
41 Mr. Sakaino: Applicants have been informed to apply for a permit to move ohia. It may  
42 take 2-6 weeks to do sampling and get test results because there are only two USDA  
43 employees who can do it. The application form starts the sampling process so we are  
44 asking people to apply early.  
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Board Member Hong left the meeting at 10:56 a.m.

Board Member Russell: Has anyone used indigenous microorganisms to attack the disease?

Mr. Sakaino: I have not heard of that. We haven't gotten to biological control at this point.

Board Member Russell: What about those who ordered logs prior to quarantine?

Mr. Sakaino: Logs still need to be tested. Everything coming out of Hawaii Island is being tested.

Board Member Russell: Are there any efforts to track what already left Big Island?

Mr. Sakaino: I know of shipments from the Big Island. At this point we haven't found the disease on the other islands. There were 9 samples taken on Oahu, 2 on Lanai, and 2 on Maui. All these samples were negative, which is a good sign.

Board Member Galimba left the meeting at 11:01 a.m.

Board Member Russell: Are you familiar with Jeff Anderson and did you test logs from him?

Mr. Sakaino: Yes, I am familiar with Jeff Anderson. And yes, we have tested logs from him but we haven't gotten the results yet. Jeff Anderson and Hookano Trucking and Lumber are the two major log shipping companies.

Board Member Russell: Do they ship to a lot of places in the State?

Mr. Sakaino: Ohia logs are a special order kind of thing.

Board Member Russell: I would recommend we speak with Mr. Anderson and see where all his logs went.

Mr. Sakaino: Okay.

Amy Takahashi, HDOA/PQB Acting Manager: Dr. Keith said that soil testing indicated that soil is not a good medium for causing infection of ohia plants. The infection rate is very low. Because soil can harbor the fungus, PQB recommends maintaining the soil amendment.

Chairperson Enright: So to be clear, some of the testing that Mr. Sakaino noted was based on the testing of the soil media that Plant It Hawaii utilizes?



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Ms. Takahashi: Yes. In addition to that, we are encouraging the nurseries to come on board with our compliance program. Plant It Hawaii is in the process of joining it. Those businesses that utilize best management practices will be able to ship their plants. Ohia plants that look like they have symptoms or test positive will not be shipped. However, with fabricated ohia products, it may be possible to go back to the area the wood is from, test the area, and if it's found free of the fungus, then it may be possible to ship out the fabricated ohia products.

Board Member Evans: If soil is a limited vector for the fungus, do we have an idea of the more effective vectors?

Ms. Takahashi: I think that is still unknown. Dr. Keith is only doing research on soil.

Board Member Evans: There are applications from Big Island shippers, but are there other growers that are shipping logs from other islands?

Mr. Sakaino: I do not have any information on the other islands. The Big Island has the two companies on the Kona side that are doing a lot of the business.

Board Member Ornellas: Once the product is sawed into lumber, is it a problem?

Mr. Sakaino: In regards to ohia, we found out that the lumber must be dried. If it's green, it will tend to crack. If it's considered cut lumber, it is a very low risk.

Board Member Russell: In the case of a building already constructed, how would you go about testing those posts?

Mr. Takaino: I would take core samplings with shavings. You can do it with a small drill, bore holes an inch to 2 inches deep.

Wil Leon Guerrero, HDOA/PQB: I just wanted to add that the fungus is found in the cambium layer, which is close to the bark. If you get that area, then you can sample. If the cambium layer is removed, then the fungus is gone.

Board Member Ha: Do you have a sense of how fast it is spreading?

Ms. Takahashi: It will depend on current surveys now being done. It's just in the infancy stage now. Puna and Hilo are the original sites, and now it's in Kona.

Mr. Sakaino: It is moving slowly. It is up towards Saddle Back Road. I'm not sure about the acreage, but it is increasing.

Hearing no further comments, Chairperson Enright moved to the next order of business.

