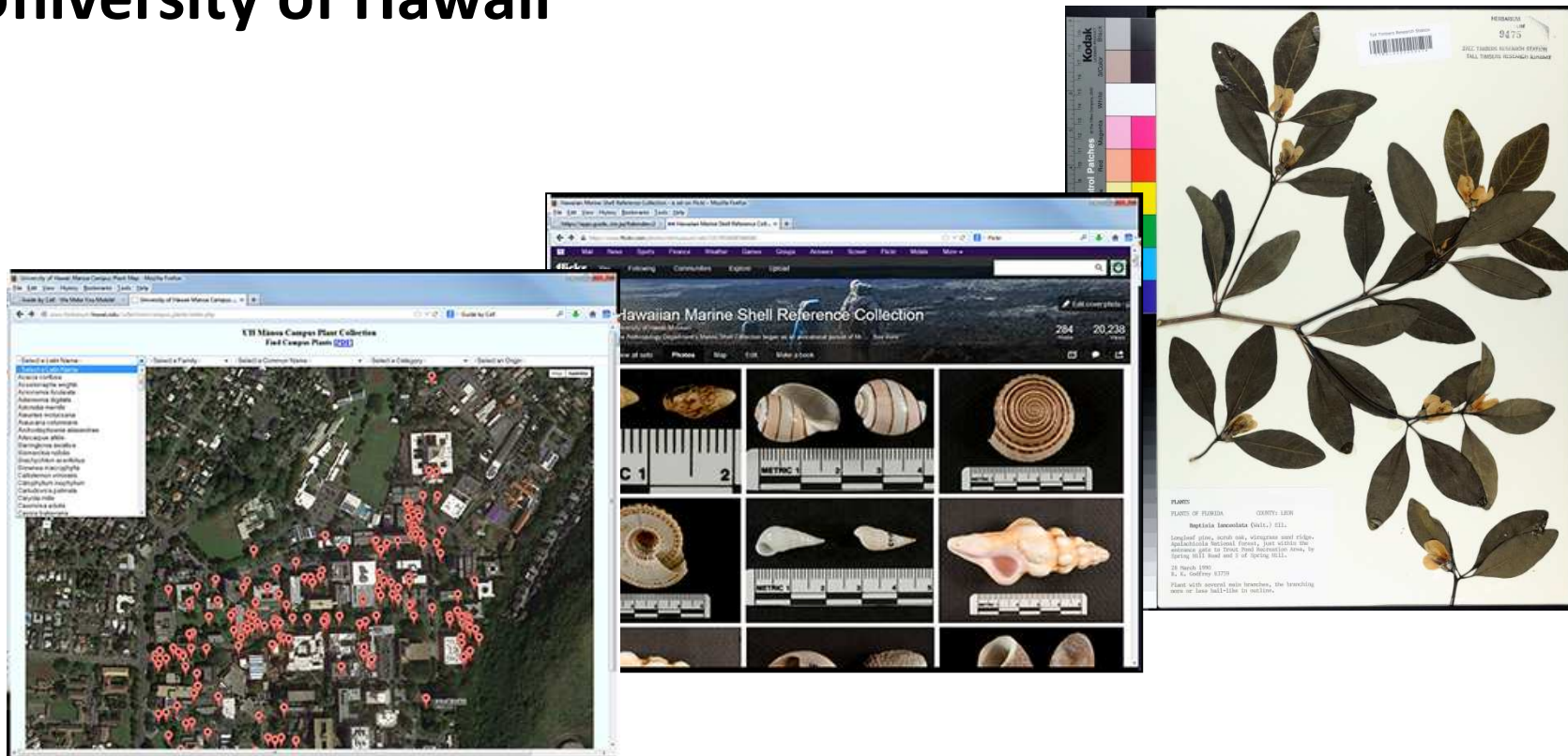


# Biodiversity Collections Digitization Initiatives University of Hawaii



Michael Thomas, Joseph F. Rock Herbarium  
University of Hawaii at Mānoa





117A.P.S. 8-3818(967-9176-11)(2-4-26-11-15A)20-1000 UNIVERSITY OF HAWAII MANOALU O.

