

Appendix 1.

Hawaiian & Scientific Names for 3 Sawtooth (*Gloiocladia*) Species

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No: Memo - Hawaiian & Scientific Names for 3 Sawtooth (*Gloiocladia*) Species
Laua'enuhokai
G. iyoensis
- Laukuamo'o**
Lineage #2
- 'Ama'uma'ukai**
Lineage #3

About the Limu Names

In collaboration with the Papahānaumokuākea Marine National Monument (PMNM) Cultural Working Group's (CWG) Nomenclature Hui, the School of Life Sciences at the University of Hawai'i at Mānoa (UHM), and other members representing various organizations including the National Oceanic and Atmospheric Administration (NOAA), we offer the following names for three *Gloiocladia* species:

Hawaiian Name: **Laua'enuhokai**
Scientific Name: *Gloiocladia iyoensis*

Hawaiian Name: **Laukuamo'o**
Scientific Name: *Gloiocladia laukuamoo*

Lineage #3 Tentative Hawaiian Name: **'Ama'uma'ukai**

Lineage #1 was first introduced to the Nomenclature Hui as a potentially new species to be named and described. During the naming period, it was concluded that species #1 is most likely *Gloiocladia iyoensis*, a type of limu also found in Australia. The Nomenclature Hui still felt it appropriate to honor the limu and its discovery here in Hawai'i with a Hawaiian name—**Laua'enuhokai**. The fern in Hawai'i most commonly known today as lau'e (*Microsorium scolopendria*) is Indigenous to Australia. Since the fern and the limu are found both in Hawai'i and Australia, the use of the term lau'e offers another connection between the terrestrial and aquatic species over space.

Laua'e (*Microsorium scolopendria*)
PC: Maresa Pryor

Laua'enuhokai (*Gloiocladia iyoensis*)
PC: Algae Base

An image provoked by the limu (lineage #2) is the kuamo'o—the kua (back) of the mourning mo'o (gecko, *Lepidodactylus lugubris*); the backbone; the spine. The sawtooth-like shape of the limu can be seen in the varied patterns that appear on the backs of some common mo'o in Hawai'i. Similarly, the limu also looks like the backbone or spine—perhaps that of a human—representing a connection between Kānaka (Hawaiians and all human beings) to limu and other plants as the backbone of human life. This connection represents the Hawaiian worldview of kinship and kinship-making to space and species via name. Lau placed before kuamo'o offers two meanings. Lau, commonly known as *leaf* or *blade of a plant*, can also refer to *multiplicity*. The blades of the **Laukuamo'o** look like many backbones connected to each other.

Mo'o (*Lepidodactylus lugubris*)
PC: Aaron H Griffing *et al.* 2018

Kuamo'o (back of the mo'o, backbone, spine)

Laukuamo'o (*Gloiocladia laukuamoo*)
PC: Kazumi Allsopp

Morphology of the lineage #3 cannot be recognized due to a lack of material, however, the general morphology of the genus *Gloiocladia* was used as a reference to tentatively (unofficially) establish a Hawaiian name for the lineage.

Members of the Nomenclature Hui were immediately struck by the appearance of these limu (seaweed), and were reminded of certain related images. 'Ama'uma'u is the term for the young leaves of the 'ama'u (*Sadleria cyatheoides*) fern. Like the limu, young 'ama'uma'u leaves are stunningly red. The individual blades of each fern leaf have similar sawtooth-like characteristics that also resemble the limu. Similarly, the shape of the laua'e fern can also be seen in the *Gloiocladia iyoensis*. The Hawaiian names given to these two species of limu also reflect Hawaiian nomenclatural tradition that draws a relationship between an aquatic and terrestrial species through a single name. As the 'ama'uma'u remains on land, the addition of "kai" (ocean) after the phrase indicates its counterpart in the ocean. Nohokai (ocean dweller) added after laua'e has the same effect.

'Ama'uma'u (*Sadleria cyatheoides*)
PC: keokeaperennials.com

N/A

'Ama'uma'ukai (*Gloiocladia amaumaukai*)

Lastly, each name possesses an element that connects them to each other. **Laua'enuhokai** and **Laukuamo'o** both begin with the term "lau;" and **'Ama'uma'ukai** and **Laua'enuhokai** both end with the term "kai."

About the Nomenclature Hui

The goal of the Papahānaumokuākea Marine National Monument Cultural Working Group's (CWG) Nomenclature Sub-Committee (also referred to as the Nomenclature Hui) is to continue to push the agenda regarding reclaiming our spaces, building, strengthening, and continuing relationships with elements/species within these spaces. Sharing a perspective from other traditions, we understand that names and places and relationships to those elements/species evolved over time. This is an attempt to define and articulate a collective present-day relationship as a placeholder for future generations. This naming process is an evolving one. We encourage the inclusion of all senses—not only the thought and the academic process—but coming from our experiences in seeing, smelling, hearing, touching, tasting, and feeling (na'au), reaffirming a collective sense of diversity.

About the Naming Process

The Nomenclature Hui follows a multi-disciplinary and multi-sensory naming process that includes building and maintaining pilina (relationship) to species, to researchers, and to place; examination of traditional knowledge within primary textual resources and oral repositories; and incorporation of new scientific knowledge and technological advances. This collaboration of knowledge adds to our collective understanding and relationship, especially when connecting to these species through the Kānaka (Native Hawaiian) sensibilities of sight, touch, smell, taste, hearing, and na'au (feeling). For an in-depth review of the Nomenclature Hui's naming process, see Pihana & Lorenzo-Elarco, "HĀNAU KA PALIHOA, LELE! The story, genealogy, and process of the Papahānaumokuākea Marine National Monument Native Hawaiian Cultural Working Group Nomenclature Subcommittee" in *We Are Ocean People: Indigenous Leadership in Marine Conservation*, Parks Stewardship Forum, vol. 38, Issue 2, 2022.

He Leo Mahalo

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