

House District(s) \_\_\_\_\_

Senate District(s) \_\_\_\_\_

THE TWENTY-NINTH LEGISLATURE  
APPLICATION FOR GRANTS  
CHAPTER 42F, HAWAII REVISED STATUTES

Log No: \_\_\_\_\_

For Legislature's Use Only

Type of Grant Request:

GRANT REQUEST – OPERATING

GRANT REQUEST – CAPITAL

"Grant" means an award of state funds by the legislature, by an appropriation to a specified recipient, to support the activities of the recipient and permit the community to benefit from those activities.

"Recipient" means any organization or person receiving a grant.

STATE DEPARTMENT OR AGENCY RELATED TO THIS REQUEST (LEAVE BLANK IF UNKNOWN): DEPARTMENT OF AGRICULTURE

STATE PROGRAM I.D. NO. (LEAVE BLANK IF UNKNOWN): \_\_\_\_\_

1. APPLICANT INFORMATION:

Legal Name of Requesting Organization or Individual:  
Hawaii Tropical Fruit Growers

Db:

Street Address:

81-6393 Mamalahoa Hwy Captain Cook, Hi. 96704

Mailing Address:

PO Box 1162

Captain Cook, Hi. 96704

2. CONTACT PERSON FOR MATTERS INVOLVING THIS APPLICATION:

Name KEN LOVE

Title Executive Director

Phone # 808-443-8722

Fax # \_\_\_\_\_

E-mail ken@mycoffee.net

3. TYPE OF BUSINESS ENTITY:

- NON PROFIT CORPORATION INCORPORATED IN HAWAII
- FOR PROFIT CORPORATION INCORPORATED IN HAWAII
- LIMITED LIABILITY COMPANY
- SOLE PROPRIETORSHIP/INDIVIDUAL
- OTHER

6. DESCRIPTIVE TITLE OF APPLICANT'S REQUEST:

INCREASING GERmplasm AND AVAILABILITY OF FRUIT TREES TO GROWERS STATEWIDE THROUGH PROPAGATION AND MARKET DEVELOPMENT OF NEW INTRODUCED SPECIES

4. FEDERAL TAX ID #: [REDACTED]

STATE TAX ID #: [REDACTED]

7. AMOUNT OF STATE FUNDS REQUESTED:

FISCAL YEAR 2019: \$ 289, 572

8. STATUS OF SERVICE DESCRIBED IN THIS REQUEST:

- NEW SERVICE (PRESENTLY DOES NOT EXIST)
- EXISTING SERVICE (PRESENTLY IN OPERATION)

SPECIFY THE AMOUNT BY SOURCES OF FUNDS AVAILABLE AT THE TIME OF THIS REQUEST:

STATE \$ \_\_\_\_\_

FEDERAL \$ \_\_\_\_\_

COUNTY \$ \_\_\_\_\_

PRIVATE/OTHER \$ \_\_\_\_\_

[REDACTED]  
MARK SUIISO PRESIDENT

KEN LOVE EXECUTIVE DIRECTOR

AUTHORIZED SIGNATURE

NAME & TITLE

1-7-18

DATE SIGNED

JAN 19 2018 9:47 AM

## Application for Grants

*Please check the box when item/section has been completed. If any item is not applicable to the request, the applicant should enter "not applicable".*

### **I. Background and Summary**

*This section shall clearly and concisely summarize and highlight the contents of the request in such a way as to provide the State Legislature with a broad understanding of the request.*

*Please include the following:*

1.  **A Brief Description of the Applicant's Background**

Hawaii Tropical Fruit Growers (HTFG) is a nonprofit organization committed to supporting the Hawaii-grown tropical fruit community through promotion, research, education, and collaborative initiatives. Incorporated in 1989, the vision of HTFG is to expand and perpetuate the diversity, continued production, and legacy tropical fruit grown in the state. HTFG collaborates with local organizations and works with farmers and producers to increase the growth and consumption of locally produced tropical fruits. Members of HTFG include small growers, commercial growers, rare fruit tree collectors, fruit tree nurseries, packers, wholesalers, and manufacturers of tropical fruit specialty products from all over the state; though the majority resides on Kauai, Molokai, and in East Hawaii and West Hawaii.

HTFG supports and participates in research studies to improve cultural practices and postharvest treatments. For example, this research has revealed how to increase the shelf life of fresh fruit. The result of this research has been used to help chefs and grocery stores appreciate more advantages of buying local, thus positively impacting the local economy. Research studies are conducted through a close partnership with the University of Hawaii (UH), College of Tropical Agriculture and Human Resources (CTAHR) and with the USDA-ARS Pacific Basin Agricultural Research Center (PBARC). Recently, research was conducted to develop value-added products from off-grade tropical fruit. This study was part of the Hawaii Master Food Preserver Program. During this project, over 100 farmers, producers, and chefs were taught how to make quality, value-added products from local produce and meats that can be sold commercial or at farmers' markets.

In addition to conducting research, HTFG also implements educational programs for the community. Starting in 1989, HTFG hosts the annual International Tropical Fruit Conference every fall, which informs the public of new research, industry news, and trends related to the tropical fruit industry. This well-attended Conference features tropical fruit experts from around the world and also includes orchard tours and demonstrations, fruit tasting, and a benefit auction.

Another significant contribution of HTFG to the industry is its involvement in a global network of fruit groups sharing germplasm. Germplasm is living tissue that can grow new plants. HTFG currently operates five germplasm repositories, which provide cultivars of fruit that are either historically notable (such as rapoza mangos or yamagata avocados) or that have potential for market creation/expansion such as finger limes or new varieties of tangerines. In addition to germplasm, these repositories also support older but very popular cultivars such as Kahaluu and Malama avocados and Keitt and R2E2 mangos. These efforts support the local agricultural industry by making available tropical fruit trees that new and struggling farmers can afford. Farmers, who often must purchase hundreds of trees to be grown in an orchard, benefit from access to low-cost trees and have increased access to many new cultivars that are not available from conventional sources. On average, HTFG members pay \$20 per tree while non-members are charged \$40, a substantial difference compared to the commercial nurseries average price of \$65. However, these efforts also benefit commercial nurseries, as they too are able to purchase new and seemingly exotic varieties of highly marketable fruits to sell to the public.

2.  **The Goals and Objectives Related to the Request;**

The Hawaii Tropical Fruit Growers (HTFG) seeks techniques to increase access to tropical fruit trees in Hawaii. Hawaii's year round mild, tropical climate provides an ideal growing environment for many fruit varieties, yet we import nearly 40 million pounds of citrus, not to mention other fruits, hindering economic opportunity for local farmers.

*Objectives*

HTFG proposes the **Fruit Tree Investment Program (Fruit TIP)** with the objective of increasing the growth, diversity, and distribution of tropical fruit trees in the state. Fruit TIP will enable improved quality and quantity of germplasm repositories statewide in addition to the construction of a much-needed greenhouse. Germplasm repositories are locations at which local fruit trees and seeds are preserved, researched, and grown to support increased crop diversity and greater small farmer access to fruit tree varieties. By increasing the number and quality of repositories, the selection and varieties of tropical fruit trees available will increase, as well as realizing greater advancements in the development of new varietal crops for access in the local market place. Through the Fruit TIP program, HTFG will pave the way to reduce Hawaii's reliance on imported tropical fruits by supporting local producers and increasing locally grown and exotic fruit available to Hawaii residents.

The purpose of this initiative supports the two primary ways that HTFG can initiate an increase in Hawaii's self-sustainability. The first technique is to locally grow and market fruits that are heavily imported into the state, tangerines for example, as a way to crowd out imports. The second technique is to diversify the types of fruit grown locally. Growing fruits from around the world that are highly marketable yet virtually unknown locally, can have significant economic benefit for local growers. In the past, the

introduction of exotic fruits to Hawaii, such as pineapples, Sharwil avocado, black gold jackfruit, finger limes, and macadamia nuts have proven to be successful; many of which have since become staples in the state's agricultural industry. There are thousands of exotic, uncommon fruits that could easily be grown in Hawaii's climate. For example, Australia is home to over 100 various fruits that could thrive in Hawaii, such as Ooray, Midgen, and Blood lime, which, if grown in Hawaii, crowding out imports and providing consumers access to increased local goods.

