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5 **Minutes of the Board of Agriculture**  
6

7 CALL TO ORDER – The meeting of the Board of Agriculture was called to order on  
8 October 18, 2016 at 9:00 a.m. by Board of Agriculture Chairperson Scott Enright, at the  
9 Plant Quarantine Conference Room, 1849 Auiki Street, Honolulu, Hawaii 96819.

10  
11 **Members Present:**

12 Scott Enright, Chairperson, Board of Agriculture  
13 Mary Alice Evans, Deputy, Department of Business Economic Development, Ex  
14 Officio Member  
15 Joshua Atwood, Hawaii Invasive Species Council Supervisor, Board of Land and  
16 Natural Resources (on behalf of Suzanne Case, Chairperson)  
17 Clark Hashimoto, Member-At-Large  
18 Michelle Galimba, Member-At-Large  
19 Jerry Ornellas, Kauai Member  
20 Glenn Hong, Member-At-Large  
21

22 **Members Absent:**

23 Dr. Rachel Novotny, Interim Dean of the College of Tropical Agriculture & Human  
24 Resources University of Hawaii, Ex Officio Member  
25 Richard Ha, Hawaii Member  
26 Simon Russell, Maui Member  
27

28 **Others Present:**

29 Gareth Mendonsa, Hawaii Department of Agriculture (HDOA)/State Agricultural  
30 Loan Division (SALD)  
31 Robert Ikeno, HDOA/SALD  
32 Kevin Yokoyama, HDOA/SALD  
33 Darren Strand, Maui Gold Pineapple  
34 Linda Murai, HDOA/Agricultural Resource Management (ARM)  
35 Roy Hasegawa, HDOA/ARM  
36 Lance Sakaino, HDOA/Plant Quarantine Branch (PQB)  
37 Jeri Kahana, HDOA/Quality Assurance Division (QAD)  
38 Roger Kaiwi, Kona Coffee Council  
39 Daniel Dinell, Hawaii Coffee Company  
40 Angela Adams, Kalikimaka Farms  
41 Gideon Kaonohi, Kalikimaka Farms  
42 Kevin Moore, Hawaii Department of Land and Natural Resources (DLNR)/Land  
43 Division  
44 Hugh Baptiste, Arborscapes  
45 Chris Kishimoto, HDOA/PQB

1 Andrew Goff, Deputy Attorney General  
2 Haunani Burns, Deputy Attorney General  
3 Delanie Prescott-Tate, Deputy Attorney General  
4 Janelle Saneishi, HDOA/Office of the Chair (CHR)  
5 Micah Munekata, HDOA/CHR  
6 Darcy Oishi, HDOA/Plant Pest Control Branch (PPC)  
7 Phyllis Shimabukuro-Geiser, HDOA/Deputy Director  
8 Rob Hauff, DLNR  
9 Michael Conway, Dole Food Co.  
10 Keevin Minami, HDOA/PQB  
11 Jonathan Ho, HDOA/PQB  
12 Kalani Watson, HDOA/PQB  
13 Wil Leon Guerrero, HDOA/PQB  
14 Leo Obaldo, HDOA/PQB  
15 John Ueshiro, HDOA/PQB  
16

17 II. APPROVAL OF MINUTES FROM 5/31/16 (REVISED) and 8/23/16 MEETINGS:

18  
19 Chairperson Enright requested a motion to approve the revised May 31, 2016 and  
20 August 23, 2016 meeting minutes.