# Living Collection - Campus Arboretum

- 1911-1921  
Campus plant diversity established and assisted by Joseph Rock collections
- Introduced trees primarily from SE Asia



### UH Mānoa Campus Plant Collection Find Campus Plants [\[PDF\]](#)

- Select a Latin Name -

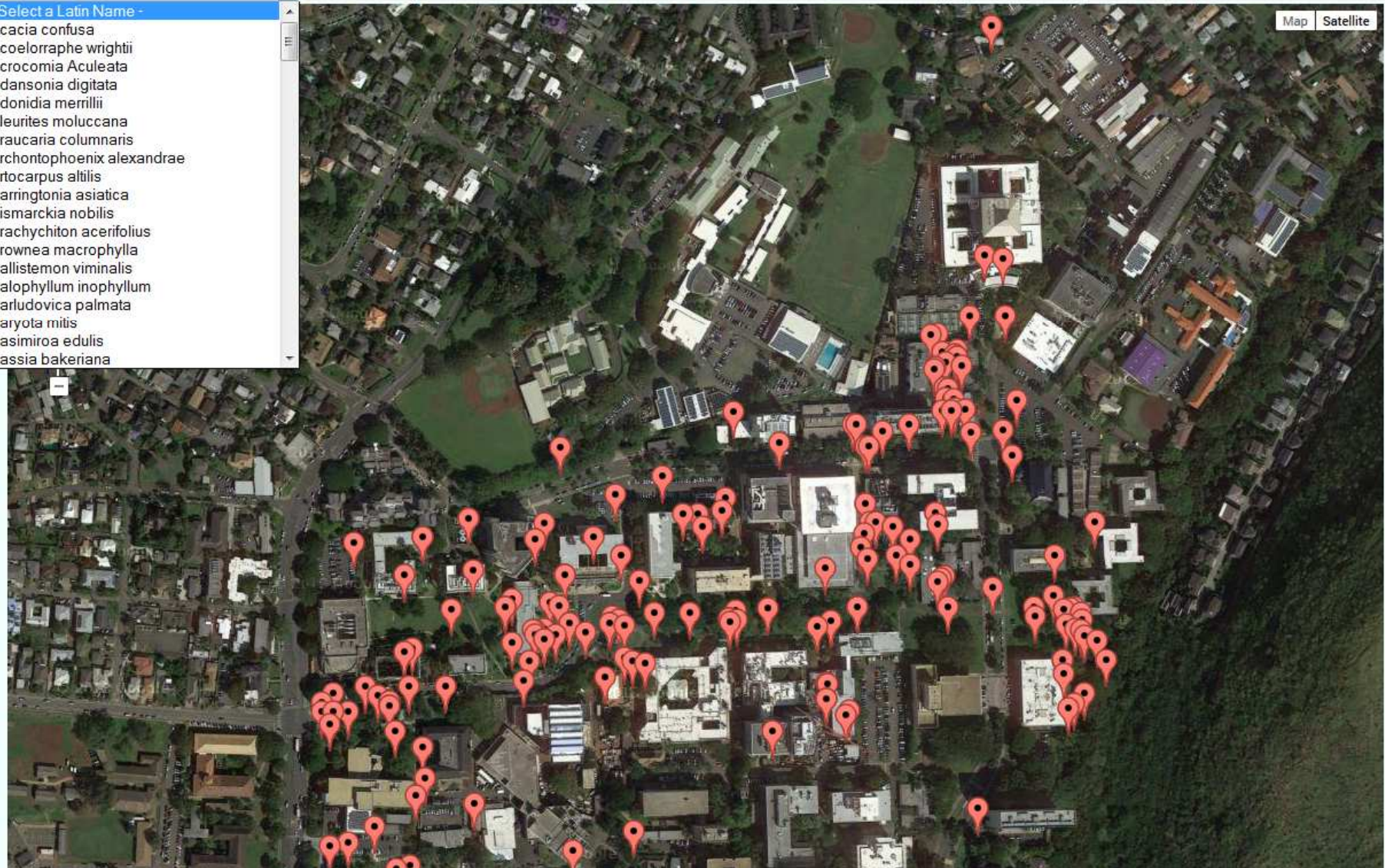
- Select a Family -

- Select a Common Name -

- Select a Category -

- Select an Origin -

- Select a Latin Name -
- Acacia confusa
- Acoelorrhaphe wrightii
- Acrocomia Aculeata
- Adansonia digitata
- Adonia merrillii
- Aleurites moluccana
- Araucaria columnaris
- Archontophoenix alexandrae
- Artocarpus altilis
- Barringtonia asiatica
- Bismarckia nobilis
- Brachychiton acerifolius
- Brownea macrophylla
- Callistemon viminalis
- Calophyllum inophyllum
- Carludovica palmata
- Caryota mitis
- Casimiroa edulis
- Cassia bakeriana



# Campus Biodiversity Heritage

- 1957-80s campus mapped
  - Rock, Harold St. John, Gerry Carr
- Geo-referenced in the 1990s
  - 3000 trees mapped
  - 700 species
- 100 species vouchered in 2007
- Leads to development of the Campus Heritage Project – 100% resurvey of plant inventory



The Getty Foundation

### UH Mānoa Campus Plant Collection Find Campus Plants [PDF](#)

- Select a Latin Name -   - Select a Family -   - Select a Common Name -   - Select a Category -   - Select an Origin -



**African Tulip Tree**  
*Spathodea campanulata* (BIGNONIACEAE)  
Introduced, Africa  