1 **VII. NEW BUSINESS**

2  
3 **1. Overview of the work done by the Hawaii Ant Lab, including on Little**  
4 **Fire Ant, presented by Dr. Cas Vanderwoude**

5  
6 Dr. Cas Vanderwoude, Hawaii Ant Lab presented an informational overview of how the  
7 State is addressing the Little Fire Ant (LFA). Lots of our pests came from South  
8 America. In the early 1900s, reports of ants spread around in different regions from that  
9 origin. In the 1970's, the ants ended up in the Western Pacific region. LFA was thought  
10 to be used as a biological control on plantations. Over the past several years, LFA has  
11 exploded in the Western and Central Pacific regions. LFA turned up in Hawaii in 1999.  
12 It was first detected in lower Puna. An infested shipment of mature palms was sent to  
13 Kauai. The HDOA responded quickly to eliminate that infestation. In 2007, LFA spread  
14 throughout the windward side of Hawaii Island. In 2009, the LFA reached Maui. In  
15 2014, LFA reached Oahu. By 2007, the situation was "beyond containment." In 2009,  
16 an ant specialist was hired. In 2012 the Hawaii Ant Lab was founded. Since 2013,  
17 there have been increasing incidences in Hilo urban area. In Kauai, the LFA is almost  
18 eradicated from a 12 acre site in north Kauai. In Maui, we are attempting to eradicate  
19 and contain the infestation. The LFA has infested Huelo (5 acres) and Hana (roughly  
20 20 acres). On Oahu, we have been working for 2 years and are on track to eradicate  
21 the LFA from 2 sites – Mililani Mauka (5 acres) and Waimanalo (5 acres). Infested  
22 growers face multiple issues that include the cost of treatment and difficulty in  
23 harvesting and husbandry. The impact on small growers is high.

24  
25 Chairperson Enright opened the floor to questioning by the Board.

26  
27 Board Member Evans: Regarding the pesticides use for eradication, is it effective?

28  
29 Dr. Vanderwoude: They are effective. We use a combination approach. The biggest  
30 problem is that LFA nest in trees. The baits we use have a small amount of pesticides.  
31 The commercial products are in granules. We developed a gel and equipment to  
32 splatter bait in high locations. The granular baits are for the ground.

33  
34 Board Member Ornellas: Your staff did a great job at the recent Farm Bureau  
35 convention.

36  
37 Board Member Ha: We had some help in Hilo for the 100 acres of bananas and were  
38 able to stay on schedule and use the gel bait.

39  
40 Dr. Vanderwoude: Bananas are the toughest crop. Any time you hit the stalk, a bunch  
41 of ants fall on you.

42  
43 Board Member Russell: What is it like to get bitten by a bunch of ants?

44

1 Dr. Vanderwoude: It is different for different people. It depends on each person's  
2 reaction. It can vary from rash to large welts.

3  
4 Board Member Russell: Is there any progress with the Hana infestation? What is the  
5 best course of action if allowed to address the person's infested property?

6  
7 Dr. Vanderwoude: It is difficult for us to work with a resident who does not want us  
8 there. The team has no desire to work where they are not wanted.

9  
10 Board Member Russell: The estimate is 20 acres? I heard you mention that the ants  
11 are moving from the source down river. Is that correct?

12  
13 Dr. Vanderwoude: Yes, the estimate is 20 acres. It was introduced at the very mauka  
14 point of the infestation with waterways that run mauka to makai through a series of  
15 properties. The ants have travelled very quickly and we have a long and narrow  
16 infested area that has reached the ocean. We are unable to enter the mauka side of  
17 Hana Highway. There are still more ants at the original site.

18  
19 Board Member Russell: In your opinion, does the department have the power to  
20 quarantine that property?

21  
22 Dr. Neil Reimer, HDOA/PQB: In order to establish quarantine, you must demonstrate  
23 that there is an emergency. We then have the ability to enter private property through a  
24 court order. Judges are not always the most excited to do that. In this case, by the time  
25 the infestation was found, it was already widely distributed. We are looking at more of a  
26 containment situation. Then, we can look at how to wipe it out. If we get to that point,  
27 then we could quarantine that one property. There is no point in doing that on one  
28 property if there are 20 acres still infested.

29  
30 Board Member Russell: I think there is a disincentive to report LFA. There should be  
31 collaboration to engage the community.

32  
33 Dr. Reimer: We need cooperation of landowners to work with us. It is more effective  
34 with community involvement.

35  
36 Hearing no further comments, Chairperson Enright moved to the next order of business.

