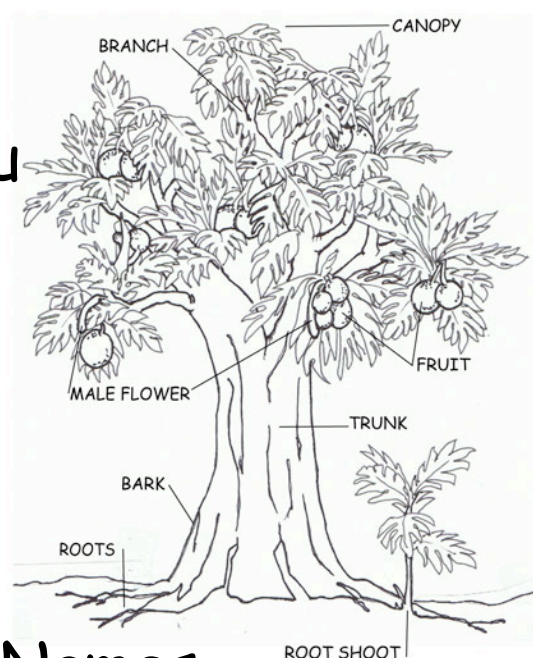


BREADFRUIT ('ULU)

CURRICULUM RESOURCES

- 'Ulu & You - Lesson Plan and Benchmarks
- Terms for the parts of a breadfruit tree
- Coloring sheets:
 - Legend of Kū and the 'Ulu
 - Tree
 - Leaf
 - Whole fruit
 - Fruit cross section
- Pacific Map of Breadfruit Names



Illustrations by Linda S. Philips

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‘Ulu and You

Grade Level - 3rd

HCPS III Benchmark WL.IE.3.4.1 - Describe mutual contributions of products and practices of the culture being studied and own culture

Sample Performance Assessment (SPA) - The student: Gives examples of shared products, practices, and beliefs (e.g., food, art, clothing, music, stories, customs, sayings, celebrations, religions, gestures) between the culture being studied and his/her own culture by creating lists, drawings, or making an oral presentation. Examples may be given in native language or language being studied.

Rubric

Advanced	Proficient	Partially Proficient	Novice
Describe mutual contributions of products and practices of the culture being studied and own culture, in great detail.	Describe mutual contributions of products and practices of the culture being studied and own culture, in detail.	Describe mutual contributions of products and practices of the culture being studied and own culture, in some detail.	Describe mutual contributions of products and practices of the culture being studied and own culture, in minimal detail.

Sample Lesson Plan:

Day #1 – Write the daily vocabulary terms and their definitions on the board or on “word wall”.

mo’olelo = story, legend, history

‘ulu = breadfruit

kumu = tree

Kū = ancient Hawaiian god of war

Read the mo’olele about ‘ulu to students.

Mo’olelo ‘ulu

The god Kū decided to live secretly among mortals as a farmer; married and had children. He and his family lived happily until a time of terrible famine. Kū could not bear watching his children suffer, and told his wife that he could deliver them from starvation, but he would have to leave them. She reluctantly agreed, and Kū said farewell and descended into the ground. His family waited there day and night, watering the ground with their tears, until suddenly a small green shoot appeared where Kū had stood. The shoot quickly grew into a tall and leafy green tree that was laden with heavy fruit that Kū’s family and neighbors gratefully ate, joyfully saved from starvation.



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Individual - Hand out coloring sheet titled “Breadfruit Legend”. As students are looking over the coloring sheet with you, ask them questions like, “Why is there an outline of a human diving down the trunk into the ground?” to prompt their memory recall of the mo’olelo you just shared with them. Now, have students write the mo’olelo from memory (two or three sentences) in the upper left hand corner or on the back side of the coloring sheet. Have students color the handout.

Pair Share - Instruct students to discuss with their neighbor dishes made with ‘ulu that they have eaten at home. Other products? How is it prepared? If neither student has eaten ‘ulu at home, instruct them to brainstorm ways they think that it might be prepared. Have them write their thoughts down on the handout.

Class Share – As a class, go around the room and have students share their uses of breadfruit.

Day #2 – Prepare a copy of the handout titled, “Breadfruit = ‘ulu” so that there are blank lines for each part of the kumu. Provide a copy for each student. Guide students through the proper labeling of the kumu. Have students color the handout.

Day #2 - #3 - Do the same as above with the remaining handouts: leaf, fruit, and cross section of fruit.

Grade Level - 4th

Benchmark SS.4.3.1 - Explain the origins and culture of early Hawaiians

Sample Performance Assessment (SPA) - The student: Describes features of early Hawaiian life, such as rules and laws, gods/religion, roles of women/classes of people, sports and games, food, kapu system, land ownership taxes, and/or education.

Rubric

Advanced	Proficient	Partially Proficient	Novice
Explain, with clear and precise detail, the origins and culture of early Hawaiians.	Explain, with detail, the origins and culture of early Hawaiians.	Explain, with minimal detail, the origins and culture of early Hawaiians.	Ineffectively explain the origins and culture of early Hawaiians.

Benchmark SS.4.3.10 - Describe how significant people, including those of legend (including Papa and Wakea, Pele, and Pa'ao) affected pre-contact Hawaii.

Sample Performance Assessment (SPA) - The student: Explains the significance of different people's contributions in the early history of Hawaii.