21  
22 Motion for approval: Galimba/Hashimoto

23  
24 Vote: Approved, 7/0.  
25

26 III. COMMENTS FROM THE GENERAL PUBLIC ON AGENDA ITEMS (ORAL OR  
27 WRITTEN)  
28

29 Chairperson Enright said that the Board will be taking public comments on agenda  
30 items as they come up during the meeting.  
31

32 IV. INTRODUCTIONS  
33

34 There were no introductions or comments.  
35

36 V. COMMUNICATIONS FROM DIVISIONS AND ADMINISTRATION  
37

38 A. AGRICULTURAL LOAN DIVISION  
39

- 40 1. Request for Approval of One (1) Direct Operating Loan and One (1) Direct  
41 Farm Sustainable Loan to Hali'imaile Pineapple Company, Limited.  
42  
43  
44  
45

1 Presentation by Kevin Yokoyama, HDOA/SALD, as submitted. Staff recommends  
2 approval.

3  
4 Motion to accept: Hashimoto/Galimba

5  
6 Chairperson Enright called Daren Strand, Maui Pineapple Co., to the front.

7  
8 Board member Hashimoto commented by saying that Hali'imaile Pineapple has made a  
9 concerted effort to keep pineapple going on Maui and that he appreciates their efforts  
10 and is in favor of this request.

11  
12 Board member Evans asked what the food safety compliance investment is for the  
13 operation. Mr. Strand said that food safety regulation is coming to a head. They do a  
14 great job with third party audits. One of the major issues is water quality. They have  
15 created a dual system in our field. Water applied to the crop on top is municipal water  
16 and water used in processing is already municipal water. The Food Safety  
17 Modernization Act (FSMA) is onerous on this. Mr. Strand said that they will need to find  
18 a consultant to provide guidance on this. The final part is the food defense plans, with  
19 security and badges. Those are important in FSMA compliance. Board member Evans  
20 said that the Department deserves credit in helping with these guys with Food Safety  
21 compliance.

22  
23 Chairperson Enright asked how the planting cycle was going. Mr. Strand said that they  
24 were here 7 months ago asking for funding to continue plantings. They fell behind in  
25 2013 because of weather, and they were able to stop the bleeding with shareholder  
26 loans. This year they are right at the end of that slowdown. Pineapple has a 3-year  
27 cycle and they expect plantings will pick up. Mr. Strand said that although Maui weather  
28 has been bizarre, the quality of pineapple and yield has been good.

29  
30 Vote: Approved, 7/0.

- 31  
32 2. Request for Approval of One (1) Direct Food Manufacturing Loan to  
33 Rusty's Hawaiian, LLC.

34  
35 Robert Ikeno, HDOA/SALD, presented testimony as submitted. Staff recommends  
36 approval.

37  
38 Motion to accept: Galimba/Hashimoto.

39  
40 Vote: Approved, 7/0.

- 41  
42 3. Request that One (1) Loan to Rey T. Cabaccang be Referred to the  
43 Attorney General for Disposition and/or Collection.  
44

1 Gareth Mendonsa, HDOA/SALD, presented testimony as submitted. Staff recommends  
2 approval.

3 Motion to accept: Atwood/Galimba.  
4

5 Board member Evans asked if the property was owned or leased. Mr. Mendonsa said  
6 that the land was actually owned or leased by Tropical Hawaiian Products and the  
7 farmer was able to farm.  
8

9 Chairperson Enright called Kevin Yokoyama, HDOA/SALD, forward. Chairperson  
10 Enright said that through discussions with agricultural mediation services, there may be  
11 an opportunity here to assist with these loans. He said that it looks like HDOA has gone  
12 through great lengths to accommodate this loan. Chairperson Enright asked if there is  
13 anything else that could be done.  
14

15 Mr. Yokoyama said that it may be worth asking for help. Mr. Mendonsa said that they  
16 have exhausted all efforts with the borrowers. The agreement to reduce the amount of  
17 monthly payment and for the borrower not to meet that payment, there is little that they  
18 can do. He said that maybe with referring the loan to the Attorney General's office, it  
19 will move the borrower forward. Chairperson Enright said that he would like to move  
20 forward with this but also ask for agricultural mediation services for assistance.  
21

22 Board member Galimba asked, when someone gets behind on a loan, if HDOA reports  
23 this to other divisions or the State. For instance, if you want to do things with the State  
24 you need a Certificate of Good Standing. Mr. Yokoyama said that it doesn't show up,  
25 but maybe down the line it would.  
26

