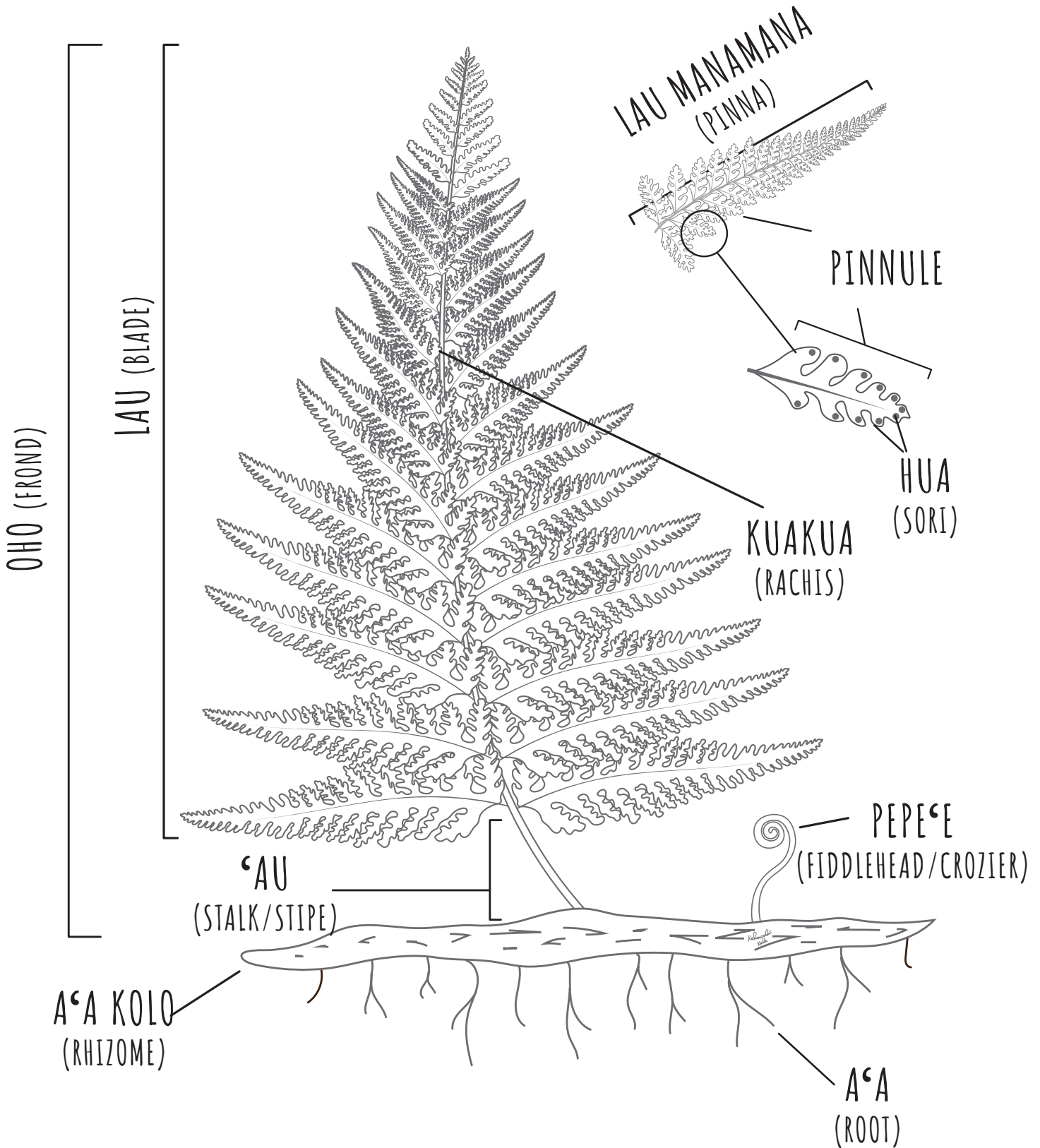


# NĀ MĀHELE O KA PALAPALAI

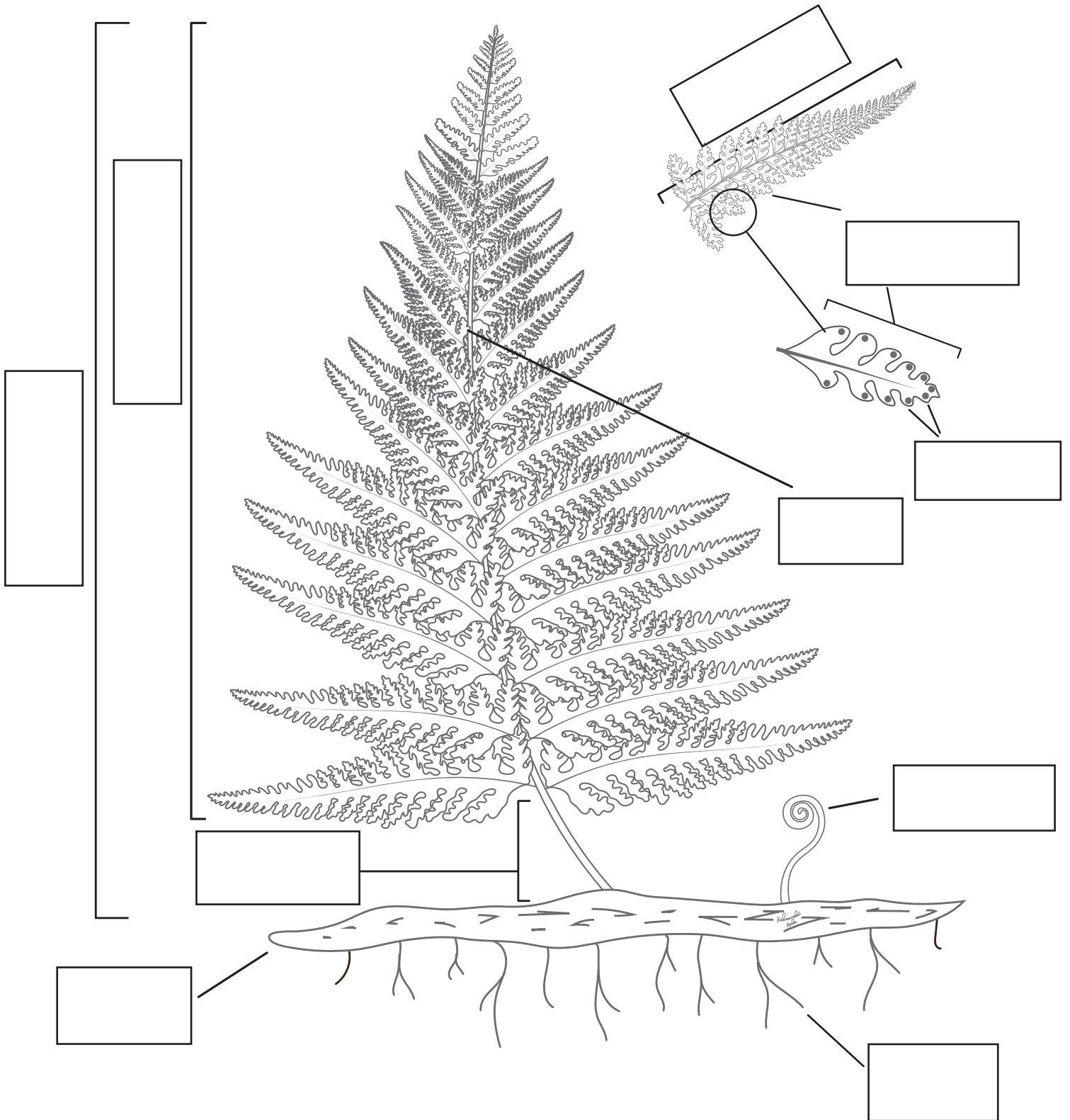
## PARTS OF THE FERN



PALAPALAI (*MICROLEPIA STRIGOSA*)

# NĀ MĀHELE O KA PALAPALAI

## PARTS OF THE FERN



PALAPALAI (*MICROLEPIA STRIGOSA*)

# NĀ MĀHELE O KA PALAPALAI

## Parts of the Palapalai Fern

1. Use the terms below to fill in the boxes on the palapalai fern diagram.
2. Color in the palapalai!

### TERMS AND DEFINITIONS

**LAU (BLADE):** The expanded leafy part of the frond above the stipe.

**PEPE'E (FIDDLEHEAD):** A young fern frond produced from the rhizome. These are characteristically tightly coiled for protection and may be further protected with hairs or scales. Also known as crozier, they uncoil slowly as they mature.

**OHO (FROND):** The leaf of a fern, which includes the blade and stipe. Fern fronds differ from leaves of flowering plants in that they have both a photosynthetic and reproductive function. Each fern plant can have from one to many fronds and depending on the species can range in size from less than an inch to 40 feet tall!

**LAU MANAMANA (PINNA):** [Plural = Pinnae] A leaflet or primary division of a frond. Pinnae may be arranged alternately or in opposite pairs along the midrib. If the frond is once divided, then it is 'pinnate'. More commonly fronds are divided into secondary pinnae and are 'bipinnate', or into tertiary pinnae and are 'tripinnate'.