Rubric

Advanced	Proficient	Partially Proficient	Novice
Describe, with clear and precise detail, how significant people, including those of legend, affected pre-contact Hawaii.	Describe, with detail, how significant people, including those of legend, affected pre-contact Hawaii.	Describe, with minimal detail, how significant people, including those of legend, affected pre-contact Hawaii.	Ineffectively describe how significant people, including those of legend, affected pre-contact Hawaii.

Benchmark SS.4.6.1 - Explain how language, traditional lore, music, dance, artifacts, traditional practices, beliefs, values, and behaviors are elements of culture and contribute to the preservation of culture

Sample Performance Assessment (SPA) - The student: Describes how specific components of Hawaiian culture assure continuity of the culture and embody cultural values.

Rubric

Advanced	Proficient	Partially Proficient	Novice
Analyze how language, traditional lore, music, dance, artifacts, traditional practices, beliefs, values, and behaviors are elements of culture and contribute to the preservation of culture.	Explain how language, traditional lore, music, dance, artifacts, traditional practices, beliefs, values, and behaviors are elements of culture and contribute to the preservation of culture.	Explain that language, traditional lore, music, dance, artifacts, traditional practices, beliefs, values, and behaviors are elements of culture and contribute to the preservation of culture.	Recognize language, traditional lore, music, dance, artifacts, traditional practices, beliefs, values, and/or behaviors as elements of culture.

Grade Level: Botany

HCPS III Benchmark SC.B.4.1 - Describe how plant products (e.g., drugs, timber, spices, herbs, fossil fuels, fibers) impact human life.

Sample Performance Assessment (SPA) - The student: Explains how timber has impacted human life (e.g., history, economics).

Rubric

Advanced	Proficient	Partially Proficient	Novice
Compare the impact of various plant products on human life.	Describe how plant products impact human life.	Give examples of plant products that impact human life.	Explain that plant products impact human life.

Grade Level – 12th grade Social Studies/Geography using “Pacific Map” of breadfruit names.

Benchmark SS.12G.2.2 - Describe why places and regions are important to individual human identity and as symbols for unifying or fragmenting society (e.g., physical and symbolic characteristics of places, effects of climate on culture).

Sample Performance Assessment (SPA) - The student: Explains the connections between a student-selected culture and its traditional location.

Rubric

Advanced	Proficient	Partially Proficient	Novice
Describe, with clear and precise detail, why places and regions are important to individual human identity and as symbols for unifying or fragmenting society.	Describe, with detail, why places and regions are important to individual human identity and as symbols for unifying or fragmenting society.	Describe, with minimal detail, why places and regions are important to individual human identity and as symbols for unifying or fragmenting society.	Ineffectively describe why places and regions are important to individual human identity and as symbols for unifying or fragmenting society.

Benchmark SS.12G.4.2 - Assess the impact of human migration on physical and human systems (e.g., effects on ecosystems, resource use, and economic development; effects on population characteristics such as religion and average age)

Sample Performance Assessment (SPA) - The student: Chooses a specific instance of human migration to study and compares statistics about the area before and after.

Rubric

Advanced	Proficient	Partially Proficient	Novice
Assess the impact of human migration on physical and human systems, drawing relevant and strongly supported conclusions.	Assess the impact of human migration on physical and human systems, drawing relevant conclusions.	Assess the impact of human migration on physical and human systems, drawing partially relevant conclusions.	Ineffectively assess the impact of human migration on physical and human systems.

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Contributed by:

Meghan Ornellas Goodale

Education Coordinator at the National Tropical Botanical Garden

BREADFRUIT TERMS

FRUIT - `ULU. HUA is a generic term for fruit

SKIN (PEEL) - `ILI

CORE - PĪKOI, `ĪKOI, or IHO

PULP (FLESH) - I`O

SEED - `ANO`ANO

MALE FLOWER - ULE `ULU or PŌULE

LEAF - LAU

TOP OF LEAF - ALO LAU

BOTTOM OF LEAF - KUA LAU

LEAF EDGE - KA`E LAU

LEAF INDENTATIONS - MAHAE LAU

MIDRIB - A`A LAU

FINE VEINS - A`A`A

TREE - KUMU

CANOPY - ĒULU

TRUNK - KUMU

BRANCH - LĀLĀ

BARK - PĀPA`A

ROOTS - A`A

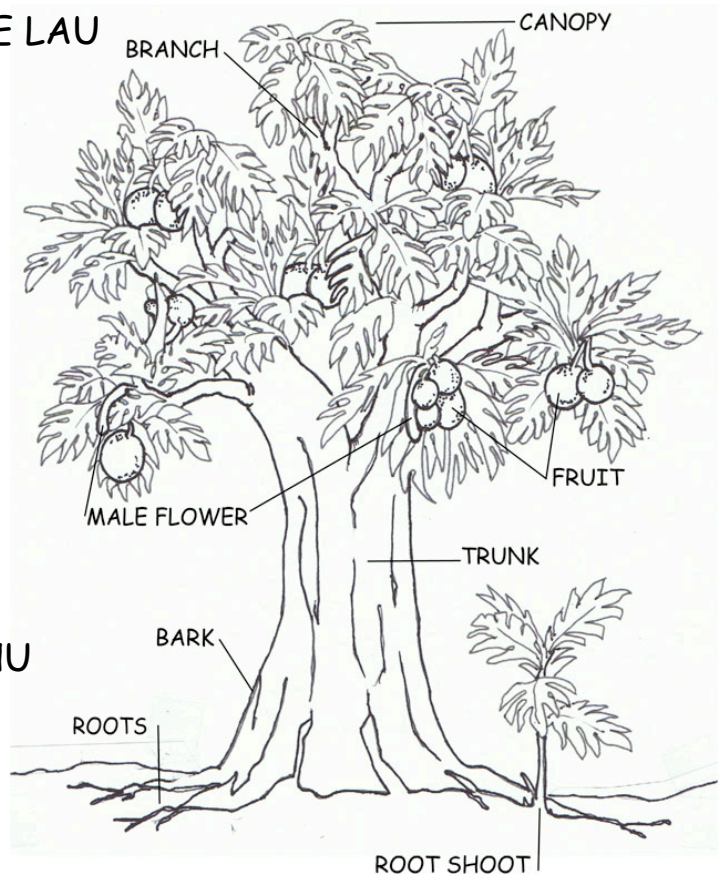
ROOT SHOOT - KAWOWO, HEHU

SAP - KOHU from TREE
KĒPAU from FRUIT

SAP (LATEX) = KĒPAU

STEM = KŪ`AU

SKIN (PEEL) = `ILI



Translation by Dr. Kawika Winter

Illustrations by Linda S. Philips



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BREADFRUIT LEGEND

KŪ and the 'ULU



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BREADFRUIT LEGEND

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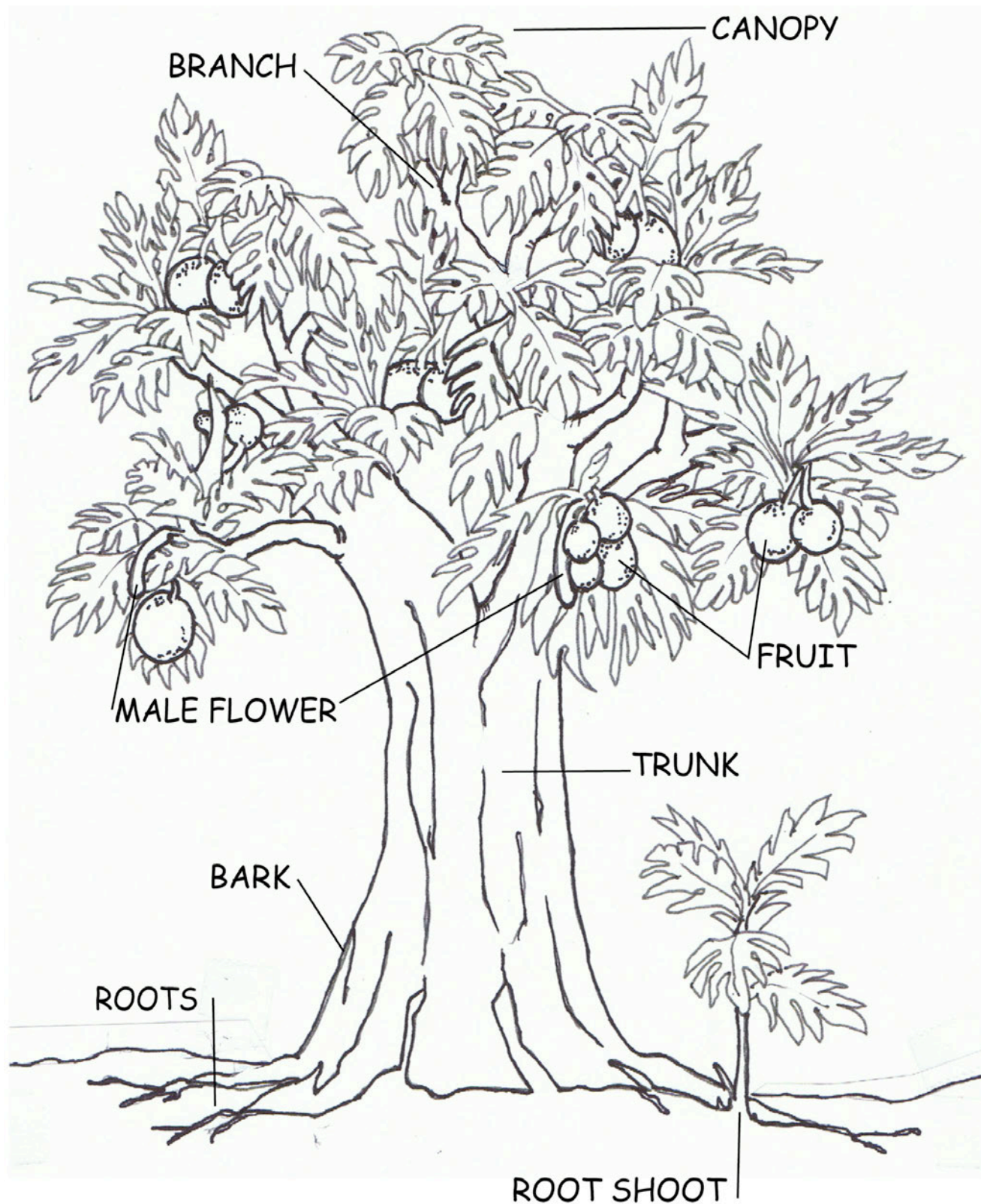
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The god KŪ decided to live secretly among mortals as a farmer; he married and had children. He and his family lived happily until a time of terrible famine. KŪ could not bear watching his children suffer, and told his wife that he could deliver them from starvation, but he would have to leave them. She reluctantly agreed, and KŪ said farewell and descended into the ground. His family waited there day and night, watering the ground with their tears, until suddenly a small green shoot appeared where KŪ had stood. The shoot quickly grew into a tall and leafy green that was laden with heavy fruit that KŪ's family and neighbors gratefully ate, joyfully saved from starvation.