This tree from the forest of West Africa has erect clusters of large, bright orange, tulip-shaped flowers much of the year. It is known as baton de sorcier in Ghana; it is said the flowers are used for black magic. The first African Tulip Tree was brought to Hawaii about mid-19th century. It is now found in tropical countries worldwide and has become invasive in Hawaii. A gold form is found on Dole Street near Holmes Hall.

#### Specimens



### MENU Site Builder

To see a site preview, [click here](#)

Splash Screen: <http://bycell.co/qkf>  
Main Menu URL: <http://bycell.co/bdxx>  
To copy the url, click in this box.

Navigation

Click Add Category or Add Page to create your site pages and content. You can drag pages to change the order in which they appear.  
Click "+" to expand the Category, "edit" to rename the category and "add" to add items to the category.

Build your Pages  
Splash Screen  
Header/Footer  
Templates  
Color Settings  
Site Settings

[Add Category](#) [Add Page](#)

- +About UH Mānoa [Rename](#)
- +Amphibians and Reptiles [Rename](#)
- +Artworks (Landscape) [Rename](#)
- +Birds [Rename](#)
- +Canoe Plants Tour [Rename](#)
- +Fish [Rename](#)
- +Historic Buildings & Sites [Rename](#)
- +Historic Costume Museum [Rename](#)
- +Insects [Rename](#)
- +Lei Plants [Rename](#)
- +Marine Seashells [Rename](#)
- +Mammals [Rename](#)



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Add Category

Add Page

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**+** About UH Mānoa [Rename](#)

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**+** Birds [Rename](#)

