

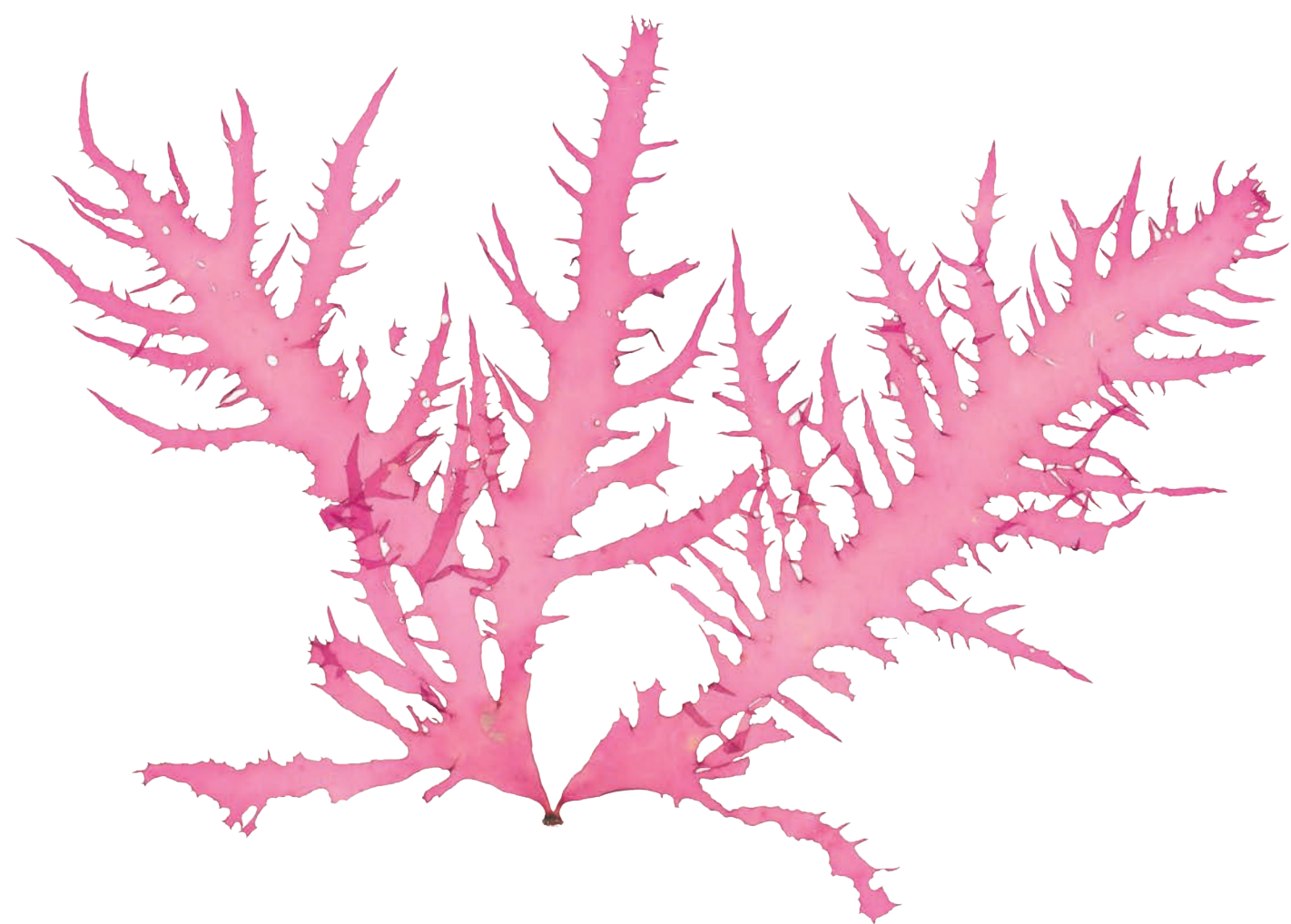
# Limu in Papahānaumokuākea



Photo: Kanoë Morishige, AlgaeBase

## Limu Kala

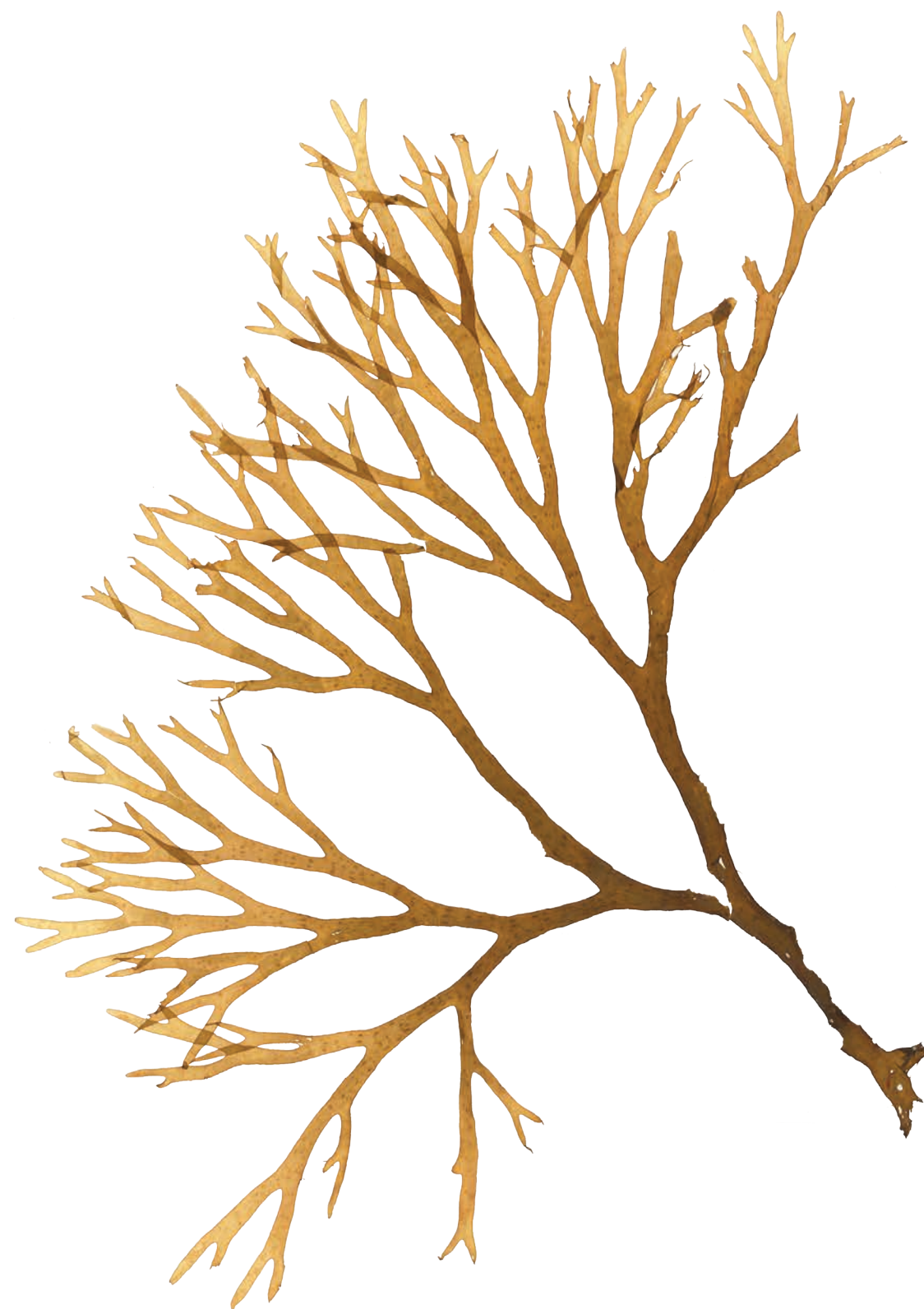
Limu Kala, *Sargassum echinocarpum*, is traditionally used for medicinal and ritualistic purposes. "Kala" means to free and to forgive. The customary practice of ho'oponopono, or reconciliation, can include the use of limu kala along with prayer to seek forgiveness of wrongdoing to cleanse the mind and heart. Limu kala is also used to drive away sickness. It can be found growing in tide pools and reef flats.



## Limu Lepe-o-Hina

*Deep Sea*

The limu is a species of *Halymenia*, known in Hawaiian as limu lepe-o-Hina, or "shawl of Hina," a Hawaiian goddess associated with limu, corals and the moon. This species, *Halymenia cromwelli*, was named by Dr. Isabella Abbott after the oceanographer Townsend Cromwell (namesake of the NOAA ship *Townsend Cromwell*, which dredged the original type specimens from 247 feet in 1990). The specimen was collected at 264 feet at Pioneer Bank in Papahānaumokuākea.



## Limu Alani

*Deep Sea*

The limu is possibly a new species in the *Dictyota* genus of brown algae. Therefore known as limu alani, this bitter and sometimes citrus tasting limu is used as medicine. There are currently eight known species of *Dictyota* in Hawai'i, only one of which is endemic to Hawai'i. At least 70 new species of limu have been discovered from the deeper reefs of Papahānaumokuākea.

## »» Caring for Limu

Limu not only helps to build Hawaii's reefs, but also its sandy beaches, and provides food for fish, turtles, and much more.



Remember limu is alive, avoid stepping or standing on them.



When harvesting limu leave the bottom portion to help limu regrow.



Fish responsibly. Removing too many natural grazers can result in ecosystem changes in limu.



Don't send chemicals into our waterways.



Pick up your trash and don't forget to reduce, reuse, recycle, refuse and respect the 'āina.



Get involved with your local environmental organizations. Join a beach clean-up or an invasive algae clean-up.