In 2017, the USDA instituted a new regulation requiring a two-year quarantine period for all trees and scion (for grafting) imported into the state. Although these rules are designed to reduce the risks associated with the entry, establishment, and spread of pests and noxious weeds, these new regulations make it virtually impossible for local growers to gain access to new cultivars, varieties, rare fruit and germplasm material, as the quarantine period results in plant death. In Hawaii, this is a significant barrier in obtaining new varieties and cultivars of mangos, avocados, citrus and thousands of unusual and highly exotic fruits that are highly marketable locally, resulting in significant demand for these varieties among growers. The construction of a greenhouse to store the plants being imported to the state, with the purpose of introducing new varieties to the local market, will allow for continued introduction of exotic fruit trees into Hawaii. Over the past 25 years, HTFG has been importing fruit trees from all over the world to supply local growers. Until recently, this process required a 2-year quarantine period at any location approved by the State department of Agriculture. After 2017 only USDA federally approved greenhouses may be used for quarantine.

While seeds are permitted to be imported without an isolation period, it is not practical for Hawaii's relatively small, risk-adverse farmers to grow trees from seedlings; starting an orchard this way can add more than 10 years to the development and fruiting of a tree. Utilizing the greenhouse will provide HTFG with the ability to continue to diversify and distribute fruit trees throughout the state. Once the fruit trees have exited the quarantined period, growers will be able to purchase them at a low-cost immediately. Through the Fruit TIP program, HTFG will erect a greenhouse and manage the trees during the required quarantine, increasing the likelihood that plants would survive the two-year quarantine. This would also pave the way for increasing local access to new citrus varieties from Japan, Enkala fruit from Malaysia and thousands of other highly marketable fruits, expanding access to local consumers.

#### *Goals*

The Fruit TIP program is comprised of **four strategic goals** designed to increase locally grown tropical fruit in Hawaii. These goals will support the growing demand for tropical fruit trees from farmers and nurseries that want to start orchards or for smaller scale production to increase access to locally grown fruit.

#### **Goal One: Repair the current germplasm repositories**

HTFG currently manages five germplasm repositories, all of which are in need of improvements to protect the plants from destructive external elements, such as flooding, poor irrigation systems, and wildlife. There are two repositories in Kona, one in Honomu, one on Molokai, and one on Kauai. Due to environmental factors, such as torrential rains, mudslides, and wildlife, the current germplasm repositories require urgent repairs. Although many of the issues have been mended, further work will prevent continued damage. For example, wild pigs have broken irrigation pipes in the Honomu and Honaunau locations. While these pipes have been fixed, they should be buried deep into the ground to ensure that the situation does not occur again. Another example is the dire need of more secure fencing for many of the sites. The Molokai location requires higher fencing to prevent deer from accessing and damaging the plants. These wild pigs and deer have created damage, totaling more than \$8,000. Additional issues include Kauai mudslides, theft, and damage from environmental factors, such as high winds. The installation of new and improved irrigation systems, weed mats, and fencing will allow HTFG to increase germplasm cultivars and prevent further devastation to the sites.

**Goal Two: Increase selection and diversity of available fruit trees**

Although Hawaii is well known for its mild year-round climate, growing fruit trees can present a number of challenges. Each island's different elevation and soil types, create distinct needs for successful planting, fertilizing, irrigation and general horticultural practices. For instance, specific fruit trees, such as figs, require morning irrigation in Kona but not in Hilo. Fig cuttings from the same tree will often take on different characteristics when planted at different elevations or in different locations.

Fruit TIP proposes purchasing 500 new-to-Hawaii species of tropical fruit trees. Each existing repository location will receive 50 trees, while 100 trees will be planted at each new repository. The fruit trees will be chosen based on demand through polls conducted of the Hawaii Department of Agriculture, the University of Hawaii, the U.S. Department of Agriculture, and local produce wholesalers. Through their robust knowledge and industry experience, HTFG will ensure the success of this program by only planting fruit trees that will thrive in the specific location and climate as well as those that match the demands of the community. All trees to be purchased will produce fruit or have some edible component, resulting in increased market opportunity among the visitor industry, commercial nurseries, wholesalers, and retailers. There are more than 500 species of fruit with the potential to create new local markets that benefit producers and growers.

**Goal Three: Construct three new germplasm repositories in order to expand outreach throughout the state**

Currently, HTFG only manages germplasm repositories on Hawaii, Molokai, and Kauai. These locations were strategically chosen because of grower outreach potential and because these sites are prime for agritourism opportunities. HTFG proposes the construction of three new repositories on Lanai, Maui, and Oahu to better serve

growers on these islands, ensuring statewide access. Currently, the plants are shipped from the Captain Cook repository to growers on these islands. Unfortunately, fire ants, coqui frogs, and other pathogens have made interisland shipments increasingly difficult. It has become imperative that each island has a selection of fruit trees for growers to access in order to increase island self-sufficiency and market access for these islands' consumers.

**Goal Four: Greenhouse Addition**

The addition of the greenhouse in Captain Cook is a vital element of Fruit TIP. This site maintains HTFG's main repository, which obtains and ships new varieties and species to all other repositories. Prior to the new USDA regulations requiring that all trees imported into Hawaii be quarantined, HTFG routinely imported various new assortments of fruit trees to diversify the marketplace. Fruit TIP proposes building a greenhouse in Kona to allow HTFG to continue to import varieties of fruit trees and unusual specimens to continue providing diverse marketplace selections, resulting in positive economic impact for growers in the state. The construction of the greenhouse will include installing an irrigation system and a shade house extension to protect its existing 2,000 trees that require shaded areas. The greenhouse will enable HTFG to greatly increase the numbers of fruit tree species, thereby increasing the species available to growers, resulting in greater access to local-grown fruit.

Building and utilizing the greenhouse provides HTFG the opportunity to increase access to the next major exotic fruit in Hawaii that will have a significant economic benefit, as we've seen historically with macadamia nut and pineapple; resulting in agritourism and local market opportunity.

3.  **The public purpose and need to be served;**

HTFG is committed to improving the production, consumption, and quality of tropical fruit in Hawaii. Hawaii is significantly reliant on imported goods; growing fruit locally is a surefire mechanism to reduce this reliance. Fruit TIP leverages Hawaii's ideal climate for growing tropical fruit, increases residents and visitors access to highly demanded exotic Hawaii fruit, and increases the diversity of fruit available to contribute to a stronger local economy. Furthermore, Fruit TIP is well aligned with similar statewide initiatives but contrary to existing initiatives focuses on increasing the supply of local fruit available to growers, thereby increasing general market access. In recent years, the state, through local government agencies, has focused their efforts on increasing the growth, production, and consumption of locally grown and produced goods and decreasing the state's reliance of imported goods. For example, the HDOA's *Buy Local, It Matters* campaign, incorporates consumers, farmers, ranchers, producers, manufacturers, distributors, retailers, and restaurants in an effort to increase the amount of, and access to, locally grown, made, cooked, and produced foods in the state. Another example is Governor David Ige's *Sustainable Hawaii Initiative*, which aims to increase Hawaii's self-sustainability by doubling local food production by 2020.

Due to its unique location and climate, much of the fruit that is imported, especially tropical fruit, could be grown easily within the state. Approximately 17.6 million pounds of imported citrus and 16 million pounds of bananas could be replaced with locally grown fruit. In 2008, (the last year that shipments were tracked and published) more than 115 million pounds of fruit that could be grown locally were imported. Replacing merely 10 percent of the 85-90 percent of imported foods with locally produced goods would keep \$313 million circulating in Hawaii (Department of Business, Economic Development, & Tourism and HDOA, 2012). According to the USDA's National Agricultural Statistics Service, in one year Hawaii imported:

- 2,322,000 pounds of Avocados
- 16,028,000 pounds of Bananas
- 1,600,000 pounds of Grapefruit
- 4,035,000 pounds of Lemons
- 2,139,000 pounds of Limes
- 10,671,000 pounds of Oranges
- 1,460,000 pounds of Tangerines

HTFG aims to significantly decrease these numbers over the next 7 to 10 years, aligning and furthering statewide efforts to increase Hawaii's self-sufficiency.

#### *Local Need*

The demand for tropical fruit trees in Hawaii is much greater than the current number of trees available. HTFG chapters throughout the state receive up to 30 requests each week from farmers wanting to know where they can find specific trees. Surveying the three largest nurseries on three separate islands, revealed that less than 200 avocado trees were available, 350 figs, 180 citrus, 400 mango and only 60 lychee trees. There were no jackfruit, durian or mangosteen available, despite the growers demand for ultra-exotic tropical fruits, such as these, and new varieties of more traditional tropical fruits like avocado and citrus.