27 Vote: Approved, 7/0.  
28  
29

- 30 4. Request that One (1) Loan to Ryan S. Shimada and Elizabeth G. Shimada  
31 be Referred to the Attorney General for Disposition and/or Collection.  
32

33 Garreth Mendonsa, HDOA/SALD, presented testimony as submitted. Staff  
34 recommends approval.  
35

36 Motion to accept: Hashimoto/Galimba.  
37

38 Board member Galimba said that one of the loan pre-conditions was a written lease and  
39 she asked what happened. Mr. Mendonsa said that there was a condition on the  
40 original loan that there be a letter from the landlord authorizing the tenant that he could  
41 farm there. Mr. Mendonsa said that the letter is in file and that there is a first right of  
42 refusal given to the tenant given that if the person lists the property for sale. Board  
43 member Evans said that in relation to this particular situation, with property there  
44 converting from agriculture to gentlemen farms, that it may be that land values are  
45 getting higher and making it economically unfeasible for tenant farmers.

1  
2 Board member Galimba asked if they used this money to buy equipment. Mr.  
3 Mendonsa said that a portion was used for equipment such as a tractor, mower  
4 attachment, etc. Board member Galimba asked if HDOA can get that equipment back  
5 or if the Attorney General is needed. Mr. Mendonsa said that SALD works with the  
6 borrower and that there has been no contact with the borrower since last year. He said  
7 that, hopefully, with referral to the Attorney General, a letter to that effect may be  
8 possible to sell the equipment to pay off the loan.

9  
10 Board member Hashimoto asked whether the borrowers are farming. Mr. Mendonsa  
11 said that the last time he saw them was in November 2015 and they had 3 acres of  
12 organic bananas.

13  
14 Chairperson Enright asked if they are on Kamehameha Schools land. Mr. Mendonsa  
15 said yes.

16  
17 Vote: Approved, 7/0.

18  
19 B. AGRICULTURAL RESOURCE MANAGEMENT DIVISION

- 20  
21 1. Request Approval of: 1) Assignment of General Lease No. S-3102 (fka  
22 General Lease No. S-3859); Faith Okabe, Assignor, to Hugh Baptiste,  
23 Assignee; and 2) Issuance of New Sublease, Hugh Baptiste, Sublessor, to  
24 Faith Okabe, Sublessee; TMK: 1st Div/4-1-025:022 & 023, Koolaupoko,  
25 Waimanalo, Island of Oahu, Hawaii

26  
27 Ms. Linda Murai, HDOA/ARM, presented as submitted. Staff recommends approval.

28  
29 Motion to accept: Evans/Ornellas.

30  
31 Mr. Hugh Baptiste, Arborscapes, came forward to address the Board.

32  
33 Board member Evans asked if the sublease will compromise plans for agriculture on  
34 Oahu. Mr. Baptiste said that it will not as they have made a deal with Faith Okabe to  
35 take care of financial responsibilities and allow her to take care of her mother.

36  
37 Vote: Approved, 7/0.

- 38  
39 2. Request for Assignment of General Lease No. S-3127; Angela Chaille-  
40 Meixell and Timothy Meixell, Assignor, to Kalikimaka Farms, LLC,  
41 Assignee; TMK 1st Div/4-1-027:012, Lot No. 37; Koolaupoko, Waimanalo,  
42 Island of Oahu, Hawaii

43  
44 Ms. Linda Murai, HDOA/ARM, presented as submitted. Staff recommends approval.

45

1 Motion to accept: Evans/Atwood.

2

3 Angela Adams and Gideon Kaonohi from Kalikimaka Farm, LLC, came forward to  
4 address the Board.

5

6 Board member Evans asked how long Leyland Cypress takes to grow. Ms. Adams said  
7 that it takes 3 years to grow 7 feet. These trees do not have a smell and are fluffy.