**+** Canoe Plants Tour [Rename](#)

**+** Fish [Rename](#)

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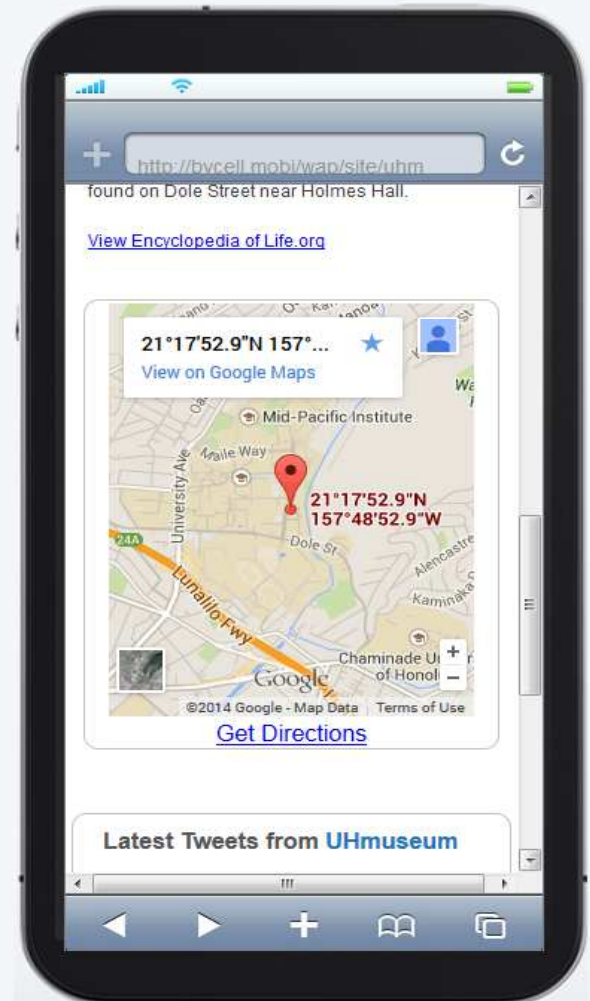
**+** Historic Costume Museum [Rename](#)

**+** Insects [Rename](#)

**+** Lei Plants [Rename](#)


**+** Marine Seashells [Rename](#)

**+** Mammals [Rename](#)






https://bycell.mobi/uhm?phone=ipad



UNIVERSITY  
of HAWAII\*  
SYSTEM

[Home](#) >> [Plants](#) >> African Tulip Tree

Bignoniaceae



**African Tulip Tree**  
[Spathodea campanulata](#) (BIGNONIACEAE)  
Introduced, Africa

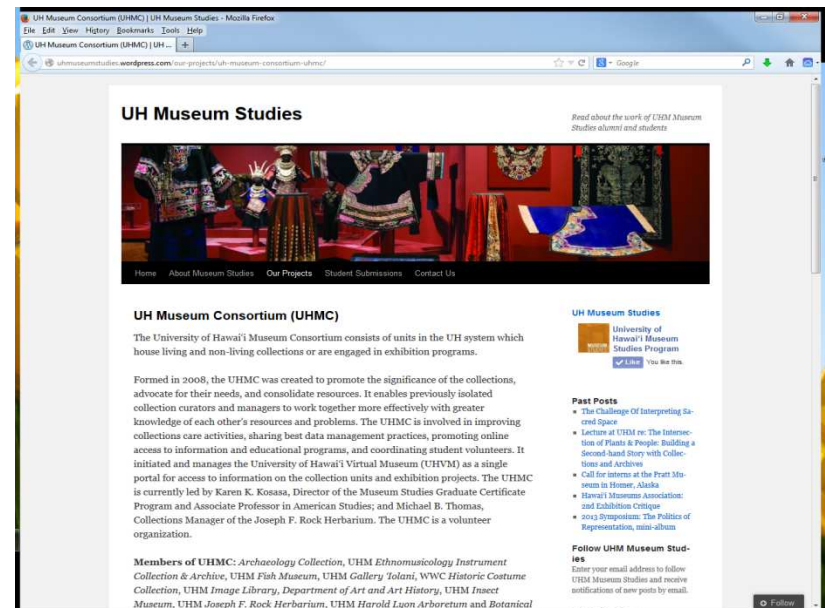
This tree from the forest of West Africa has erect clusters of large, bright orange, tulip-shaped flowers much of the year. It is known as baton de sorcier in Ghana; it is said the flowers are used for black magic. The first African Tulip Tree was brought to Hawaii about mid-19th century. It is now found in tropical countries worldwide and has become invasive in Hawaii. A gold form is found on Dole Street near Holmes Hall.