BREADFRUIT

TREE



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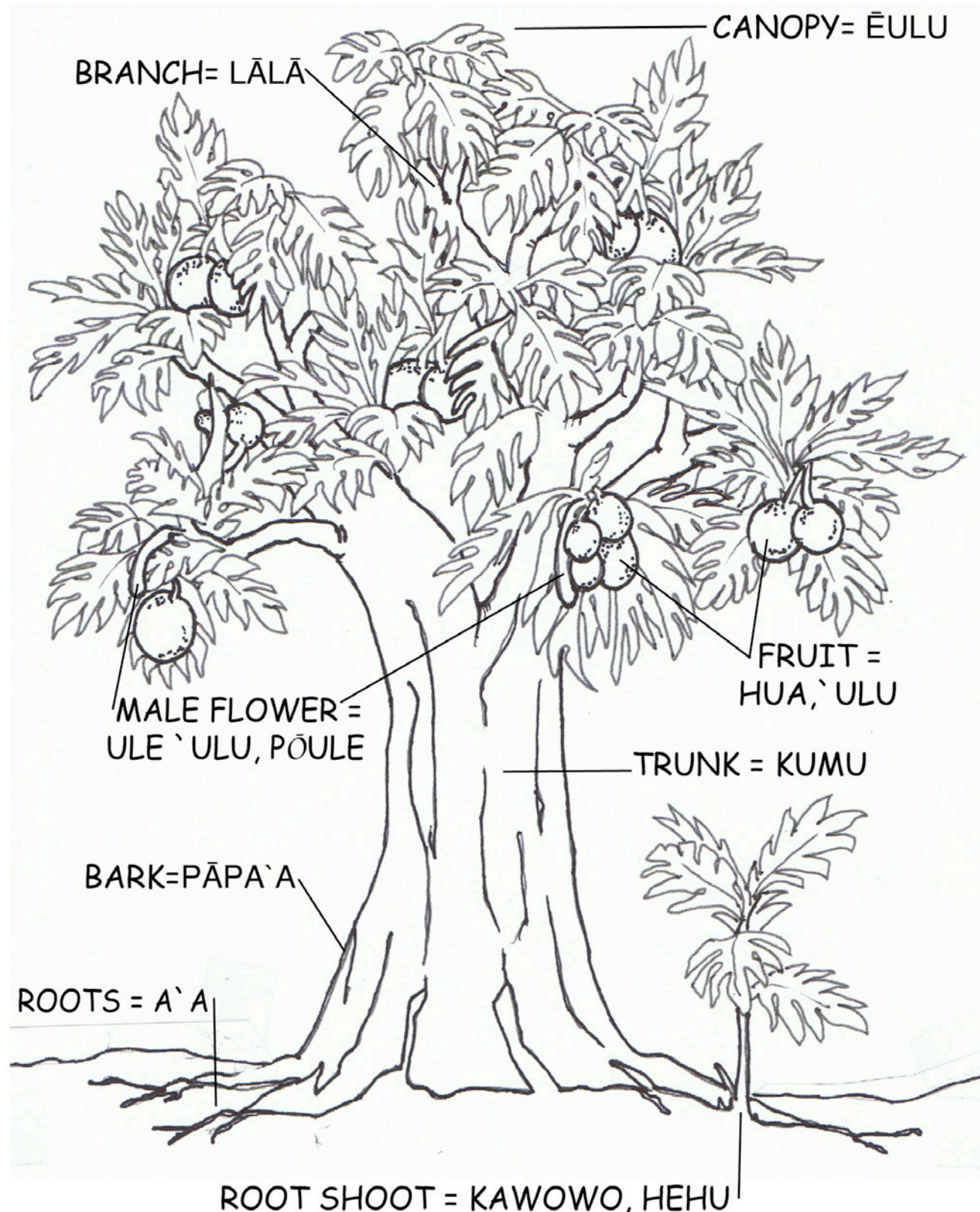
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BREADFRUIT = 'ULU