8

9 Board member Atwood said that he supports Leyland Cypress trees as a low risk  
10 species for Hawaii. Ms. Adams said that this was one of the reasons to do their  
11 operation. Board member Atwood asked if the weed risk assessment was used for farm  
12 startups. Ms. Adams said that she was not sure.

13

14 Board member Hashimoto asked how many trees they had. Ms. Adams said that they  
15 had 520 trees. Board member Hashimoto asked if they are constantly planting. Ms.  
16 Adams said that they plan to sell all of those and continue planting.

17

18 Board member Hong asked how many acres are in planting now. Ms. Adams said that  
19 they have one half acre. Board member Hong asked if they were going to grow out.  
20 Ms. Adams said that they were planning to grow out this winter season of the whole  
21 property. She said that they will be doing more research on what else we can grow.

22

23 Board member Evans asked where they get their seed stock from. Ms. Adams said that  
24 they get their seed through a friend and Hawaii Forestry.

25

26 Chairperson Enright said that 8.6 acres is great but when that has been planted out,  
27 HDOA can try to find more property for expanding their operation.

28

29 Board member Hashimoto asked if there was a lot of labor involved. Ms. Adams said  
30 that the plants are sheared once a year all by hand. She said that they have done  
31 organic weeding in the area.

32

33 Vote: Approved, 7/0.

34

35 3. Request Approval of: 1) Extension of General Lease No. S-5515 and 2)  
36 Construction of Farm Dwelling (After-the-Fact); Leandra Gollob; TMK: 1st  
37 Div/4-1-027:001, Lot 30, Koolaupoko, Waimanalo Agricultural Subdivision,  
38 Island of Oahu, Hawaii

39

40 Ms. Linda Murai, HDOA/ARM, presented as submitted. Staff recommends approval.

41

42 Motion to accept: Evans/Hashimoto.

43

1 Board member Galimba asked if the \$225,000 is changing hands now or if it had  
2 previously been approved. Ms. Murai said that this will need to be approved first before  
3 moving over.

4  
5 Board member Ornellas asked if the structure was built to code and in conformance  
6 with building regulations. Ms. Murai said that it was.

7  
8 Vote: Approved, 7/0.

- 9  
10 4. Request Approval for the Transfer of Public Lands by Tax Map Keys from  
11 the Department of Land and Natural Resources to the Department of  
12 Agriculture Pursuant to Act 90, SLH 2003, Codified as Chapter 166E, HRS

13  
14 Ms. Linda Murai, HDOA/ARM, presented as submitted. Staff recommends approval.

15  
16 Motion to accept: Evans/Hashimoto.

17  
18 Kevin Moore, DLNR/Land Division, came to the front.

19  
20 Board member Atwood said that DLNR is supportive, but that they need time with the  
21 land division and Division of Forestry and Wildlife (DOFAW) to review the list of parcels  
22 in this submittal. He said that he would like to set up a process so that staff is working  
23 together prior to list going to board. Mr. Moore said that they have been working with  
24 HDOA. He said that there was not a lot of notice and would like more time to work on a  
25 smooth transition.

26  
27 Board member Evans said that under "comments", there are parcels that are too small  
28 or have no access. She asked if those comments were agreed to by DLNR. Mr. Moore  
29 said that the gullies and unusable lands are not accessible and that they are not trying  
30 to send those to HDOA. Board member Evans asked that of these parcels how many  
31 were encumbered by DLNR leases. Mr. Moore said that they have quite a few  
32 agricultural leases but that he was not sure on the number. Chairperson Enright said  
33 that the Board approved 40,000 acres coming over to the Department earlier in the  
34 year. He said that it has been 13 years and a war of attrition per se. He said that the  
35 department discussions with Chairperson Case, Russel Tsuji and Kevin have provided  
36 traction with moving lands over.

