

## **Hawai'i Public Seed Initiative Mini-Grant Reporting Guidelines The Kohala Center – 2015**

Please answer the following questions as carefully and accurately as possible. This will assist us in preparing our end of year report to the funders of the HPSI. You must use this format to prepare your final grant report.

This report will be due on or before **December 1, 2014**.

[seedproject@kohalacenter.org](mailto:seedproject@kohalacenter.org)

1. **Your Name (Printed please)** Marielle Hampton
2. **The name of your project and Island on which it took place.** Tropical Kabocha Variety Trial, Hawaii Island
3. **Which goals and outcomes outlined in your project proposal have been met and which (if any) are still in process?**

The project manager researched available modern varieties of pumpkin that met the qualifications and established contact with seed companies domestically and abroad for tropically adapted seed. The project manager also navigated the seed importation process by obtaining plant import permits and phytosanitary certificates. At this point in the project, approximately 25 - 50 seedlings of 11 varieties are growing on Paaui Forest Farm (see photos in media section). A quarter acre on the neighboring lot has also been cultivated for a conventional trial of varieties with treated seed.

4. **How many community members have been involved in the project and what were their roles?**

Four community members have been directly involved in the project so far. Kyle Studer of Paaui Forest Farms (PFF), Marielle Hampton, the project manager and PFF employee, and Leah Lekich, PFF employee, have all been involved in land preparation and planting. John Farrell, a member of the Hamakua Agricultural Cooperative, has offered to host the conventional trial and perform all tractor and irrigation work.

5. **How many regular volunteers have worked in this program?**

Marielle Hampton, the project manager, has volunteered her time and labor for the project. Kyle Studer and John Farrell, farmers, have volunteered their time, land, and labor for this project.

6. **Please describe the results of your project.**
  - a. What was produced?

- b. Were any events held in conjunction with this project to promote it? If so please give a short description, attach photos or any media generated. If a crop was grown please answer the most appropriate questions below.

- 1) How much seed was produced?
- 2) How much food or product was produced?
- 3) How many plants were put into production for this project?

Approximately 400 plants are growing as of December 15, 2015, and at least 600 more are intended for planting in the next month, January of 2016. A conservative estimate of 2.5 lb fruits per plant places our potential production at 10,000 pounds or 5 tons of pumpkin.

- 4) What seed variety(s) were used for this project
- 5) What was the source(s) of the seed obtained?
- 6) Was the seed used in the project open pollinated or hybrid?
- 7) What farming methods were used?
  - a) Organic?
  - b) Other (please describe).

The following varieties were planted for the organic segment of the trial:

- Bungkang (F1) - Evergreen Seeds, USA
- Thai Muang (F1) - Evergreen Seeds, USA
- Sunday Sweet (F1) - Evergreen Seeds, USA
- PUM 90601 (F1) - LeFroy Valley, New Zealand
- Dark Jade (F1) - Lion Seeds, Thailand
- SQ4408 (F1) - Lion Seeds, Thailand
- SQ4412 (F1) - Lion Seeds, Thailand
- SQ405404 (F1) Lion Seeds, Thailand
- Bliss (F1) - East-West Seeds, Thailand
- Xmehen Ku'um (OP) - 200 acres, USA
- OOAK (OP) - LeFroy Valley, New Zealand

The following varieties will be planted for the conventional segment of the trial:

- Cheetah (F1) - LeFroy Valley, New Zealand
- #18766 (F1) - East-West Seeds, Thailand
- Orlena (F1) - East-West Seeds, Thailand
- Leela (F1) - East-West Seeds, Thailand
- Arjuna (F1) - East-West Seeds, Thailand
- Pujita (F1) - East-West Seeds, Thailand
- #331 (OP) - East-West Seeds, Thailand

**7. If your project was a community event, workshop or seed exchange please describe the events including;**

- a. Title and Date and location of event.

- b. Approximately how many people attended this event?
- c. Where other activities associated with this event?  
(Workshops/presentations/demonstrations etc.)