TREE = KUMU



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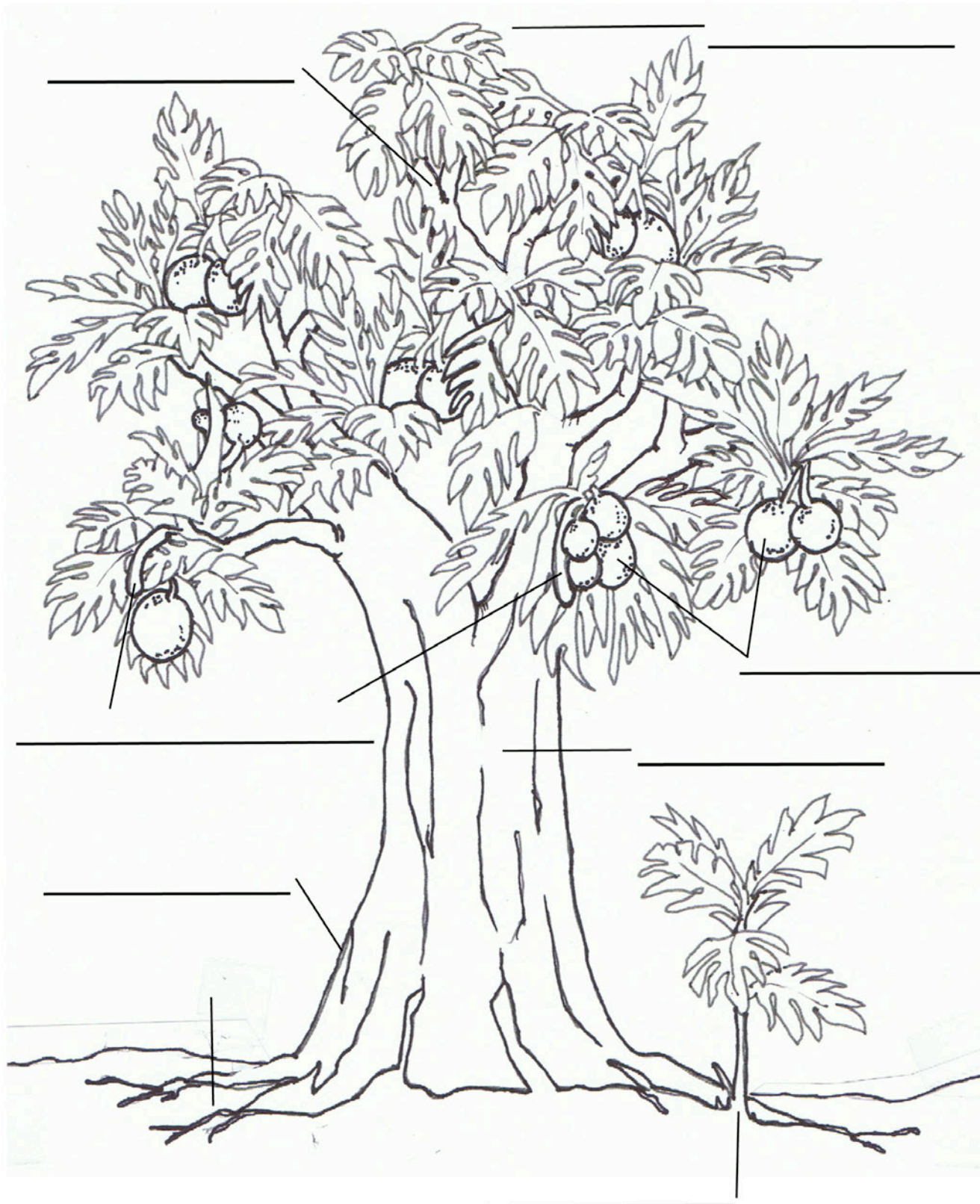
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BREADFRUIT