37  
38 Board member Ornellas asked what the department position is on small land locked lots  
39 with no agricultural use. Chairperson Enright said that this is about interpreting the  
40 language of Act 90. He said that there is a revocable permit for 8 acres in Hanapepe  
41 valley we are looking at. The lease was supposed to be cleared, however, the  
42 individuals with the permit didn't move on it. It is now forested. He asked whether that  
43 land would then come over to HDOA. HDOA interprets Act 90 that that land would not  
44 come to HDOA. That is something HDOA will have to discuss. There was a revocable  
45 permit for three quarters of an acre in Hanalei Valley actively in Taro but is landlocked in

1 the middle of Hanalei. He said that the Department does not have any lands much  
2 further than Kapaa. Chairperson Enright said that he is open to that discussion to take  
3 over land like that as this process moves forward. He said that the HDOA ARM division  
4 has its interpretation. It has been 13 years with bureaucratic infighting but there will be  
5 traction to move these leases now. The lease rent that HDOA provides in a rent re-  
6 opening is significantly less than DLNR. He said that having these properties in HDOA  
7 will be great for agriculture.

8  
9 Board member Galimba asked what the current process is of getting this list. Ms. Murai  
10 said that the list came from DLNR. ARM then went through it and did due diligence to  
11 check each parcel. Based on land and size, ARM can discern what land is good. We  
12 go through DLNR files for land that may be of importance and do a physical site visit  
13 and inspect current condition and we make a determination of which parcels we would  
14 take. The parcels accepted then come back to the Board. Board member Galimba  
15 asked if there is a better way to do this. Mr. Moore said that in 2008 there was a  
16 shotgun approach with inholdings. Now the focus is looking at properties with a tenant  
17 and an agricultural use and trying to get those leases to HDOA.

18  
19 Board member Ornellas asked if the court ruling of revocable permits have any issue  
20 with HDOA. Chairperson Enright said that this will get folded in and that further  
21 discussion is needed.

22  
23 Chairperson Enright deferred this request to the next meeting.

24  
25 Chairperson Enright called for a 5 min recess at 9:55am.

26  
27 Chairperson Enright called the meeting back to order at 10:00am.

28  
29 C. QUALITY ASSURANCE DIVISION

- 30  
31 1. Request for (1) Preliminary Approval of Proposed Amendments to Chapter  
32 4-143, Hawaii Administrative Rules and (2) Authorization for the  
33 Chairperson to Schedule Public Hearings and to Appoint a Hearing Officer  
34 in Connection with (1). Amendments to sections 4-143-6, 4-143-11, and  
35 4-143-12 extend the sunset date for the defect tolerance for coffee from  
36 June 30, 2017 to June 30, 2020.

37  
38 Jeri Kahana, HDOA/QAD Administrator, presented as submitted. Staff recommends  
39 approval.

40  
41 Motion to accept: Ornellas/Hashimoto.

42  
43 Chairperson Enright opened the floor to public testimony.

44



1 Roger Kaiwi, President of the Kona Coffee Association and the Coffee Berry Borer  
2 (CBB) Task Force, provided testimony as submitted. He said that they support HDOA  
3 on this request. Since 2010, the CBB has been heartbreaking. It has been a difficult  
4 pest. He said that they need additional time to mitigate this pest. In the next 3 years,  
5 they hope to see where they can be as an industry.

6  
7 Daniel Dinell, Hawaii Coffee Company, provided testimony in support of this request.  
8 These amendments will help farmers with CBB damage, provide a steady market, and  
9 the industry is committed to come together to revise the standards.

10 Board member Galimba asked if this was a compromise position. Ms. Kahana said that  
11 when looking at grade standards, there are a lot of issues. Because of the timeline  
12 involved, everything would revert back to what was original. There was big concern  
13 with Kona farmers because of CBB. Within the next 3 years they will try to mitigate the  
14 pest. Concern is with the Hawaii name of coffee here and putting out a good product.  
15 She thanked the Chair who sat in the meetings to bring people together.