In order to further Hawaii's efforts towards greater food security, Fruit TIP will increase farmer access to various and unusual fruit trees. Based on demand of local farmers, HTFG will import, grow, and clone various types of fruit trees. Commercially grown fruit that is in short supply such as figs, (there is a three-month waitlist to buy fresh figs from a number of farms in Kona!) finger limes, and rambutan, are often sold out in advance of production. Fruit TIP will increase the quantity of these highly popular fruits in order to meet local demand. This will include exotic and unusual fruit, resulting in increased sales of local goods and greater agritourism opportunity.

The increase in the quantity and quality of germplasm repositories in Hawaii will further the state's objective of reducing Hawaii's reliance on imports and increasing self-sufficiency. By providing affordable and well researched trees to farmers, who are

inherently risk adverse, Fruit TIP will expand the market for local fruit in Hawaii.



4.  **Describe the target population to be served;**

Broadly, Fruit TIP increases access to a wide variety of fruit trees to farmers statewide. More directly, this project will benefit growers in the state, both members and non-members of HTFGs. There are over 700 members of HTFG statewide will have greater access to an increased number and more diverse selection of fruit trees. HTFG member are comprised of approximately 60% commercial growers, 5% manufacturers and processors, 10% packers, 20% backyard growers (whose sales are less than \$1,000 per year), and 5% researchers. Beyond HTFG membership, local growers who are not members will benefit as they will have access to increased and more diverse fruit trees as well as local consumers, producers, and retailers who will have greater access to locally grown fruit. As of December 2017, over 5,000 non-members have benefited from obtaining approximately 8,000 low cost fruit trees and propagative material from HTFG or one of its members and consignees in the past three (3) years. HTFG anticipates that in 2019, 1,500 farmers (members and non-members) will benefit from purchasing 8,000 trees linked to Fruit TIP with another 200 being donated to community gardens and research projects. Fruit TIP's benefits are not exclusive to HTFG membership. By increasing the availability of low cost fruit trees, farmers and growers, as well as retailers, consumers, visitors, etc. will benefit.

The short-term outcome of this program will bring great benefit to the agricultural industry, particularly growers. Purchasing fruit trees, as opposed to seedlings, lower market barriers by decreasing the time, labor, and financial investment required to be a successful grower. Typically, fruit trees can take a significant amount time to bear fruit; newly planted orchards typically start from seed and can take up 12 years before the trees produce fruit for commercial harvest. Considering the current inadequacy of available fruit trees in Hawaii and the time it takes to produce new trees, Fruit TIP offers a proficient alternative to jump start the tropical fruit industry throughout the state by shortening the time it will take for farmers to attain a producing orchard.

The long-term outcome will benefit local farmers, who will realize expanding economic opportunities as reliance on imports are reduced; as well as consumers and local retailers such as restaurants and chefs, grocery stores, and wholesalers who have long complained about the lack of locally grown fruit available. The increased production will also benefit the tourism industries that will have new opportunities to utilize and promote locally grown fruit. All of these beneficiaries result in an increase to the local economy. It is estimated that Fruit TIP will reach its full potential in 10 years. On average, once planted, the trees must grow from one to ten years in order to reach maturity prior to being cloned and sold to farmers for a small fee. Some trees such as figs can be cloned after the first year while Mangosteen and Jaboticaba trees can take up to 20 years. Currently, fruit trees like avocado and mango, retail for \$65 to \$85 per tree, while HTFG makes them available to members for \$20 each in order to help farmers establish new orchards and test new varieties. After the trees acquired by Fruit

TIP reach maturity, HTFG anticipates distributing 30,000 fruit trees per year statewide, making a significant impact on island sustainability and small farm income. Previous trees are sold to HTFG members, the public and donated to community groups, Master Gardener groups and various schools statewide.

5.  **Describe the geographic coverage.**

Once operational, the repositories and greenhouse established under Fruit TIP will benefit growers, producers, retailers, and consumers across the state. This project will increase the diversity and accessibility of low costing fruit trees to farmers on Hawaii, Kauai, Molokai, Lanai, Maui, and Oahu. As the main location, the Captain Cook Kona site will be the utilized for receiving and maintaining fruit trees during the quarantine process and for shipping plants to the other locations.

Each repository site is roughly two (2) acres with room for expansion, except for the Kona location, which does not offer opportunities for expansion. As proven by past successes, these lot sizes are easily manageable by our volunteers and chapter officers. The Oahu location is part of an ongoing partnership with the UH's Urban Garden Center in Pearl City. The Maui site will be situated in Lower Kula and the Lanai location will be situated in Palama Lanai.

## **II. Service Summary and Outcomes**

*The Service Summary shall include a detailed discussion of the applicant's approach to the request. The applicant shall clearly and concisely specify the results, outcomes, and measures of effectiveness from this request. The applicant shall:*

1.  **Describe the scope of work, tasks and responsibilities**

The scope of work for this project varies by location. As the Project Manager, Ken Love will oversee tasks across the state. The following describes the scope of work for each site:

*Kauai*

HTFG uses two acres at the National Tropical Botanic Garden (NTGB) for exotic fruit trees for the purpose of dissemination of germplasm to Kauai growers. The battery timers for the irrigation system have been ineffective due to torrential rains. The current irrigation timers will be replaced with 110-volt timers that have dedicated sections to better control water usage. Water and electric pipes as well as wires will be required for the new timers. This program also proposes adding 50 new species to replace those lost during floods and destruction due to rain. In order to prevent future damage to the trees, a weed mat better controls erosion from heavy rains in the newly planted area. Also, the weed mat will slow the growth of weeds; therefore, lowering future labor

costs. The NTGB will provide space for additional trees as needed. The operations performed at this location will be managed by Scott Sloan of NTGB. Other HTFG Chapter officers and members will volunteer their services as well.

<b>Kauai</b>		
<b>Equipment</b>	<b>Estimated Cost</b>	<b>Responsible persons</b>
Irrigation timers	\$200	Scott Sloan, Rob Rosen, Liz Ito & Ken Love
Pipe & wire	\$500	Scott Sloan, Rob Rosen, Liz Ito & Ken Love
Weed mat	\$5,000	Scott Sloan, Rob Rosen, Liz Ito & Ken Love
Trees	\$720	Scott Sloan, Rob Rosen, Liz Ito & Ken Love
Shipping	\$450	Scott Sloan, Rob Rosen, Liz Ito & Ken Love
334 hours of contract labor	\$5,010	To be determined
<b>Total location cost</b>	<b>\$11,880</b>	

*Molokai*

The Molokai repository is located at the Joy Farm and requires fencing weed mats to protect the trees from axis deer. The addition of weed mats will reduce the growth of weeds; thus, reducing labor costs. There have been numerous workdays and tree sales on Molokai to support the ongoing work to build the repository. Funding will provide support to stabilize and replace trees destroyed by deer, above and beyond the regular workday tasks. The existing fencing is incomplete and will be extended during the project. Fifty cultivars will be added to this location. The operations performed at this site will be managed by Molokai Chapter Manager Marshall Joy. Other HTFG Chapter officers and members will volunteer their services as well.

<b>Molokai</b>		
<b>Needs</b>	<b>Estimated cost</b>	<b>Responsible persons</b>
Weed mat	\$6,000	Marshall Joy, Bev Furgeson, Viola Wichman and Ken Love
Trees	\$720	Marshall Joy, Bev Fergeson, Viola Wichman and Ken Love
Shipping	\$500	Marshall Joy, Bev Furgeson, Viola Wichman and Ken Love
Fencing	\$3,000	Marshall Joy, Bev Furgeson, Viola Wichman and Ken Love
334 hours of contract labor	\$5,010	Marshall Joy, Bev Furgeson, Viola Wichman and Ken Love
<b>Total location cost</b>	<b>\$15,230</b>	

**Honomu**

The Honomu site requires weed mats and fencing to protect the area from wild pigs. By minimizing the growth of weeds, the addition of weed mats will reduce labor costs. HTFG will add 50 cultivars to the site that have been specifically requested by East Hawaii growers. Honomu’s unique climate results in very wet soil in the repository, which must be amended with fertilizers, micronutrients, and cinder in order for the trees to thrive. The operations performed at this location will be managed by Honomu Chapter Manager Brian Lievens. Other HTFG Chapter officers and members will volunteer their services as well.

