A BILL FOR AN ACT

RELATING TO 'ULU.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:

- 1 SECTION 1. Hawaiian breadfruit ('ulu) has a long history in
- 2 Hawaii as an important and consistent food source. This
- 3 illustrious history includes a period during which breadfruit
- 4 played a significant role in providing the annual production of
- 5 millions of pounds of nutritious food that sustained the
- 6 population across the islands. Research has shown that Kona
- 7 alone produced fifty thousand to sixty thousand tons of
- 8 breadfruit per year in what is now the coffee belt. Breadfruit
- 9 is believed to have arrived in the Hawaiian islands
- 10 approximately seven hundred years ago. Since its introduction
- 11 to the climate and soil environment of Hawaii, breadfruit has
- 12 consistently contributed to and enhanced all aspects of Hawaii,
- 13 including traditional diet, culture, and lifestyle. Its
- 14 distinctive beauty and mythical origins, historical, cultural,
- 15 religious, and social significance, and the diversity of its
- 16 forms in traditional methods of food production have all
- 17 contributed to the legacy of breadfruit in the Hawaiian heritage



- 1 and culture. This significant presence and abundance
- 2 illustrates how breadfruit flourishes in modernity as the
- 3 contemporary manifestation of Hawaii Nei.
- 4 Several factors over the past decade have demonstrated that
- 5 breadfruit consumption and research are growing in relevance,
- 6 including the availability of large numbers of breadfruit trees,
- 7 the expansion of the gluten-free market, the confirmation of
- 8 value in breadfruit by-products, and the increasing market
- 9 movement toward locally grown food. For the first time in the
- 10 technological era, breadfruit has the potential to become a
- 11 major commercial crop, even while remaining closely connected to
- 12 traditional Hawaiian, Polynesian, Micronesian, and Melanesian
- 13 values.
- 14 Significant global resources exist for breadfruit in
- 15 Hawaii, including the largest conservation effort of breadfruit
- 16 agrobiodiversity by the National Tropical Botanical Gardens,
- 17 significant product research and development by the University
- 18 of Hawaii, Pacific-wide relationships and development efforts
- 19 through The Pacific Business Center Program at the Shidler
- 20 School of Business Administration, and cooperative development
- 21 structures and processing infrastructure as seen in the Hawaii

- 1 'Ulu Producers Cooperative. Dozens of other small breadfruit
- 2 producers around the State make diverse products such as chips,
- 3 hummus, pies, and baking mixes, and a growing number of
- 4 restaurants, distributors, and retail vendors are carrying
- 5 breadfruit products.
- 6 Despite the increase in breadfruit development in the
- 7 State, the growth of markets and infrastructure needed to
- 8 utilize the projected ten- to twenty-fold increase in fruit
- 9 production is in a precarious state. Substantial investments
- 10 into breadfruit research and development have occurred, but
- 11 additional research and market support are required to develop
- 12 sustainable breadfruit production methods, postharvest handling,
- 13 processing and refinement, manufacturing methods, scalable flour
- 14 mill design, packaging, market product development and testing,
- 15 distribution, and regional sustainable capacity for supply for
- 16 breadfruit products. Without additional support, the growth of
- 17 farm production could quickly undermine the development that has
- 18 been accomplished. In order to realize the vast potential of
- 19 breadfruit to serve as a major contributor to local food and
- 20 food security, support for the burgeoning industry is needed.

S.B. NO. S.D.

- 1 A conservative estimate of \$2,000,000 per year farm value,
- 2 e.g., two million pounds of fruit per year, is anticipated
- 3 within five years based on trees currently in the ground that
- 4 have yet to be productive, with additional economic development
- 5 coming from processing, marketing, and distribution of the
- 6 fruit. The global gluten-free market was valued at
- 7 \$14,940,000,000 in 2016 and is expected to grow at a compound
- 8 annual growth rate of 9.3 per cent from 2017 to 2025,
- 9 illustrating the potential market for breadfruit. Furthermore,
- 10 the profit projected from processing and marketing the
- 11 breadfruit flower as an organic insecticide is estimated to
- 12 exceed the million dollar mark. This profit may be due to the
- 13 far more potent nature of the breadfruit flower that contains a
- 14 natural tri-chemical compound combination that is such a
- 15 powerful repellant that the breadfruit outperforms its synthetic
- 16 competitors.
- 17 The economic development potential for the processing,
- 18 refinement, packaging, and exporting of breadfruit products for
- 19 the state and national market is substantial considering the
- 20 general employment and economic benefits to the State.

- 1 'Ulu is a long-lived, easy to grow, productive, nutritious,
- 2 starchy staple crop that can continue to contribute to
- 3 environmental, social, and economic health of the State for
- 4 generations. As everyone who has tasted extraordinary dishes
- 5 made from 'ulu knows, there is now high potential for 'ulu to
- 6 contribute to healthy diets and food security ideals based on
- 7 locally grown foods. In fact, the State has already begun to
- 8 realize some of the vast, potential benefits of 'ulu. The
- 9 department of education recently placed an order so that all
- 10 three hundred of Hawaii's public schools will have 'ulu for at
- 11 least one meal.
- 12 The purpose of this Act is to make an appropriation for the
- 13 research, development, marketing, and conservation of
- 14 breadfruit.
- 15 SECTION 2. There is appropriated out of the general
- 16 revenues of the State of Hawaii the sum of \$ or so much
- 17 thereof as may be necessary for fiscal year 2018-2019 for the
- 18 research, development, marketing, and conservation of breadfruit
- 19 as follows:
- 20 (1) Developing breadfruit businesses that have

S.B. NO. S.D. 1

1	(2) Performing research that is directly supporting
2	farmers and industry development; and
3	(3) Providing ancillary support such as tree production
4	marketing, and public education.
5	The sum appropriated shall be expended by the college of
6	tropical agriculture and human resources at the University of
7	Hawaii for the purposes of this Act.
8	SECTION 3. This Act shall take effect on July 31, 2150.

S.B. NO. S.D. 1

Report Title:

Agriculture; Breadfruit; 'Ulu; Appropriation; University of Hawaii College of Tropical Agriculture and Human Resources

Description:

Appropriates funds for the research, development, marketing, and conservation of 'ulu. (SB2069 HD1)

The summary description of legislation appearing on this page is for informational purposes only and is not legislation or evidence of legislative intent.