16  
17 Board member Hong asked if most farmers are able to maintain quality under 20%.  
18 Ms. Kahana said that it is difficult with CBB. You can control the farm, but your  
19 neighbor might not. She asked how do you control that. At the same time, milling of the  
20 beans, with an optical sorter is expensive. Ms. Kahana said that this was the only way  
21 to maintain their quality to sort out defective beans.

22  
23 Board member Hong asked if they are saying mitigation is coming. Mr. Kaiwi said that  
24 SHAC funding is in the 4<sup>th</sup> year of a federal grant with \$300k. We had a lot of aging  
25 farmers who struggled to carry 70 lb backpacks. Most farmers with a conventional style  
26 orchard can handle. He said that Botanigard, the fungicide that kills CBB, expense is  
27 high. The price is \$220 in retail and this grant lowers price to \$70 with SHAC funding.  
28 He said that there were processors who were buying junk coffee and marketing it as  
29 high grade. Through grading programs, a farmer can improve quality. He said that  
30 education and awareness is high. They will ask for \$750,000 next year through the feds  
31 as we used all money currently for the year. They still have about 400k with HB1514 to  
32 use with 50% co-pay. He said that they are still a long way from control. Mr. Kaiwi said  
33 that there are struggles like terrain, aging farmers, other outlets, etc. but they are  
34 making headway despite these struggles.

35  
36 Board member Hong asked if there are other regions that are struggling with this.  
37 Mr. Kaiwi said yes, but that they have billions of pounds of coffee. They can control  
38 different acres. He said that they need to fix it in the field then they would not need the  
39 optical equipment.

40  
41 Board member Hashimoto asked if Kau coffee growers are affected like Kona growers.  
42 Mr. Kaiwi said that they are in different areas. The land is a little flatter. He said that  
43 everyone has their difficulties. If you can spray with a tractor control method is better.  
44 Backpack method is harder and more expensive.

45

1 Vote: Approved, 7/0.

2  
3 D. PLANT INDUSTRY DIVISION

- 4  
5 1. Request for: (1) Submission of Hearing Officer's Report and Summary of  
6 Public Hearing Testimony on Proposed Amendments to Chapter 4-72,  
7 Hawaii Administrative Rules, to Establish a Permanent Quarantine to  
8 Restrict the Intrastate Movement of Ohia Plants and Plant Parts, Soil, and  
9 Other Known Hosts of Ohia Wilt (Rapid Ohia Death) from the Island of  
10 Hawaii, Except by Permit Issued by the Hawaii Department of Agriculture;  
11 (2) Acceptance of Minutes of Public Hearings; and (3) Adoption of  
12 Proposed Amendments to Chapter 4-72, Hawaii Administrative Rules.

13  
14 Jonathan Ho, HDOA/Acting PQB Manager, presented testimony as submitted. Staff  
15 recommends approval.

16  
17 Motion to accept: Hong/Atwood.

18  
19 Rob Hauff, DLNR/DOFAW, was called to address the Board. Mr. Hauff said that he has  
20 been working with HDOA staff on developing this rule. He said that this was very  
21 sensible to do the rule now. He said that this rule will help buy us time to do the  
22 research needed to help stop the spread of Rapid Ohia Death (ROD) to other islands.

23  
24 Board member Hong asked if Mr. Hauff could characterize the tracking the spread of  
25 ROD on the Big Island. Mr. Hauff said that they did statewide fly over surveys of the  
26 Ohia forest, second time around on the Big Island. He said that they have mapped  
27 about 50,000 acres of recently killed trees. They are in the process of doing ground  
28 samples to see if this is all ROD. He said that there is lots of acreage in Puna with  
29 small outbreaks in Kau, and in Kealakekua Bay. They have not detected ROD in the  
30 northern region. They are intending to do quarterly surveys in that area. He said that  
31 they plan on doing surveys twice a year with aerial mapping. If new technologies are  
32 found to do rapid detection we will do it, but for now it is aerial surveys.