<b>Honomu / Hilo</b>		
<b>Needs</b>	<b>Estimated cost</b>	<b>Responsible persons</b>
Weed mat	\$3,000	Brian Lievens, Richard Forster, Axel Kratel & Ken Love
Trees	\$720	Ken Love
Cinder & Soil Amendments	\$300	Brian Lievens, Richard Forster & Ken Love
Fencing	\$3,000	Brian Lievens, Richard Forster, Axel Kratel & Ken Love
334 hours of contract labor	\$5,010	Misc
<b>Total location cost</b>	<b>\$12,030</b>	

**Kona Honaunau**

The Honaunau location needs an additional and updated irrigation system as well as a weed mat to reduce intensive labor needs. Wild pigs damaged the current irrigation system. Additionally, water costs have increased; therefore, some funding will be used for irrigation. Lastly, 50 cultivars that have been requested by Kona growers will be planted in the repository. Honaunau Chapter Manager, Chantal Chung, will manage the tasks performed at this location. Other HTFG Chapter officers and members will volunteer their services as well.

<b>Kona Honaunau</b>		
<b>Needs</b>	<b>Estimated cost</b>	<b>Responsible Persons</b>
Weed mat	\$6,000	Chantal Chung, Brian Lievens, Eli Ednie & Ken Love
Irrigation	\$500	Chantal Chung, Brian Lievens, Eli Ednie & Ken Love
Trees	\$720	Ken Love

Water	\$500	Chantal Chung, Brian Lievens, Eli Ednie & Ken Love
334 hours of contract labor	\$5,010	Misc
<b>Total location cost</b>	<b>\$12,730</b>	

*Oahu*

A new germplasm repository will be constructed at the Pearl City Urban Garden Center. This is a collaborative effort with the University of Hawaii's Urban Garden Center. A new irrigation system and propagation materials, such as pots, plant material, and potting soil will support the new site. Furthermore, water for existing and new planting materials is proposed to ensure the success of this location. Fifty cultivars, as identified by Oahu growers, will be planted. Lastly, support will cover the shipping of plant materials. Oahu Chapter Manager, Mark Suiso, will manage the tasks performed at this location. Other HTFG Chapter officers and members will volunteer their services as well.

<b>Oahu</b>		
<b>Needs</b>	<b>Estimated cost</b>	<b>Responsible Persons</b>
Propagation materials	\$1,000	Mark Suiso, Lance Kimura, Noe Neumann & Ken Love
Soil	\$400	Mark Suiso, Lance Kimura, Noe Neumann & Ken Love
Irrigation materials	\$1,000	Mark Suiso, Lance Kimura, Noe Neumann & Ken Love
Water	\$5,000	Mark Suiso, Lance Kimura, Noe Neumann & Ken Love
Trees	\$1,500	Ken Love & Lance Kimura
Shipping	\$600	Mark Suiso, Lance Kimura
334 hours of contract labor	\$5,010	Misc
<b>Total location cost</b>	<b>\$14,510</b>	

*Kona: Captain Cook*

According to new USDA regulations, all plant material brought into Hawaii from overseas must be held in quarantine for up to two years. A greenhouse can be used to store imported plant materials in a manner that allows the quarantined plants to thrive. The expense associated with constructing the greenhouse includes preparing the ground, concrete, and an irrigation system. Additionally, HTFG will construct a shade house extension to cover 2,000 of its current trees that require shaded areas. Honomu Chapter Manager, Brian Lievens, will manage the operations performed at this location. Other HTFG Chapter officers and members will volunteer their services.

<b>Captain Cook</b>		
<b>Needs</b>	<b>Estimated cost</b>	<b>Responsible Persons</b>
Greenhouse including tables	\$50,000	Ken Love, Xavier Chung, Brian Lievens & Eli Ednie
Ground preparation & concrete	\$30,000	Ken Love, Xavier Chung, Brian Lievens & Eli Ednie
Water	\$3,600	Ken Love, Xavier Chung, Brian Lievens & Eli Ednie
Irrigation	\$2,500	Ken Love, Xavier Chung, Brian Lievens & Eli Ednie
Shade house extension	\$1,000	Ken Love, Xavier Chung, Brian Lievens & Eli Ednie
334 hours of contract labor	\$5,010	Misc
<b>Total location cost</b>	<b>\$92,110</b>	

**Maui**

Fruit TIP will construct a new germplasm repository in Lower Kula. This will require clearing and preparing two acres for planting; and installing weed mats and an irrigation system. Fifty cultivars will be shipped to, and planted at, the repository on land identified by Maui County. HTFG also requests support to supply water to the new trees. Paul De Filippi will manage the site, along with HTFG Chapter President and members. The Maui County Economic Development Board has pledged additional assistance.

<b>Maui</b>		
<b>Needs</b>	<b>Estimated cost</b>	<b>Responsible persons</b>
Trees	\$3,000	Paul De Filippi, James Simpliciano Annette Davidsen, Ken Love
Shipping	\$1,000	Paul De Filippi, James Simpliciano & Annette Davidsen
Irrigation	\$2,000	Paul De Filippi, James Simpliciano & Annette Davidsen
Land preparation	\$15,000	Paul De Filippi, James Simpliciano & Annette Davidsen
Weed mat	\$5,000	Paul De Filippi, James Simpliciano & Annette Davidsen
Water	\$1,000	Paul De Filippi, James Simpliciano & Annette Davidsen
334 hours of contract labor	\$5,010	Paul De Filippi, James Simpliciano & Annette Davidsen
<b>Total location cost</b>	<b>\$32,010</b>	

**Lanai**

The new germplasm repository on Lanai will require clearing land at HDOA Agricultural Park land. An irrigation system will be installed. Fifty cultivars that have been chosen by Lanai growers and the HTFG Board of Directors will be shipped and planted at the site. The site manger on Lanai will be Brad Bunn. Other HTFG Chapter officers and community members will volunteer their services as well.

<b>Lanai</b>		
<b>Needs</b>	<b>Estimated Cost</b>	<b>Persons responsible</b>
Land preparation	\$20,000	Brad Bunn, David Embrey, & Ken Love
Irrigation	\$4,000	Brad Bunn, David Embrey & Ken Love
Trees	\$4,000	Ken Love
Shipping	\$1,000	Brad Bunn, David Embrey & Ken Love
Water	\$1,000	Brad Bunn, David Embrey & Ken Love
Contract Labor	\$5,010	Misc
<b>Total location cost</b>	<b>\$35,010</b>	

The total costs for Fruit TIP is as follows.

<b>Total by Location</b>	
<b>Site</b>	<b>Estimated Cost</b>
Kauai	\$11,880
Molokai	\$15,230
Honolulu	\$12,030
Honaunau	\$12,730
Oahu	\$14,510
Captain Cook	\$92,110
Maui	\$32,010
Lanai	\$35,010

<b>Total Costs</b>	
<b>Total Location Costs Sub Total</b>	<b>\$225,510</b>
<b>Travel &amp; Per Diem</b>	<b>\$14,062</b>
<b>PI Salary</b>	<b>\$50,000</b>
<b>Total</b>	<b>\$289,572</b>

2.  Provide a projected annual timeline for accomplishing the results or outcomes of the service

The proposed project will occur between July 1, 2018 to June 30, 2019.

Month	Project	Location	Expected completion
1	Purchase and deliver weed mats, irrigation materials, and other infrastructure supplies.	All islands	Month 2
1	Contract and begin greenhouse construction.	Kona	Month 7
2	Select fruit trees based on community demands for all islands	All islands	Month 2
3	Deliver trees to each island coordinator	All islands	Month 3
4	Mobilize Kauai volunteers to expand repository	Kauai	Month 5
5	Mobilize volunteers to develop Maui repository	Maui	Month 6
6	Mobilize volunteers at Palama Lanai to develop Lanai repository	Lanai	Month 7
7	Mobilize Kona volunteers at Honaunau repository	Kona	Month 7
8	Mobilize Honomu volunteers at repository	Honomu	Month 8
8	Mobilize Molokai volunteers at repository	Molokai	Month 8
9	Mobilize Oahu volunteers at Urban Garden Center	Oahu	Month 9
10	Mobilize Captain Cook volunteers at mother repository	Captain Cook	Month 10
11	Evaluate conditions and success at all locations	All islands	Month 11
12	Prepare final reports	Captain Cook	Month 12

3.  Describe its quality assurance and evaluation plans for the request. Specify how the applicant plans to monitor, evaluate, and improve their results.