TREE



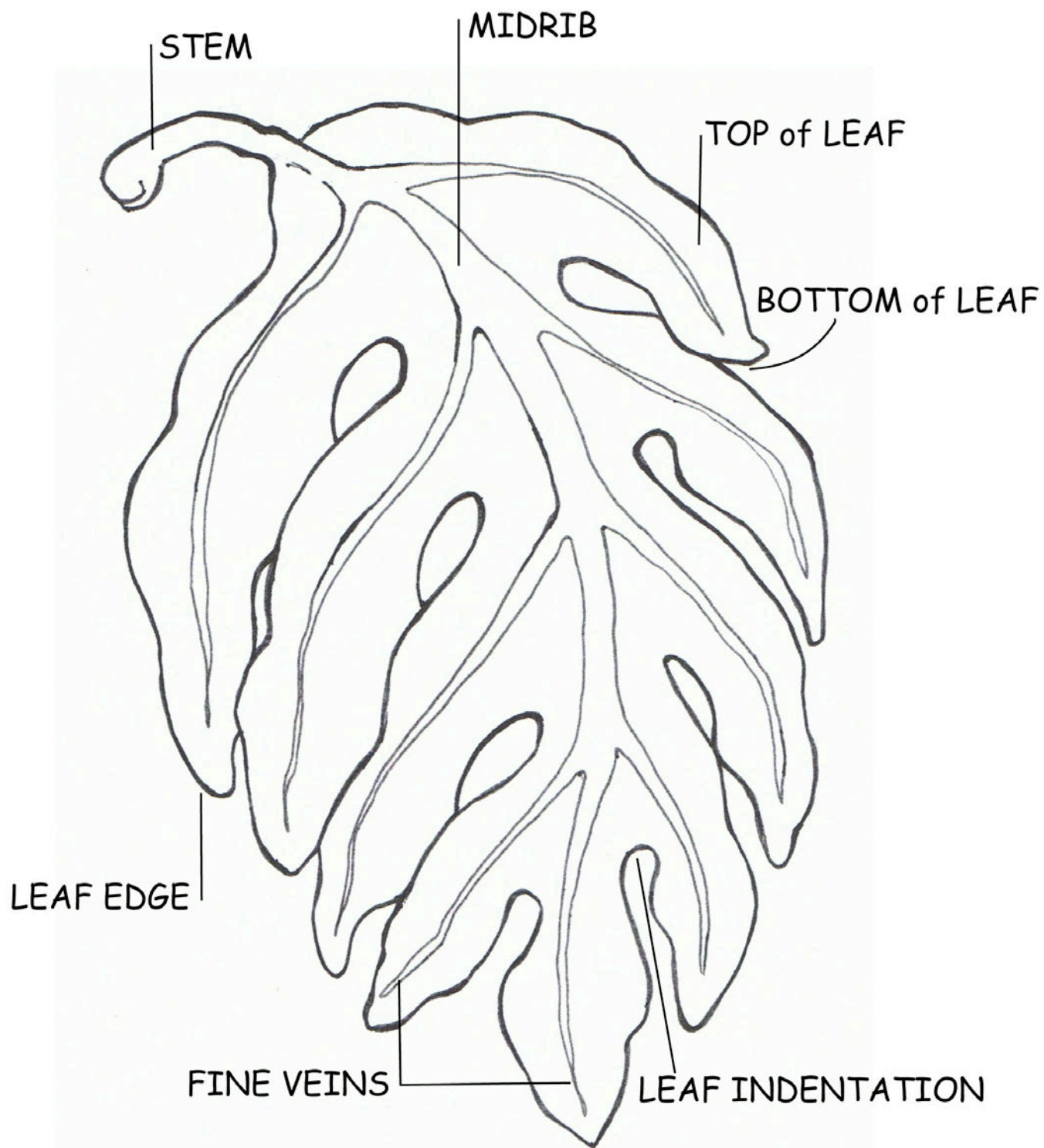
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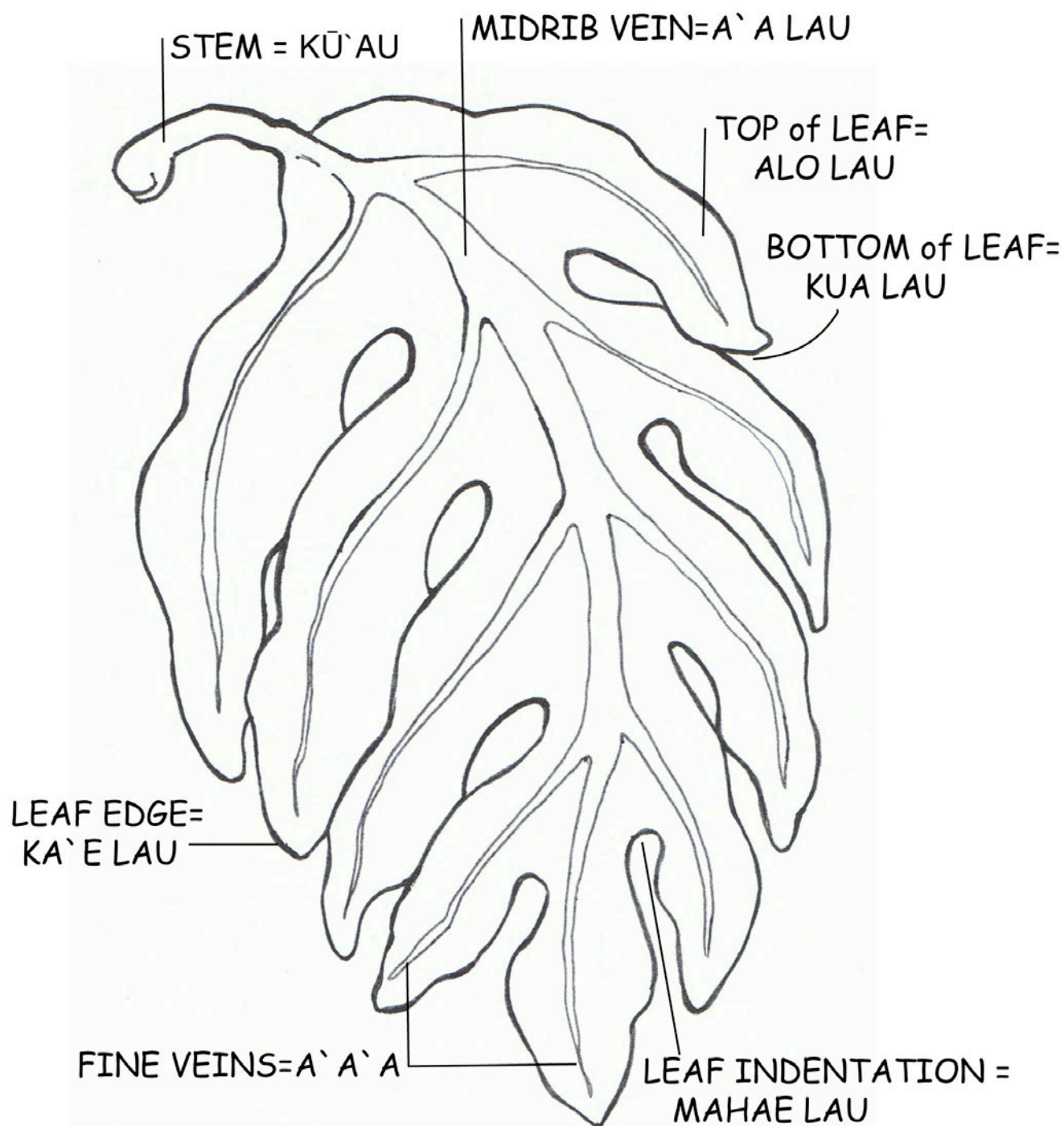