33  
34 Board member Hong asked if there is any resistance in areas of heavy infestation. Mr.  
35 Hauff said that they were not sure if it is resistance or trees escaping the pathogen  
36 infection. He said that they are not sure about genetic resistance and USDA ARS is  
37 doing research to see if there is resistance. He said that there is no proof as of now and  
38 there may be some variation. Board member Hong said that he would like to see  
39 further updates from PBARC.

40  
41 Board member Atwood asked what measures are in place to minimize intra-island  
42 spread within the Big Island. PQB's Mr. Ho said that both DLNR and HDOA are part of  
43 a working group, and that while there is no specific regulation against moving Ohia  
44 within the island, they have been using outreach through various groups to educate the  
45 public. There is still a need to educate. The people that have been educated have

1 been spreading the word. They have a lot of power with this. *Ceratocystis* is very much  
2 a human spread disease and we have been becoming more coordinated with  
3 education. Mr. Hauff said that they are installing sanitation stations at trailheads around  
4 the islands. They are also doing outreach at transfer stations where people can bring  
5 their green cuttings. He said that they have put up banners to avoid Ohia cuttings  
6 leaving.

7  
8 Board member Atwood asked about tests for *Ceratocystis* for items shipping inter island  
9 and what is the rate of false positives. Mr. Ho said that this was discussed previously  
10 during adoption of the initial rule. Mr. Hauff said that on the last update, there is a pretty  
11 high level of confidence that the molecular tests are detecting the DNA and whether it is  
12 viable or not.

13  
14 Board member Atwood said that on behalf of DLNR, we commend the staff for speed of  
15 rule and presentations for the public hearings.

16  
17 Chairperson Enright said that the science is dynamic to say the least and one of the last  
18 briefings is that the older trees that were succumbing to this disease. He asked if that  
19 was still the case. Mr. Hauff said that they have seen that pattern. Trees in areas  
20 where they are exposed with canopy emergent trees are showing higher rates of  
21 mortality. He said that patterns need to play out still and that they do not have the  
22 robust science there just yet. Chairperson Enright said that the thought was that the  
23 wind was producing the wounds. Mr. Hauff said that severe winds would cause wounds  
24 to the taller, older trees.

25  
26 Chairperson Enright asked if ROD was moving north toward Hamakua coast. Mr. Hauff  
27 said that they still haven't caught that. He said that they have found infestations near  
28 Wailuku River in Hilo Forest Reserve. Above that there has been no further detection.  
29 Through partners, Mr. Hauff said that US Fish and Wildlife and Hakalau National  
30 Wildlife Refuge really jump on any detections through surveys.

31  
32 Chairperson Enright commented by saying that some of the aerial surveys you have  
33 done, you thought you detected some stand in Kohala. Mr. Hauff said that there are  
34 some areas that have been looked at and that older die back was there for a while. He  
35 said they will continue to do those surveys in those regions.

36  
37 Board member Atwood said that ROD funding is set aside in the HISC budget for FY  
38 2017.

39  
40 Chairperson Enright also stated that biosecurity funds will help provide some resources.

41  
42 Vote: Approved, 7/0.

43  
44 Board member Evans left at 10:30am.

45

- 1           2. Request to: (1) Allow the Importation of Mahimahi, *Coryphaena hippurus*,  
2           an Animal on the List of Restricted Animals (Part B), by Permit, for  
3           Research in an Above Ground Flow-Through System, by Kampachi  
4           Farms, LLC at the Natural Energy Laboratory of Hawaii Authority, Kailua-  
5           Kona; and (2) Establish Permit Conditions for the Importation of Mahimahi,  
6           *Coryphaena hippurus*, an Animal on the List of Restricted Animals (Part  
7           B), by Permit, for Research in an Above Ground Flow-Through System, by  
8           Kampachi Farms, LLC at the Natural Energy Laboratory of Hawaii  
9           Authority, Kailua-Kona.

10  
11 Jonathan Ueshiro, HDOA/PQB Acting Aquatics Specialist presented testimony as  
12 submitted. Staff recommends approval. The applicant, Dr. Dale Sarver, and Kampachi  
13 Farms co-founder, Neil Sims, participated in the Board's discussion by long-distance  
14 telephone call from Kailua-Kona.