HTFG Executive Director Ken Love will serve as the Project Manager of Fruit TIP. He will be responsible for all aspects of this project and will provide monthly reports to the Advisory Committee. This Committee will be formed to oversee the progression of the project and to provide a means for quality assurance. The committee will consist of representatives from HDOA, USDA APHIS, University of Hawaii, National Tropical Botanical Garden (Kauai), County of Maui as well as HTFG Officers and Board Members. If any issues or concerns arise, the Committee will provide feedback and vote, if needed, on the necessary course of action. Committee members will meet with community



members and growers to discuss any trends and to provide feedback. Information will be shared with the Project Manager, who will work to obtain, clone, and make germplasm available based on the demands of the community. Any changes made will be shared via the HTFG website and social media. Throughout the project the HDOA and USDA will also be asked to evaluate project actions in order to better overall goals.

**The Advisory Committee Members include:**

Dr. Robert Paull	University of Hawaii CTAHR- Oahu
Dr. Ted Radovitch	University of Hawaii CTAHR- Oahu
Dr. Richard Manshardt	University of Hawaii CTAHR- Oahu
Paul Heerlein	University of Hawaii Palamanui- Kona
Sharon Hurd	Department of Agriculture Market Development Division- Oahu
Mike Scharf	USDA Aphis- Kona
Clare Okumoto	Department of Agriculture Kona Airport
Andrea Kawabata	University of Hawaii CTAHR- Kona
Alyssa Cho	University of Hawaii CTAHR - Hilo
Karen Arakawa	Maui Development Board
Diane Ragone	National Tropical Botanic Garden - Kauai
Glenn Teves	University of Hawaii CTAHR-Molokai

During the course of the project, each location will be managed by a qualified representative of HTFG, such as the local Chapter President. Each site manager will be responsible for acquiring the resources and contracting the labor for their respective locations. Prior to the starting construction of each site, Project Manager, Ken Love will travel to each location to meet with the site manager to ensure preparations are situated. Throughout the project, the site manager will report progress and any issues directly to the Project Manager.

4.  List the measure(s) of effectiveness that will be reported to the State agency through which grant funds are appropriated (the expending agency). The measure(s) will provide a standard and objective way for the State to assess the program's achievement or accomplishment. Please note that if the level of appropriation differs from the amount included in this application that the measure(s) of effectiveness will need to be updated and transmitted to the expending agency.

Project Goal	Island	Responsible Party	Assessment
1. Increase plants by 50 new cultivars	Each location	Project and Island Managers	Ken Love, Board and Advisory Committee HDOA
2. Increase plant types by 50 new exotic	Each location	Project and Island Managers	Ken Love, HDOA, USDA (import clearance)

species			
3. Increase productivity at sites by improving conditions at each of the existing repositories	Each location	Project and Island Managers	Ken Love, Board and Advisory Committee HDOA
4. Build a repository on Maui	Maui	Project manager, Karen Arakawa, Paul De Filippi	Ken Love, Board and Advisory Committee HDOA
5. Build a repository on Lanai	Lanai	Ken Love, Brad Bunn, Dave Embry and representatives of Pulama Lanai	Ken Love, Board and Advisory Committee HDOA
6. Build a repository on Oahu at the UH Urban Garden Center (UGC)	Oahu	Mark Suiso, Lance Kimura and UBC representatives	Ken Love, Board and Advisory Committee HDOA
7. Erect USDA-approved Greenhouse	Kona	Ken Love, Xavier Chung, Brian Lievens and Eli Ednie	Ken Love, Board and Advisory Committee HDOA
8. Distribute fruit trees to 750 growers.	All islands	Island Managers	Ken Love, Board and Advisory Committee HDOA
9. Import exotic trees for distribution after greenhouse construction	Kona Greenhouse	Ken Love, Xavier Chung, Eli Ednie & Brian Lievens	HTFG Board and Advisory Committee HDOA USDA

### III. Financial

#### Budget

1.  The applicant shall submit a budget utilizing the enclosed budget forms as applicable, to detail the cost of the request.
  - a. Budget request by source of funds ([Link](#))
  - b. Personnel salaries and wages ([Link](#))
  - c. Equipment and motor vehicles ([Link](#))
  - d. Capital project details ([Link](#))
  - e. Government contracts, grants, and grants in aid ([Link](#))

#### Budget Narrative

In addition to the budget form requested, HTFG has included a breakdown of costs for each request.

##### *Travel Expenses*

HTFG requests \$14,062 for travel expenses. A total of \$2,640 is requested for airfare expenses. This is based on 20 interisland flights (10 roundtrip). The roundtrip airfare costs are based on data from the 2018 U.S. General Services Administration (GSA). The Project Manager will travel via air from Captain Cook to each of the five (5) islands (Kauai, Molokai, Oahu, Maui, and Lanai) twice during the project year. In addition to airfare, these trips will require \$4,000 in car rental fees. Trips to Honaunau and Honomu will be not require airfare but necessitate \$310 in gas. The mileage rates for these trips are based on 2018 GSA mileage reimbursement rates.

In addition to airfare, HTFG requests \$4,688 for lodging and \$2,424 for meals and incidentals. The lodging and meal and incidental rates have been based on the 2018 Per Diem Rates issued by the Department of Defense (DoD). The Project Manager will travel to each location prior to the commencement of the construction and will stay for two (2) days per trip to meet with the Chapter Presidents and to ensure everything is in order. The Project Manager will return back to the site following the initial plantings for two (2) days to assess plants.

Travel Expenses Item	Cost per Unit	Total Unit	Final Costs
Airfare to Kauai	\$270/round trip	2 round trips	\$540
Airfare to Lanai	\$280/round trip	2 round trips	\$560
Airfare to Maui	\$270/round trip	2 round trips	\$540
Airfare to Oahu	\$200 /round trip	2 round trips	\$400
Airfare to Molokai	\$ 300/round trip	2 round trips	\$600
Lodging on Kauai	\$325/night	4 nights	\$1,300
Lodging on Lanai	\$254/night	4 nights	\$1,016
Lodging on Maui	\$259/night	4 nights	\$1,036
Lodging on Oahu	\$177/night	4 nights	\$708
Lodging on Molokai	\$157/night	4 nights	\$628

Meals (and Incidentals) on Kauai	\$135/day	4 nights	\$540
Meals (and Incidentals) on Lanai	\$118/day	4 nights	\$472
Meals (and Incidentals) on Maui	\$134/day	4 nights	\$536
Meals (and Incidentals) Oahu	\$123/day	4 nights	\$492
Meals (and Incidentals) on Molokai	\$96/day	4 nights	\$384
Drive to Honoumuli (134 miles/way)	\$0.55/mile	4 trips	\$295
Drive to Honaunau (7 miles)	\$0.55/mile	4 trips	\$15
Rental Car	\$200/day	20 days (4 days per island excluding Hawaii)	\$4,000
<b>Total Travel Expense</b>			<b>\$14,062</b>

#### Supplies

HTFG is requesting \$66,530 for supplies for the Fruit TIP program. This includes \$10,500 for a total of 350 new fruit trees to be planted statewide. Importing these trees to each location will require \$3,550. Planting will require a total of \$700 worth of soil and \$1,000 for propagation materials. In addition, \$25,280 is being requested for weed mats and \$6,400 for irrigation pipes and timers to improve plant maintenance. Lastly, \$3,000 is being requested for fencing to ensure the repositories are safeguarded from external factors.

Supplies	Cost per Unit	Total Unit	Final Costs
Trees	\$30	350	\$10,500
Weed mat	\$320. (300 feet x 12')	79	\$25,280
Irrigation pipes & timers	\$1,280	5	\$6,400
shipping	\$507	7	\$3,550
propagation materials: grafting tape, knives, root tone	\$1,000	1	\$1,000
Soil	\$350	2	\$700
Fencing	\$3,000	2	\$6,000
Irrigation Water	\$2,220	5	\$11,100
<b>Total Supplies Expense</b>			<b>\$64,530</b>

**Contract Labor**

HTFG is requesting **\$40,080** for contract labor. This estimate is based at \$15.00 per hour for a total of **2,672** labor hours between all **eight** locations. Each location will contract workers for irrigation work, weed mat application, ground preparation and tree planting.