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BREADFRUIT = 'ULU

LEAF = LAU



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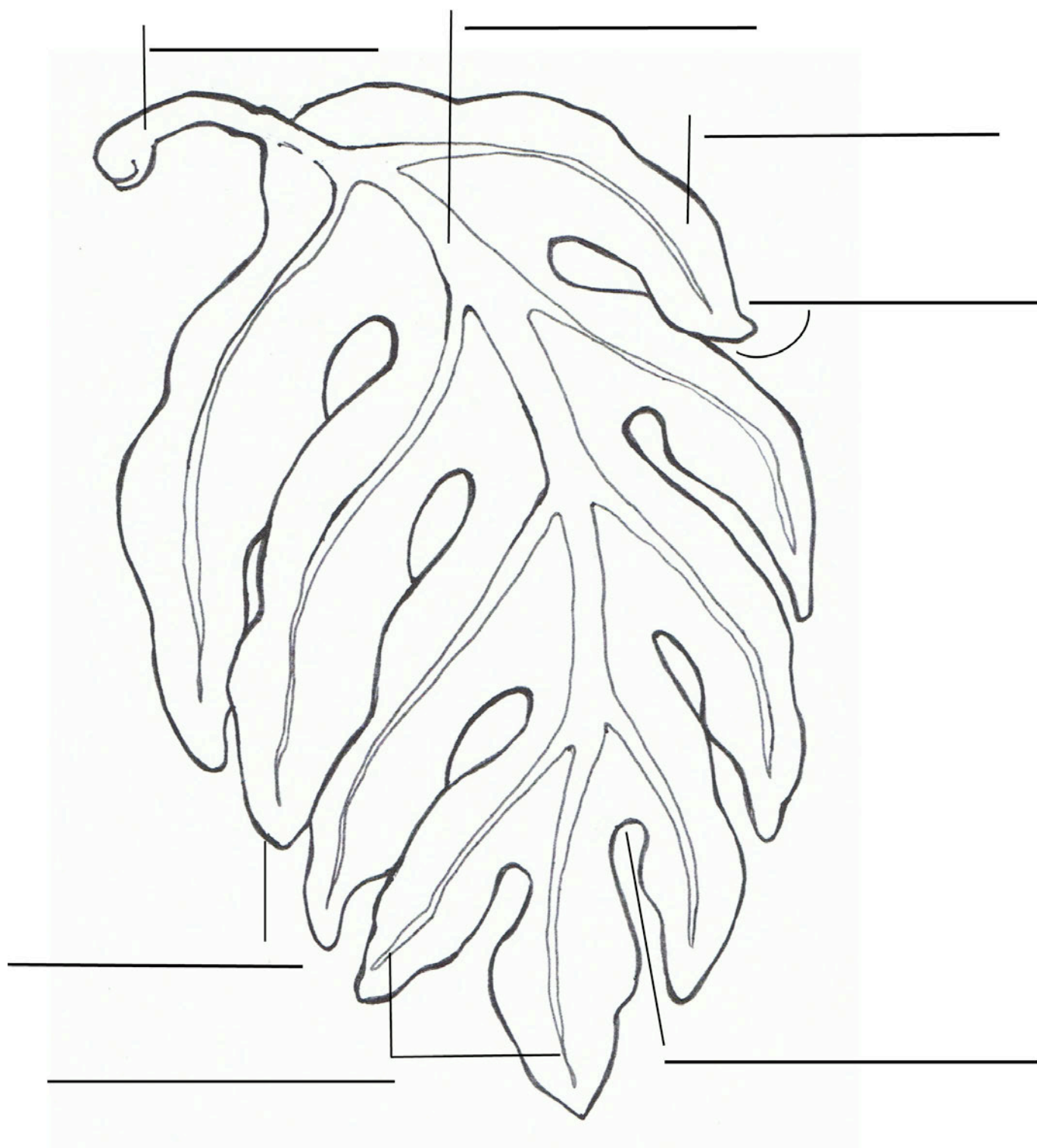
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LEAF



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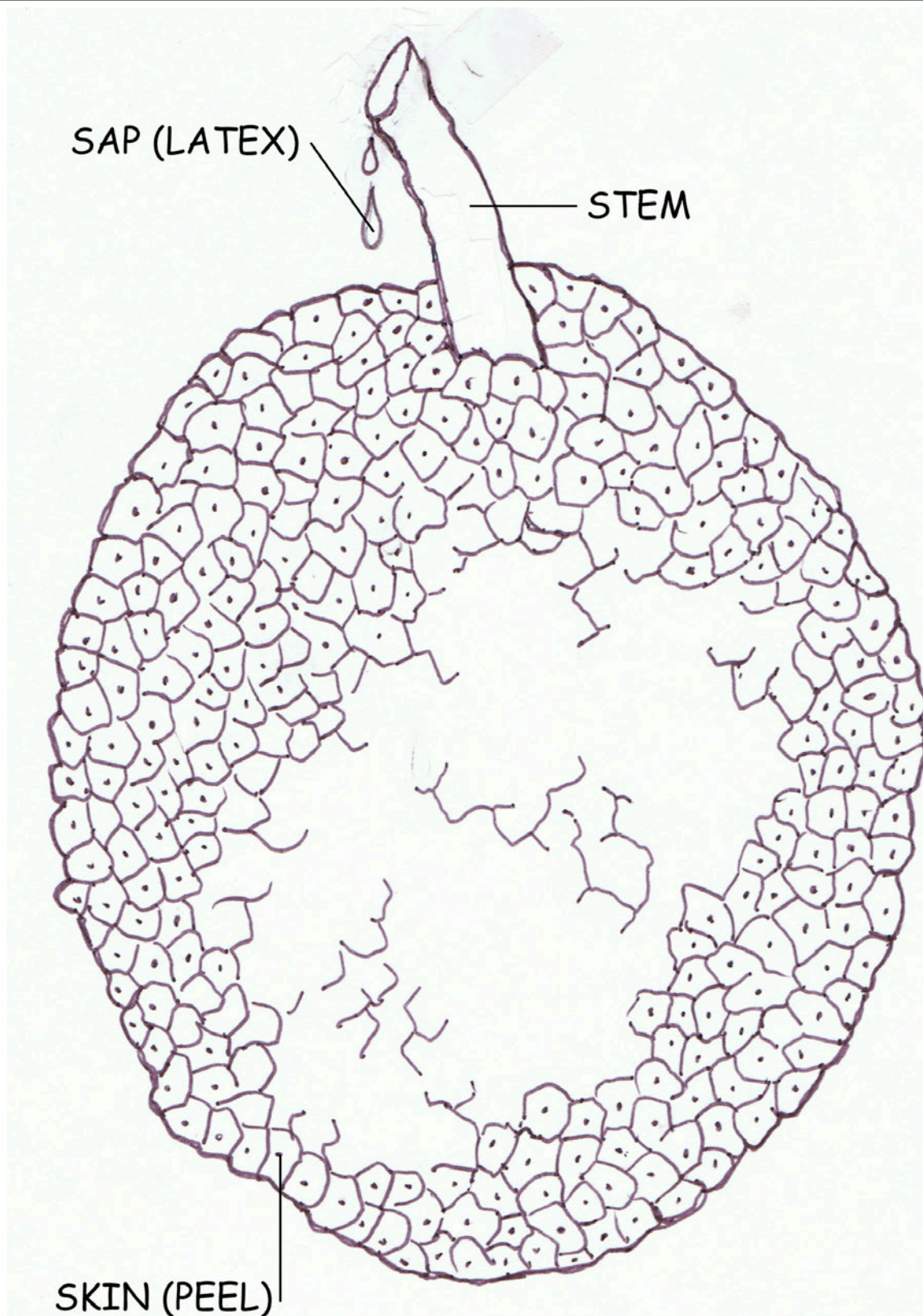