37  
38 **2. Presentation on the 2015 Statewide Agricultural Land Use Baseline**  
39 **Project by Jeff Melrose**  
40

41 Jeff Melrose, UH Hilo, provided a power point informational presentation on the 2015  
42 Statewide Agricultural Land Use Baseline Project. UH Hilo Spatial Data Analysis' work  
43 was used to show what agriculture looks like in the State. The last time this was done  
44 was in 1980. The report is just about finished. Draft copies hopefully will be available  
45 by the second week in November. Digital images will be available on Office of State

1 Planning and HDOA websites with the report. The baseline is not a plan, but it's a tool  
2 that can inform planning.

3

4 Chairperson Enright opened the floor to questioning by the Board.

5

6 Board Member Evans: I am thrilled that this data will be available to the Office of  
7 Planning. Are you able to overlay state land ownership over the central Oahu area and  
8 show which private lands might become available so you can find opportunities to  
9 expand ownership?

10

11 Mr. Melrose: Yes, we will be mapping overlay. In terms of identifying other areas, we  
12 are not the ones to determine that. We know that the central plain on Oahu can  
13 produce at a cost competitive rate. There's a sense of urgency with these lands  
14 because ownership is in transition. In Maui, the lands that are most sustainable are the  
15 ones in up-country Kula. Public money could be used to buy these types of lands. I'm  
16 hopeful that this agricultural plan will be a planning tool and doesn't get used against  
17 farmers for regulatory purposes. This is a tool for getting a look at how land use has  
18 changed since the 1980s.

19

20 Board Member Ha: This is a good tool.

21

22 Mr. Melrose: I think that finding a way to update people's vision is key.

23

24 Board Member Ha: Big agriculture is great. But where we are going in the future, there  
25 is needs to be a lot of small scale agriculture operations.

26

27 Mr. Melrose: Big is good for scale. But it does not address all the opportunities and  
28 marketing for farmers. Finding farmers is tough. Finding these farmers and helping  
29 them with things like food safety is what we should be doing. I hope this tool serves this  
30 purpose.

31

32 Board Member Ornellas: Would you rather farm or hand towels out at the pool? Which  
33 is easier? We need to nurture the young energetic ones who want to take up farming.  
34 Go Farm produced only one farmer last year.

35

36 Mr. Melrose: We know there is going to be fallout.

37

38 Board Member Russell: How much we are importing?

39

40 Mr. Melrose: You can make some assumptions on what is being produced. We need  
41 to shake off those numbers of 85% imported, 15% local. Hawaii can't do it all. We  
42 need to figure out what can be grown here. The hardest part is that we have so little  
43 data.

44

1 Board Member Russell: Do you have any thought as to how many acres we need to  
2 farm for those crops that we can grow?

3

4 Mr. Melrose: I have not personally done that. The question is where and what. We  
5 need to figure out ways to determine the next step.

6

7 Chairperson Enright: This tool, along with the work from Sustain Hawaii, will give us an  
8 understanding of where we are at. The metrics can help drive the conversations that  
9 we need to have. Without metrics to see where we are, how are we supposed to move  
10 forward? This tool is meant to help agriculturalists get in business, stay in business,  
11 and stay profitable. The Governor wants the State to double production of local fresh  
12 produce.

13

14 Board Member Ha: If farmers make money, they are going to farm. It costs more to  
15 produce local. Can the consumer afford to buy local or only the cheapest import? A  
16 good economy will allow people to spend more on local produce. The bigger picture is  
17 energy and whether there is money to be made.

18

19 Mr. Melrose: One thing that is important is when we have the food conversation, I think  
20 it is code for vegetables. We also need beef, chicken, eggs, etc. In 1970's, all beef  
21 raised here stayed here. Even then, we only supplied 30% of all beef consumed here,  
22 so we were still importing. The circumstances are different. The fruit conversation is  
23 different from vegetable conversation, or the eggs or the milk. We need to talk about  
24 what we mean in order to get all parts of the picture.

25

26 Chairperson Enright: I may ask you to join us again for another update.

27

28 Mr. Melrose: You will be able to identify areas to invest in and be able to justify where  
29 you will be placing investments, especially with food hubs.


30

31 Chairperson Enright: Last Tuesday, I was talking about that issue with the House  
32 Finance Committee in Lalamilo. For that particular region, this is a great tool. It is  
33 dynamic and will continue to serve HDOA Chairs and the Board for years to come.

34

35 Hearing no further comments, Chairperson Enright moved to the next item on the  
36 agenda.

37

1  
2 **VIII. ADJOURNMENT OF REGULAR MEETING**  
3  
4 Having no further business before the Board, Chairperson Enright called for a motion to  
5 adjourn the meeting: Evans/Ha.  
6  
7 Meeting adjourned at 12:30 p.m.  
8  
9 Respectfully submitted,  
10   
11  
12  
13 Micah K. Munekata  
14 Board Secretary