Location	Cost per Unit	Total Unit	Final Costs
Kauai	\$15/hour	334 hours	\$5,010
Lanai	\$15/hour	334 hours	\$5,010
Maui	\$15/hour	334 hours	\$5,010
Oahu	\$15/hour	334 hours	\$5,010
Molokai	\$15/hour	334 hours	\$5,010
Captain Cook	\$15/hour	334 hours	\$5,010
Honomu / Hilo	\$15/hour	334 hours	\$5,010
Kona/ Honaunau	\$15/hour	334 hours	\$5,010
<b>Total Costs</b>		<b>2672</b>	<b>\$4080</b>

**Site preparation**

Based on conversations with construction companies and land clearing companies, site preparation will cost \$65,000. These preparations are necessary prior to installing each of the new repositories **and greenhouse**. The land will need to be **cleared** and **graded** before irrigation and planting can begin.

Item	Cost per Unit	Total Unit	Final Costs
Land prep and concrete for Kona	\$30,000	1	\$30,000
Land prep on Lanai	\$20,000	1	\$20,000
Land Prep on Maui	\$15,000	1	\$15,000
<b>Total Costs</b>			<b>\$65,000</b>

2.  The applicant shall provide its anticipated quarterly funding requests for the fiscal year 2019.

Quarter 1	Quarter 2	Quarter 3	Quarter 4	Total Grant
\$100,000	\$89,572	\$50,000	\$50,000	\$289,572

3.  The applicant shall provide a listing of all other sources of funding that they are seeking for fiscal year 2019.  
No additional sources are being sought at this time.
4.  The applicant shall provide a listing of all state and federal tax credits it has been granted within the prior three years. Additionally, the applicant shall provide a listing of all state and federal tax credits they have applied for or anticipate applying for pertaining to any capital project, if applicable.  
Not applicable.
5.  The applicant shall provide a listing of all federal, state, and county government contracts, grants, and grants in aid it has been granted within the prior three years and will be receiving for fiscal year 2019 for program funding.

Awarding Agency	Program: Title of Project	Award
<b>2015 Grants/Contracts</b>		
County of Hawaii		\$9,800
<b>2016 Grants/Contracts</b>		
Hawaii Department of Agriculture		\$9,800
	Project was to decrease the amount of time it takes for growers and stakeholders to obtain producing-trees by managing the approval process to import the trees and ensuring compliance with the quarantine period rules.	\$48,000,
<b>2017 Grants/Contracts</b>		
Hawaii Department of Agriculture		\$9,800
County of Hawaii		\$9,790
County of Kauai		\$1,000
<b>2018 Grants/Contracts</b>		
Hawaii Department of Agriculture		\$9,800

6.  The applicant shall provide the balance of its unrestricted current assets as of December 31, 2017.

**HTFG Assets as of December 31, 2017**

Bank Balance	\$5,810
Inventory (fruit trees)	\$12,000

**IV. Experience and Capability**

1.  **Necessary Skills and Experience**

*The applicant shall demonstrate that it has the necessary skills, abilities, knowledge of, and experience relating to the request. State your experience and appropriateness for providing the service proposed in this application. The applicant shall also provide a listing of verifiable experience of related projects or contracts for the most recent three years that are pertinent to the request.*

For over 28 years, HTFG has promoted all aspects of tropical fruit production in Hawaii. It is knowledgeable on every aspect of the fruit industry, such as culturing germplasm, cloning trees, managing repositories, harvesting fruits, and using fruits to produce value-added goods. As one of the leading agricultural organizations in the state, HTFG has collaborated on projects with the University of Hawaii (UH), the Hawaii Department of Agriculture (HDOA), the Maui Food Innovation Center, Hilo Community College and the Waipa Foundation to support and initiate projects that benefit the fruit industry. HTFG has also worked with growers, producers, chefs, and the general public to generate initiatives to not only improve the growth and consumption of fruit but to do so for in-demand fruit. Under the direction of Ken Love, HTFG has successfully conducted the numerous projects that have improved the growth and promotion of Hawaii fruit.

HTFG has firsthand experience creating and managing repositories and is fully capable of ensuring the short-and long-term success of the Fruit TIP program. With the support of the HDOA, HTFG successfully built repositories with germplasm sourced locally from the University of Hawaii and from HTFG growers. These repositories have been in operation for over five (5) years and in that short duration, production has increased by **more than 500%**. Throughout the years, the repositories have been used to produce clones of in-demand fruit trees for distribution to members, local organizations, and the general public. The Fruit TIP program is similar to this program, but does not duplicate it, as the germplasm will be supplied from outside sources; thus, expanding the availability of exotic and unusual fruits from around the world. Furthermore, the Fruit TIP program includes the construction of the USDA-approved greenhouse, which is a necessary step to ensure that growers have access to exotic and unusual fruit trees at a significantly reduced rate.

HTFG is well-equipped to manage the large-scale Fruit TIP project. In fiscal year 2015, with the support of the HDOA, HTFG managed a project that imported **more than 50**

varieties of tropical fruit sourced from international nurseries. One of HTFG's most innovative projects to date, *Jumpstarting the Tropical Fruit Industry* project, also referred to as the 10,000 Tree Project, is a three-year project, which began in 2016. Inspired by its previous successes, HTFG initiated this project to increase the numbers of trees available for distribution by 10,000 trees. Thus far, 8,000 trees have been distributed.

In addition to increasing the quantity and varieties of fruit trees grown in Hawaii, HTFG is continually finding ways to improve fruit consumption and market accessibility. In 2005, HTFG conducted "The 12 Trees Project," in collaboration with UH. This program received approximately \$300,000 from [USDA WSARE](#) to implement a project to increase production and popularity of fruits that were desired by local culinary experts. During the program, island chefs were asked which fruits they preferred to work with. Based on these answers, 12 species of fruit trees totaling 75 trees were planted. Once the trees matured, chefs were able to order and utilize these fruits in their restaurants. The Principal Investigator (PI) at UH stated that the 12 Trees Project was the most successful project that UH had ever participated in.

HTFG is continually finding methods to increase the production of fruit-related products. In 2010, HTFG brought the nationally-recognized Master Food Preservers (MFP) program to Hawaii. Throughout the nation, this program is part of a university extension program but in Hawaii it is managed by HTFG and is often held in connection with the UH, Maui Food Innovation Center, Hilo Community College and the Waipa Foundation on Kauai. MFP is a statewide educational program that teaches participants (such as chefs, growers, and other members of the community) about food safety and how to produce value-added products from home-grown produce.



2.  **Facilities**

*The applicant shall provide a description of its facilities and demonstrate its adequacy in relation to the request. If facilities are not presently available, describe plans to secure facilities.*

The current germplasm repositories sites are two acres, housing a minimum of 50 species, and have basic irrigation, fencing and partial weed matting. The locations are on long established farms and properties that are committed to HTFG for this project. These sites are currently secured through a Memorandum of Agreement with the National Tropical Botanic Garden (Kauai), Brian Lievens (Honolulu), Joy Farm (Molokai) Ma'ona Community Garden (Honaunau), Love Family Farms (Captain Cook). The new location sites are in the County of Maui and Palama Lanai. Through this project, 50 additional cultivars will be added to each location.

HTFG's main office and mother repository is located in Captain Cook at the Love Family Farms, owned by Executive Director Ken Love. Roughly 30% of this land is used for commercial/personal use, 40% is dedicated to HTFG-related services, and 30% is used for educational-related purpose, such as teaching agritourism, food preservation systems and managing repositories. This location for the greenhouse is ideal because it is near the mother repository site as well as the main port for importing fruit trees and distributing plants to other islands. Furthermore, this location will permit the HTFG and the HDOA to have easy access for inspections and routine procedures. Erecting the greenhouse at UH, or another similar site, would debilitate our ability to perform the necessary scope of services and disenfranchise local farmers.

**V. Personnel: Project Organization and Staffing**

1.  **Proposed Staffing, Staff Qualifications, Supervision and Training**

*The applicant shall describe the proposed staffing pattern and proposed service capacity appropriate for the viability of the request. The applicant shall provide the qualifications and experience of personnel for the request and shall describe its ability to supervise, train and provide administrative direction relative to the request.*

Project Manager, Ken Love, has firsthand experience in the creation and management of germplasm repositories in addition to an extensive knowledge of tropical fruits. He has been involved with various aspects of Hawaiian agriculture since 1983. Currently, he oversees the operations of all of the existing repositories. Love has led various research projects on germplasm and tropical fruits and has written more than 25 technical extension publications for UH on tropical fruit. He is also the Founder and Executive Director of Hawaii Master Food Preservers and teaches food preservation systems statewide.