[View Encyclopedia of Life.org](#)

# Connecting Collections

- 2008 Partnership with Museum Studies Program and development of the UH Museum Consortium to support art galleries, living and non-living collections.
- Focused on collection inventories and digitization of archived photos and video (VHS)

- Campus Plants
- Fish Museum, Biology Dept.
- Herbarium, Botany Dept.
- Insect Museum, Entomology Dept.
- Marine Mollusks, Archeology Program
- Land Snails, Biology Dept.
- Waikiki Aquarium
- Lyon Arboretum
- UH Art Galleries





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- Authors
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Appearing quarterly since 1947, Pacific Science is an international, multidisciplinary journal reporting research on the biological and physical sciences of the Pacific basin. It focuses on biogeography, ecology, evolution, geology and volcanology, oceanography, palaeontology, and systematics. In addition to publishing original research, the journal features review articles providing a synthesis of current knowledge.

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# Michael Thomas

University of Hawaii Museum

14,453  
Photos

February 2008  
Member Since

Photostream **Sets** Favorites Creations



Mangarevan Expedition (1934)  
405 photos



Drosophilidae of Hawaii  
146 photos



Dacine Fruit Flies of...  
1,216 photos



Curators Choice Gallery...  
59 photos



Harold St. John Collection  
16 photos



Vietnam (LBM)  
34 photos



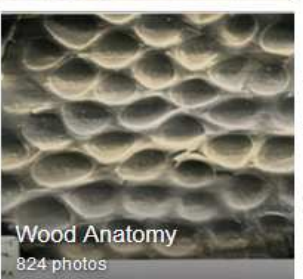
Weeds of Hawaii  
227 photos



Indigenous Flowers of the...  
40 photos



Haleakala National Park...  
191 photos



Wood Anatomy  
824 photos



Hawaiian Mosses  
194 photos



Hawaiian Ferns and Fern Allies  
61 photos



Mauna Loa: Sea to Summit...  
75 photos



Hawaiian Marine Shell...  
284 photos



Northwestern Hawaiian Islands  
300 photos



Molokai, Hawaii  
307 photos



Oahu, Hawaii  
911 photos



Malaysia (LBA)  
78 photos

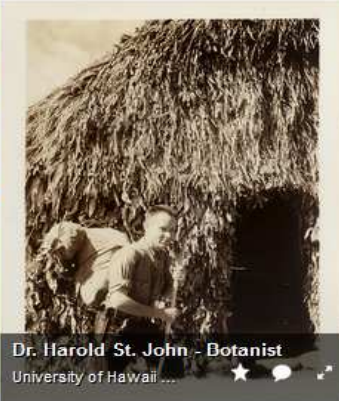
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University of Hawaii Museum

Photo by Dr. Harold St. John taken during a 5 day back packing trip to a high plateau... See more

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**Indigenous Flowers of the Hawaiian Islands, Isabella Sinclair (1885)**  
 University of Hawaii Museum  
 Isabella McHutcheson moved to Hawaii after her marriage in 1863 to her cousin Francis Sinclair... See more

40 Photos 2,448 Views

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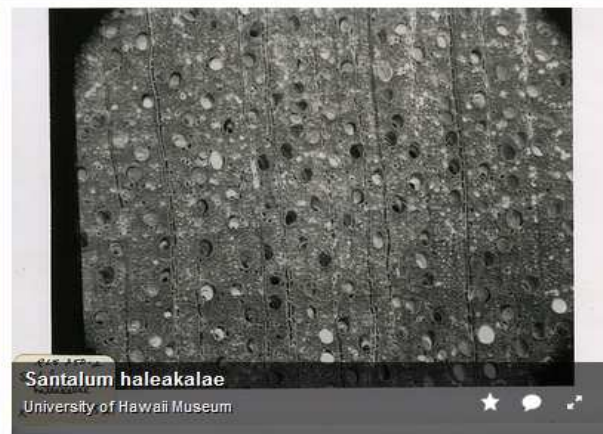


# Wood Anatomy

University of Hawaii Museum  
Credit: Dr. Charles H. Lamoureux, Botany Department, University of Hawaii at Manoa.

824 Photos 1,179 Views

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Michael Thomas

*Aplustrum amplustre*

Synonym: *Hydatina amplustre*.

Common Name: Pink Bubble, Swollen Bubble.

Adult Size: 22 mm.