**PINNULE:** A subleaflet or division of the pinna. The secondary division of twice-divided blades.

**KUAKUA (RACHIS):** The central midrib of a fern blade. It is a continuation of the stipe. Often the rachis differs from the stipe, both in colour and covering of hairs and scales.

**A'A KOLO (RHIZOME):** The stem of the fern plant. Rhizomes may creep along or under the ground or even up a tree (a creeping rhizome), it may grow into a short or tall trunk (a vertical rhizome), or it may be a solid mass that gives rise to a tuft of fronds (an erect rhizome). Very often, the rhizome grows underground. The rhizome produces roots and new fronds.

**A'A (ROOT):** The part of a plant that typically lies below the surface of the soil, which transports water and nutrients to the rest of the plant through numerous branches and fibers.

**HUA(SORI):** [Singular = Sorus] A cluster of sporangia, which are the spore-bearing structure of ferns.

**STIPE (A'A):** The petiole (stem) of a fern frond. The stalk of a frond joining the rhizome to the blade.

Definitions adapted from:

1. [https://www.sciencelearn.org.nz/image\\_maps/22-fern-structure](https://www.sciencelearn.org.nz/image_maps/22-fern-structure)
2. Palmer, D.D. Hawai'i's Fern and Fern Allies. Honolulu: University of Hawai'i Press. 2003.