Love has extensive experiencing in leadership and management roles. He served as an officer in the Kona Pacific Farmers' Cooperative, President of the American Culinary Federation (ACF) Kona Kohala Chefs Association as well as Chapter and State President of Hawaii Tropical Fruit Growers before becoming Executive Director. Additionally, since becoming the Executive Director of HTFG in 2008, Love has managed various successful grant programs for the organization. He directed the initial germplasm repository project, which led to the construction of the existing repositories. Additionally, Love directed the 12 trees project, which awarded \$300,000 to HTFG to increase fruit production in the islands. Moreover, he has worked closely with the HDOA and USDA to promote and improve fruit production in the state. Love has managed a successful three-year project for the University of Hawaii, which yielded a publication (<https://www.ctahr.hawaii.edu/oc/freepubs/pdf/12fruits.pdf>) showing sustainable methods for growing and marketing 12 fruit identified by island chefs as being most desired.

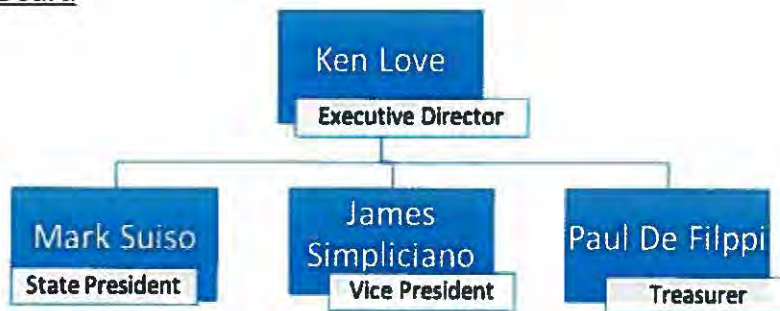
The local Chapter Manager will manage the construction and maintenance performed during Fruit TIP. All chapter managers are dedicated agriculturists who have been each been involved in the agricultural industry of Hawaii for at least of 35 years. Chapter Managers will hire qualified, licensed (when applicable) workers to perform the necessary tasks. The Chapter Managers will report on the process of the project directly to the Project Manager.

2.  **Organization Chart**

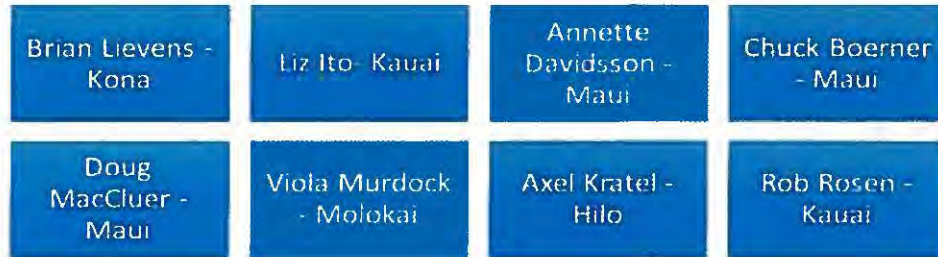
*The applicant shall illustrate the position of each staff and line of responsibility/supervision. If the request is part of a large, multi-purpose organization, include an organization chart that illustrates the placement of this request.*

HTFG has only one paid staff member, who is the Executive Director. The work completed by HTFG is conducted by volunteers or in partnerships with other organizations. The following charts outline the position of the Executive and General Board members

**Executive Board**



**General Board Members**



The work to be performed at each location will be managed by the site manager. Each site manager will hire and supervise the staff necessary to perform the work. The Project Manager will oversee the entire project.

**Project and Site Managers**



3.  **Compensation** *The applicant shall provide the annual salaries paid by the applicant to the three highest paid officers, directors, or employees of the organization by position.*

HTFG Executive Director, Ken Love, is the only member of the Applicant group to receive a salary of \$500.00 per month. He actively leads various activities to support HTFG's efforts and initiatives, including collaborating with organizations such as HDOA and CTAHR. Board Directors and Officers support various initiatives on a volunteer basis.

## VI. Other

1.  **Litigation** *The applicant shall disclose any pending litigation to which they are a party, including the disclosure of any outstanding judgment. If applicable, please explain.*  
Not applicable.
2.  **Licensure or Accreditation** *The applicant shall specify any special qualifications, including but not limited to licensure or accreditation that the applicant possesses relevant to this request.*  
Not applicable.
3.  **Private Educational Institutions** *The applicant shall specify whether the grant will be used to support or benefit a sectarian or non-sectarian private educational institution. Please see [Article X, Section 1, of the State Constitution](#) for the relevance of this question.*  
Not applicable.
4.  **Future Sustainability Plan** *The applicant shall provide a plan for sustaining after fiscal year 2018-19 the activity funded by the grant if the grant of this application is:*
  - (a) *Received by the applicant for fiscal year 2018-19, but*
  - (b) *Not received by the applicant thereafter.*

This project helps to increase the production of large amounts of potted fruit trees sold at cost in order to perpetuate the project beyond 2020. Until the repositories are fully operational, expenses will be covered by sales of existing trees. Once fully established, likely in 2025, each location will be sustained through the sale of cloned trees and fruit they produce. The majority of the work performed at the germplasm repository is conducted by volunteers; thus, labor costs are minimal. On average, each location is expected to produce 1,000 citrus trees per year, which will result in the \$15,000 in revenue, which will allow for purchase of new trees and resources.

5.  **Certificate of Good Standing (If the Applicant is an Organization)** *If the applicant is an organization, the applicant shall submit one (1) copy of a certificate of good standing from the Director of Commerce and Consumer Affairs that is dated no earlier than December 1, 2017.*
6.  **Declaration Statement** *The applicant shall submit a declaration statement affirming its compliance with Section 42F-103, Hawaii Revised Statutes. ([Link](#))*
7.  **Public Purpose** *The applicant shall specify whether the grant will be used for a public purpose pursuant to Section 42F-102, Hawaii Revised Statutes. ([Link](#))*

## BUDGET REQUEST BY SOURCE OF FUNDS

Period: July 1, 2018 to June 30, 2019

App

Hawaii Tropical Fruit Growers

BUDGET CATEGORIES	Total State Funds Requested (a)	Total Federal Funds Requested (b)	Total County Funds Requested (c)	Total Private/Other Funds Requested (d)
<b>A. PERSONNEL COST</b>				
1. Salaries	50,000			
2. Payroll Taxes & Assessments				
3. Fringe Benefits				
<b>TOTAL PERSONNEL COST</b>	<b>50,000</b>			
<b>B. OTHER CURRENT EXPENSES</b>				
1. Airfare, Inter-Island	14,062			
2. Insurance				
3. Lease/Rental of Equipment				
4. Lease/Rental of Space				
5. Staff Training				
6. Supplies	64,530			
7. Telecommunication				
8. Utilities	5,900			
9. contract labor	40,080			
10. Green house	50,000			
11. site preparation	65,000			
12				
13				
14				
15				
16				
17				
18				
19				
20				
<b>TOTAL OTHER CURRENT EXPENSES</b>	<b>239,572</b>			
<b>C. EQUIPMENT PURCHASES</b>				
<b>D. MOTOR VEHICLE PURCHASES</b>				
<b>E. CAPITAL</b>				
<b>TOTAL (A+B+C+D+E)</b>	<b>289,572</b>			
<b>SOURCES OF FUNDING</b>	Budget Prepared By:			
(a) Total State Funds Requested	Ken Love Executive Director		808 443-8722	
(b) Total Federal Funds Requested			Phone	
(c) Total County Funds Requested			1/18/18	
(d) Total Private/Other Funds Requested			Date	
<b>TOTAL BUDGET</b>	Mark Suiso President Name and Title (Please type or print)			

## BUDGET JUSTIFICATION - CAPITAL PROJECT DETAILS

Period: July 1, 2018 to June 30, 2019

Applicant: Hawaii Tropical Fruit Growers

FUNDING AMOUNT REQUESTED						
TOTAL PROJECT COST	ALL SOURCES OF FUNDS RECEIVED IN PRIOR YEARS		STATE FUNDS REQUESTED	OF FUNDS REQUESTED	FUNDING REQUIRED IN SUCCEEDING YEARS	
	FY: 2016-2017	FY: 2017-2018	FY:2018-2019	FY:2018-2019	FY:2019-2020	FY:2020-2021
PLANS	site prep (3 Islands)		65000			
LAND ACQUISITION						
DESIGN						
CONSTRUCTION	0	0	50000			
EQUIPMENT						
<b>TOTAL:</b>			<b>115,000</b>			
JUSTIFICATION/COMMENTS:						