Location: *H. amplustre* is a familiar species throughout the Indo-West Pacific (Kay, 1979).

Habitat: These opisthobranchs are common in shallow water, found in muddy, rubble-strewn areas along the shoreline where they burrow into the substrate (Kay, 1979).

References: Kay, 1979: 419-420; Morris, 1966: 255; Severns, 2000: 212.

2,802 views May 20, 2010



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Add a comment

Information icon, Photo icon, Location icon

Hawaiian Marine Shell Reference Collection (set)



Hawaii's Wildlife (group)



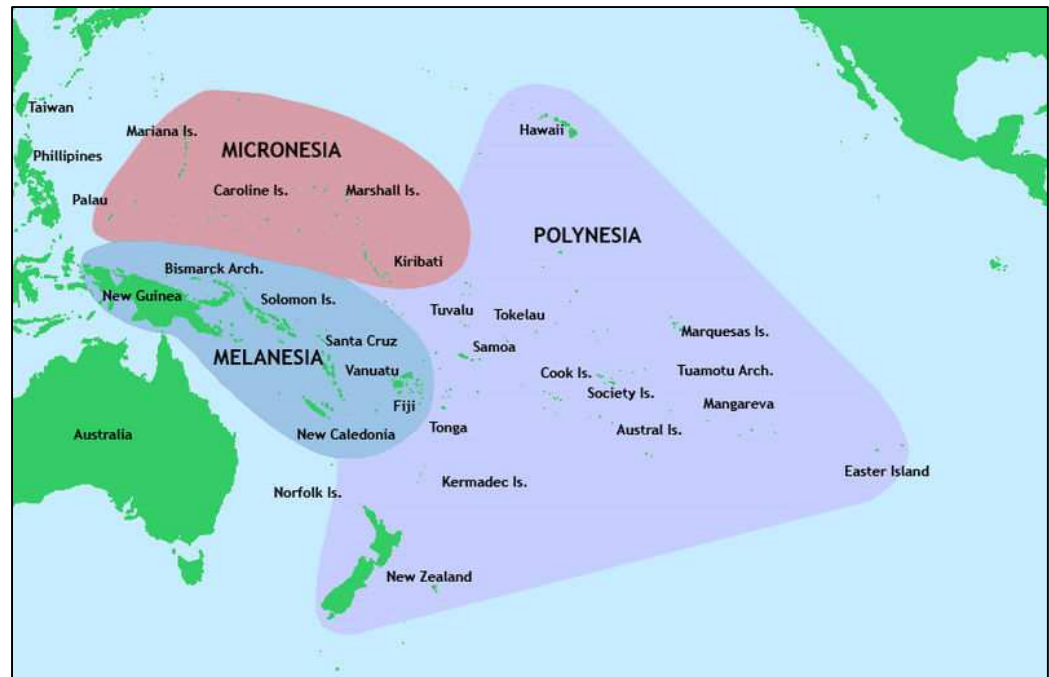
Logout & Feedback

https://www.flickr.com/photos/uhmuseum/6888504633/in/set-72157616090546606/



# Consortia Building and Partners

- - Consortium of Pacific Herbaria
  - \$1.4 million (BRC), 3 yr. NSF funded
  - Regional partners (6 countries, National Parks)
  - NTBG
  - Bishop Museum
- > 600,000 specimens
- Geolocated
- Imaged