15  
16 Motion to accept: Galimba/Hashimoto.

17  
18 Board member Hong asked what the probability is of obtaining local brood stock.  
19 Dr. Dale Sarver, Kampachi Farms, said that there is not much local stock. He said that  
20 it is hard to hold and transfer large fish in a tank. They haven't been successful with  
21 that. They have been able to collect small juveniles but those have a hard time  
22 surviving. He said that there are only a few boats that have the capacity to move fish  
23 like that and they have worked with them, but because of the rare appearance this year,  
24 there is not much.

25  
26 Board member Hong stated that the Waikiki Aquarium had dozens of Mahimahi in their  
27 round tank so it seemed successful in raising these fish. He asked if they were familiar  
28 with that. Dr. Sarver said that he was aware of that and that they did get eggs from  
29 them and did initial research. He stated that no one has live Mahimahi now.

30  
31 Board member Hong asked, if you can manipulate the eggs to have all-male  
32 populations, whether future generations would all be male in the future without  
33 hormonal treatment. Dr. Sarver said that's the idea they would like to test. Board  
34 member Hong asked if those fish escape whether the genetics would be out with the  
35 local population. Neil Sims, Kampachi Farms, said that these are land based tanks and  
36 that escaping is very unlikely. He said that they would only escape in a tsunami. If one  
37 fish did survive, then it would only have an effect on its offspring. He said that any  
38 future breeding would not be affected.

39  
40 Board member Hong asked, if one of the all-male Mahimahi were to mate with a wild  
41 female, will they only have male offspring from there or would offspring be normal. Mr.  
42 Sims stated that they would be normal male offspring. Board member Hong stated that  
43 the request submittal says sex-reversed fish can be crossed to produce all-male  
44 progeny. He said that the way he reads it is that eventually we will only have all male  
45 Mahimahi in the wild. Dr. Sarver said that only applies to the first spawning of those

1 particular fish in the research population and not to those in the wild. Mr. Sims said that  
2 you can spawn that particular first offspring with XX females and the offspring will be XY  
3 normal males. The offspring will not be YY male. Board member Hong asked for  
4 clarification that the subsequent XY male offspring will then spawn normal combinations  
5 in offspring. Mr. Sims said that was correct. Board member Hong asked if that had  
6 been demonstrated. Mr. Sims stated that this is a research proposal, but they are  
7 absolutely certain that the offspring of that XY male spawning will be normal.

8  
9 Board member Galimba asked how many years can you breed your YY male to  
10 produce all-male progeny. Dr. Sarver stated that you can do that for about 4 or 5 years.  
11 Mr. Sims said that we don't know yet and this is the research being discussed.

12  
13 Vote: Motion to approve failed 5-1. (G. Hong opposed.)

14  
15 Chairperson Enright stated that with 6 members needed for approval, this issue will  
16 have to be taken up at another meeting.

17  
18 Haunani Burns, Deputy Attorney General, stated that if the Board has questions on the  
19 genetics, this could always be referred to the advisory subcommittee.

20  
21 Chairperson Enright said that he would take that under consideration and defer this  
22 matter.

23  
24 VI. OLD BUSINESS

25  
26 None.

27  
28 VII. NEW BUSINESS

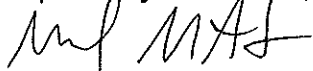
29  
30 Chairperson Enright said that the Board would like to bring in PBARC to talk about the  
31 science of ROD. He also said that they would bring in DLNR to discuss water  
32 permitting in a future meeting.

33  
34 VIII. ADJOURNMENT OF REGULAR MEETING

35  
36 Motion to adjourn meeting: Hong/Galimba.

37  
38 Meeting adjourned at 10:50 AM.

39  
40 Respectfully submitted,

41 

42  
43 Micah Munekata  
44 Board Secretary