### BUDGET JUSTIFICATION - PERSONNEL SALARIES AND WAGES

Period: July 1, 2018 to June 30, 2019

Applicant: Hawaii Tropical Fruit Growers

POSITION TITLE	FULL TIME EQUIVALENT	ANNUAL SALARY A	% OF TIME ALLOCATED TO GRANT REQUEST B	TOTAL STATE FUNDS REQUESTED (A x B)
Ken Love          Project Manager		\$50,000.00	70% OF TIME	\$ 50,000.00
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
<b>TOTAL:</b>				<b>50,000.00</b>
<b>JUSTIFICATION/COMMENTS:</b>				

## BUDGET JUSTIFICATION - EQUIPMENT AND MOTOR VEHICLES

Period: July 1, 2018 to June 30, 2019

Applicant: Hawaii TROPICAL FRUIT GROWERS

DESCRIPTION EQUIPMENT	NO. OF ITEMS	COST PER ITEM	TOTAL COST	TOTAL BUDGETED
not applicable			\$ -	
			\$ -	
			\$ -	
			\$ -	
			\$ -	
<b>TOTAL:</b>				
JUSTIFICATION/COMMENTS:				

DESCRIPTION OF MOTOR VEHICLE	NO. OF VEHICLES	COST PER VEHICLE	TOTAL COST	TOTAL BUDGETED
			\$ -	
			\$ -	
			\$ -	
			\$ -	
			\$ -	
<b>TOTAL:</b>				
JUSTIFICATION/COMMENTS:				



## List of related projects

HTFG directed by Ken Love conducted the following projects

**2005**

### The 12 trees project

Chosen by island chefs HTFG through the University of Hawaii planted an orchard that started with 12 species of fruit trees chefs most wanted to work with.

By project completion, 75 trees were producing and chefs continue to order and utilize these fruits in their restaurants. UH PI commented that it was the most successful project that UH has ever participated in.

**2010**

HTFG takes on the Master Food Preservers program. In 49 states this program is part of the University Extension but in Hawaii Ken Love brought the program here as a part of HTFG. Eight day Classes are held state wide teaching students that include chefs, growers and members of the community about food safety and how to produce value added products from home grown produce. Classes have been help in connection with the University of Hawaii, Maui Food Innovation Center, Hilo Community College and Waipa Foundation on Kauai.

**2015-2016**

HTFG creates 5 fruit tree repositories in Captain Cook, Honaunau, Honomu, Molokai and Kauai. These trees are used to produce clones for distribution to members, Community organizations and the general public.

**2016-2019**

Jumpstarting the Tropical fruit industry also referred to as the 10,000 Tree Project.

Capitalizing on the success of the repository project, HTFG developed the 10,000 tree project to increase the numbers of trees available for distribution. 8000 trees have been distributed with a year remaining on the official project.



STATE OF HAWAII  
STATE PROCUREMENT OFFICE

**CERTIFICATE OF VENDOR COMPLIANCE**

This document presents the compliance status of the vendor identified below on the issue date with respect to certificates required from the Hawaii Department of Taxation (DOTAX), the Internal Revenue Service, the Hawaii Department of Labor and Industrial Relations (DLIR), and the Hawaii Department of Commerce and Consumer Affairs

**Vendor Name:** HAWAII TROPICAL FRUIT GROWERS

**DBA/Trade Name:** HAWAII TROPICAL FRUIT GROWERS

**Issue Date:** 01/03/2018

**Status:** Compliant

Hawaii Tax#: [REDACTED]

New Hawaii Tax#:

FEIN/SSN#: [REDACTED]

UI#: No record

DCCA FILE#: 76917

**Status of Compliance for this Vendor on issue date:**

Form	Department(s)	Status
A-6	Hawaii Department of Taxation Internal Revenue Service	Compliant Compliant
COGS	Hawaii Department of Commerce & Consumer Affairs	Exempt
LIR27	Hawaii Department of Labor & Industrial Relations	Compliant

**Status Legend:**

Status	Description
Exempt	The entity is exempt from this requirement
Compliant	The entity is compliant with this requirement or the entity is in agreement with agency and actively working towards compliance
Pending	The entity is compliant with DLIR requirement
Submitted	The entity has applied for the certificate but it is awaiting approval
Not Compliant	The entity is not in compliance with the requirement and should contact the issuing agency for more information



## Department of Commerce and Consumer Affairs

### CERTIFICATE OF GOOD STANDING

I, the undersigned Director of Commerce and Consumer Affairs of the State of Hawaii, do hereby certify that

#### HAWAII TROPICAL FRUIT GROWERS

was incorporated under the laws of Hawaii on 10/02/1989 ; that it is an existing nonprofit corporation; and that, as far as the records of this Department reveal, has complied with all of the provisions of the Hawaii Nonprofit Corporations Act, regulating domestic nonprofit corporations.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of the Department of Commerce and Consumer Affairs, at Honolulu, Hawaii.

Dated: December 13, 2017

Director of Commerce and Consumer Affairs



**DECLARATION STATEMENT OF  
APPLICANTS FOR GRANTS PURSUANT TO  
CHAPTER 42F, HAWAII REVISIED STATUTES**

The undersigned authorized representative of the applicant certifies the following:

- 1) The applicant meets and will comply with all of the following standards for the award of grants pursuant to Section 42F-103, Hawaii Revised Statutes:
  - a) Is licensed or accredited, in accordance with federal, state, or county statutes, rules, or ordinances, to conduct the activities or provide the services for which a grant is awarded;
  - b) Complies with all applicable federal and state laws prohibiting discrimination against any person on the basis of race, color, national origin, religion, creed, sex, age, sexual orientation, or disability;
  - c) Agrees not to use state funds for entertainment or lobbying activities; and
  - d) Allows the state agency to which funds for the grant were appropriated for expenditure, legislative committees and their staff, and the auditor full access to their records, reports, files, and other related documents and information for purposes of monitoring, measuring the effectiveness, and ensuring the proper expenditure of the grant.
- 2) If the applicant is an organization, the applicant meets the following requirements pursuant to Section 42F-103, Hawaii Revised Statutes:
  - a) Is incorporated under the laws of the State; and
  - b) Has bylaws or policies that describe the manner in which the activities or services for which a grant is awarded shall be conducted or provided.
- 3) If the applicant is a non-profit organization, it meets the following requirements pursuant to Section 42F-103, Hawaii Revised Statutes:
  - a) Is determined and designated to be a non-profit organization by the Internal Revenue Service; and
  - b) Has a governing board whose members have no material conflict of interest and serve without compensation.

Pursuant to Section 42F-103, Hawaii Revised Statutes, for grants used for the acquisition of land, when the organization discontinues the activities or services on the land acquired for which the grant was awarded and disposes of the land in fee simple or by lease, the organization shall negotiate with the expending agency for a lump sum or installment repayment to the State of the amount of the grant used for the acquisition of the land.

Further, the undersigned authorized representative certifies that this statement is true and correct to the best of the applicant's knowledge.

Hawaii Tropical Fruit Growers

\_\_\_\_\_  
(Signature) 1/18/18  
\_\_\_\_\_  
(Date)

Mark Suiso President  
(Typed Name) (Title)

## **Project Advisory Committee**

<b>Dr. Robert Paull</b>	<b>University of Hawaii CTAHR- Oahu</b>
<b>Dr. Ted Radovitch</b>	<b>University of Hawaii CTAHR- Oahu</b>
<b>Dr. Richard Manshardt</b>	<b>University of Hawaii CTAHR- Oahu</b>
<b>Paul Heerlein</b>	<b>University of Hawaii Palamanui- Kona</b>
<b>Sharon Hurd</b>	<b>Department of Agriculture Market Development Division- Oahu</b>
<b>Mike Scharf</b>	<b>USDA Aphis- Kona</b>
<b>Clare Okumoto</b>	<b>Department of Agriculture Kona Airport</b>
<b>Andrea Kawabata</b>	<b>University of Hawaii CTAHR- Kona</b>
<b>Alyssa Cho</b>	<b>University of Hawaii CTAHR - Hilo</b>
<b>Karen Arakawa</b>	<b>Maui Development Board</b>
<b>Diane Ragone</b>	<b>National Tropical Botanic Garden - Kauai</b>
<b>Glenn Teves</b>	<b>University of Hawaii CTAHR-Molokai</b>