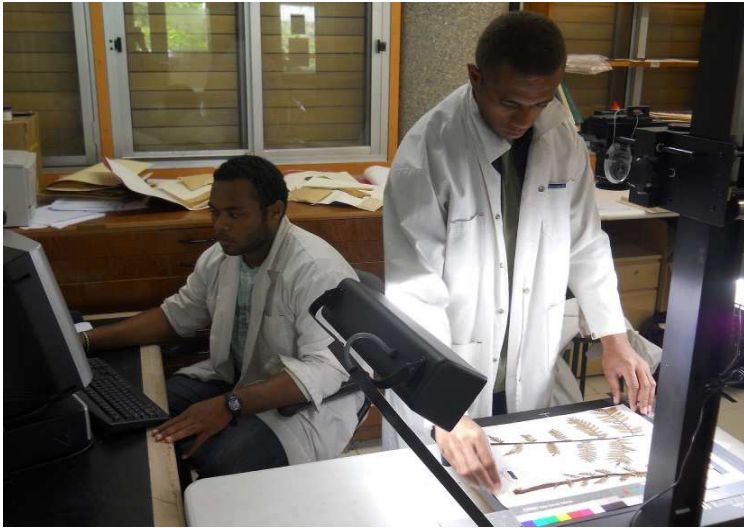


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- Hawaiian Islands Flora
- Species Lists
- Identification Keys
- Dynamic Checklist
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- Image Library
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The Consortium of Pacific Herbaria (CPH) supports the enhancement of research cyberinfrastructure within Hawai'i and the Pacific basin for implementing shared specimen data hosting of plant specimens. The CPH network is a regional node of the US Virtual Herbarium.



# Regional Partners



*The Belau National Museum and the University of Hawaii's Department of Botany work together for the Regional Herbaria Project. (See story on page 2)*



# Consortium of NORTH AMERICAN LICHEN HERBARIA



[Home](#) >> [Collection Search Page](#) >> [Joseph F. Rock Herbarium - University of Hawaii Details](#)

## Joseph F. Rock Herbarium - University of Hawaii (HAW)

Founded in 1908, the Joseph F. Rock Herbarium (HAW) serves the official university repository for botanical plant specimens. It is the result of decades of plant exploration by some of the leading researchers in the Pacific basin and collections continue to expand. Today, the herbarium is part of the University Museum Consortium, and comprises approximately 50,000 dried preserved specimens. There are currently more than 6500 lichens databased and imaged with an additional 5000 specimens remaining undetermined.

**Contact:** Michael Thomas, Collections Manager (mbthomas[at]hawaii.edu)

**Home Page:** <http://www.herbarium.hawaii.edu/>

**Management:** Data snapshot of central database

**Last Update:** 11 March 2014

**Global Unique Identifier:** e4aaabfc-9900-42c7-be83-415b8a9e75e0

**Usage Rights:** CC BY-NC-SA (Attribution-NonCommercial-ShareAlike)

**Rights Holder:** University of Hawaii

### Collection Statistics

- 4334 specimens
- 0% georeferenced
- 71 families
- 166 genera
- 920 species

### Extra Statistics

- Show Family Distribution
- Show Geographic Distribution

**Main Menu**

- Search Collections
- Exsiccata
- Image Library
- About CNALH
- Data Usage Policy
- Flora Projects**
  - Arizona
  - California
  - Colorado
  - Florida
  - Massachusetts
  - North Carolina
  - Wisconsin
  - Arctic Flora
  - Southern Subpolar Region
  - USNP Project
  - Dynamic Checklist
  - Dynamic Key
- Other Resources**
  - Links
  - Bryophyte Portal (CNABH)
  - Symbiota Help Page
- Log In
- New Account
- Sitemap

Macroalgal Herbarium Portal University of Hawaii Collection Profiles - Mozilla Firefox

www.macroalgae.org/portal/collections/misc/collprofiles.php?collid=18

# Macroalgal Herbarium Portal

Home >> [Collection Search Page](#) >> [University of Hawaii Details](#)

**Macroalgal Herbarium Portal Homepage**

- Search Collections
- Flora Projects
- Dynamic Checklist
- Dynamic Key
- Image Library
- Log In
- New Account
- Sitemap

**University of Hawaii (HAW)**

**Contact:** ()

**Management:** Data snapshot of central database

**Last Update:**

**Global Unique Identifier:** 59179d43-8080-4eac-aaf9-9e504d5e09

**Usage Rights:** CC BY-NC-SA (Attribution-NonCommercial-ShareAlike)

**Collection Statistics**

- 0 specimens
- 0% georeferenced
- 0 families
- 0 genera
- 0 species

**Extra Statistics**

- Show Family Distribution
- Show Geographic Distribution



ILLINOIS NATURAL HISTORY SURVEY  
PRAIRIE RESEARCH INSTITUTE

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Digitized Collections Community About Support