**8. How do you think this project affected or influenced your community?**

This project has involved many knowledgeable people in our agricultural network, from experts like Ted Radovich to backyard gardeners and friends. I've talked about this project to anyone who will listen and enlisted several local farmers for their help with everything from shipping complications to picking up pallets of lime and fertilizer for the land. So far, individuals have shown interest in the project and in sharing knowledge about their own experiences with pumpkin. Once the pumpkins are ready for harvest, there will be numerous opportunities to engage the community about pumpkins and their uses in different cultures around Hawaii, as well as starting conversations about backyard varieties.

**9. How has the Hawai'i Public Seed Initiative assisted the development of your program in this funding period? Suggestions for improvement of services?**

HPSI funding offset the costs of a relatively large trial for pumpkin which would otherwise be too risky to undertake at a small farm. Small farms would be understandably reluctant to invest in the complicated and costly process of obtaining seed varieties from international sources, especially given the lack of evidence showing the profitability of such exploratory endeavours. It would be great for HPSI to offer a seed-finder service so farmers and community members could seek specific varieties and receive guidance and assistance for the process. I would love to be involved in such a program. These mini-grants are an incredible resource however more funding could support much-needed varietal trials in vegetables and herbs. A number of crops would be worth pursuing, such as onions, asparagus, spinach, cilantro, and butternut squash.

**10. What were the greatest challenges you encountered in conducting this project?**

This project faced multiple challenges in both farming and administrative aspects. The primary challenge was the difficulty and cost of obtaining seed from other countries. Many companies refused to ship outside of their own country, and those who did required high fees (\$150 per shipment) for phytosanitary certificates and testing. Additionally, untreated seed was rarely available and often required extra time to process and fulfill a request for samples. Email correspondence and details related to payment, shipping, and permits also required extensive involvement.

On the farm, infrastructure combined with our remote location resulted in weeks of delays when the irrigation suppliers repeatedly provided the incorrect parts. Torrential rains for months also set back operations at the vegetable farm, preventing progress on new land.

Storage for the pumpkins, as well as marketing such great quantities, will be an additional and significant challenge for the farms.

**11. What do you think this project's greatest success was?**

The greatest accomplishment of the trial was the success in finding and connecting with experts in the realm of pumpkins as well as establishing contact with seed companies offering tropically adapted vegetable seed. The process of importing adapted seeds into Hawaii, especially in the case of organic farms, is very involved and takes months or even years to obtain desired or potential varieties.

**12. Will you continue this project in 2015 and if so what are the greatest needs for your program in this next year?**

This project could be expanded with more funding to accommodate an expanded conventional trial for seed only available in treated form, in order to evaluate the potential of such varieties for production in Hawaii. Equally important, a widescale collection of heirloom pumpkin seed in Hawaii could yield a valuable and culturally meaningful assortment of germplasm for trials and integration into future breeding projects in the state.

**13. Additional comments?**

**14. Please supply any photos, videos or newspaper stories that pertain to this project.** See next pages for photos.

Paaulo Forest Farm employee Leah Lekich plants pumpkin seeds for the organic segment of the trial beside a row of kale.



Pumpkin plants in the organic section of the trial, three weeks after direct sowing. Interplanted crops include kale and flowers.





**15. Your signature below indicates that HPSI & The Kohala Center have permission to use this information and any media for program purposes.**

**Please sign and date this form;**

Signature of Preparer: \_\_\_\_\_ Marielle L. Hampton \_\_\_\_\_

Date Submitted: \_\_\_\_\_ 12/15/15 \_\_\_\_\_

Thank you for your thoughtful answers, please address this report to;

Lyn Howe at The Kohala Center, [seedproject@kohalacenter.org](mailto:seedproject@kohalacenter.org).

Please keep a copy of this for your records. You may send this electronically or by mail. The Kohala Center, P.O. Box 437462, Kamuela, Hawai'i 96743;

The fax number is 808 885-6707.

**EDUCATION. ENVIROMENT. EMPOWERMENT.**

The Kohala Center is an equal opportunity employer and provider