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4,469  
Slide Boxes

2,021  
Vial Trays

0  
Drawers

14,433  
Total Images

190  
Specimens Annotated

Ramburii  
Lake Rd. 27, about 15 miles  
Leesburg, Lake  
County, Florida  
June 10, 1964

PERC 0,032,465



Lechn  
Cape  
Sep 2  
M.J. 26



### Upcoming Events

- MAR 12 ESA NCB 2014 annual meeting
- MAR 12 North Central Branch ESA

More events >

### Recently Uploaded

- iDigBio E&O Workshop in Publications, Jan 21, 2014
- Coenagrionidae 367 in Slide Box, Dec 17, 2013
- Coenagrionidae 366 in Slide Box, Dec 17, 2013
- Coenagrionidae 365 in Slide Box, Dec 17, 2013
- Coenagrionidae 364 in Slide Box, Dec 17, 2013
- Coenagrionidae 362 in Slide Box, Dec 17, 2013

### Get Started with Digitization



How to Digitize Vials

How to Digitize Slides

# Additional regional support

- Melanesia
  - Vanuatu
  - Solomon Islands
  - New Caledonia
  - Papua New Guinea
- Asia
  - Taiwan
  - Philippines
  - Bhutan
- Connectivity with Australia/New Zealand Herbaria Networks
  - Additional 2.5 million records

**Biocultural Collections Network**  
 Documenting the Cultural Uses of Biologically-based Museum Specimens



<b>Name</b>	Tapa beater
<b>Indigenous Name</b>	`Ike
<b>Catalog Number</b>	haw.1.1.2013
<b>Institution</b>	HAW
<b>Collection</b>	Ethnobiology
<b>Description</b>	Club shaped; flat on both ends; rounded handle; 4-sided square beater with carved vertical striations. The grooved sides would be used to soften the "hiapo" (raw paper mulberry bark) fibers in the initial stages of the beating. The smooth side would be used to flatten and join pieces together by felting. 38cm x 4.5cm.



**Related Species**  
[Mangifera indica](#)  
[Artocarpus altilis](#)

<b>Collector</b>	Michael B. Thomas
<b>Collector Number</b>	MBT1
<b>Collection Date</b>	2011-12-29
<b>Region</b>	Pacific
<b>Country</b>	Tonga
<b>State</b>	
<b>Island</b>	Tongatapu
<b>County</b>	Tongatapu Group
<b>City</b>	Nuku'alofa

<b>Kingdom</b>	Plantae
<b>Family</b>	<a href="#">Casuarinaceae</a>
<b>Taxon</b>	<a href="#">Casuarina equisetifolia</a>
<b>Indigenous Name</b>	toa
<b>Common Name</b>	ironwood
<b>Use(s)</b>	tools
<b>Plant part(s)</b>	wood



**Connected Objects**



War-Club



Bowl

# Acknowledgments

## UH Botany Department

Tom Ranker  
Cliff Morden  
Cliff Smith  
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Travis Kekai Young  
Alma Herrera-Mendoza  
Casey Jones  
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April Cascasan (Guam)  
Brytney Miller (Guam)  
and many curatorial assistants

## Museum Studies

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Melissa Rand  
Kimberly Jackson

## Herbaria Consortium Partners

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Dave Lorence and Tim Flynn, NTBG  
Waikato Aholelei, Tonga – Ministry of Agric./Forestry  
Frank Camacho and Tom Schils, Univ. of Guam  
Fa`ainu Latu, National University of Samoa  
Josie Hoh, Waimea Valley  
Pia Morei and Ann Kitalong, Belau National Museum  
Marika Tuiwawa and Alivereti Naikatini, USP, Fiji  
Tracy Laqua, Hawaii Volcanoes National Park, HI  
Liz Gordon, Haleakala National Park, HI  
Michael Gawel, War in the Pacific National Park, Guam  
Steve Evans, Pohakuloa Training Area  
Kalapapa National Historic Park  
Ministry of Environment, Niue  
and many assistants & volunteers...