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FRUIT



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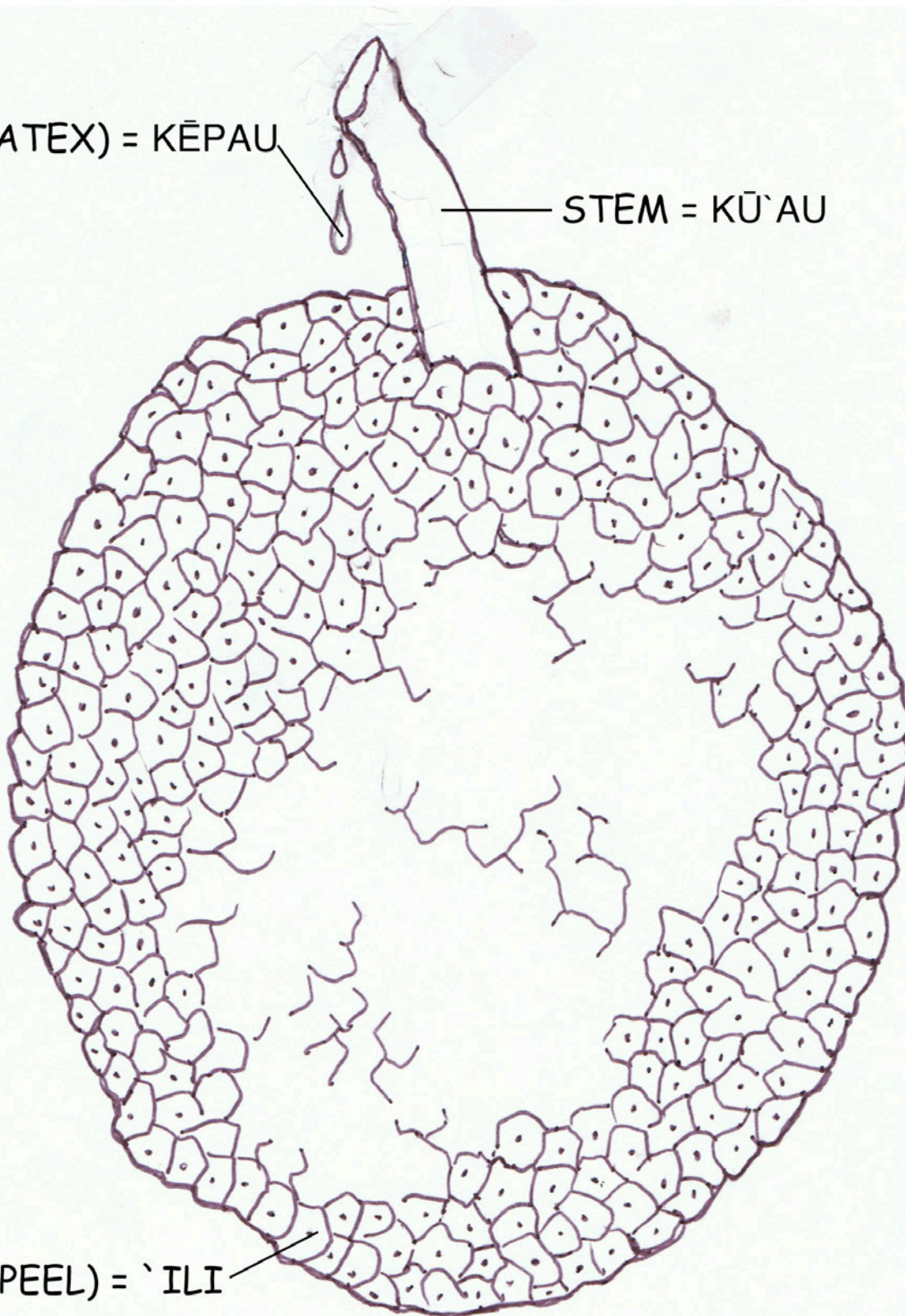
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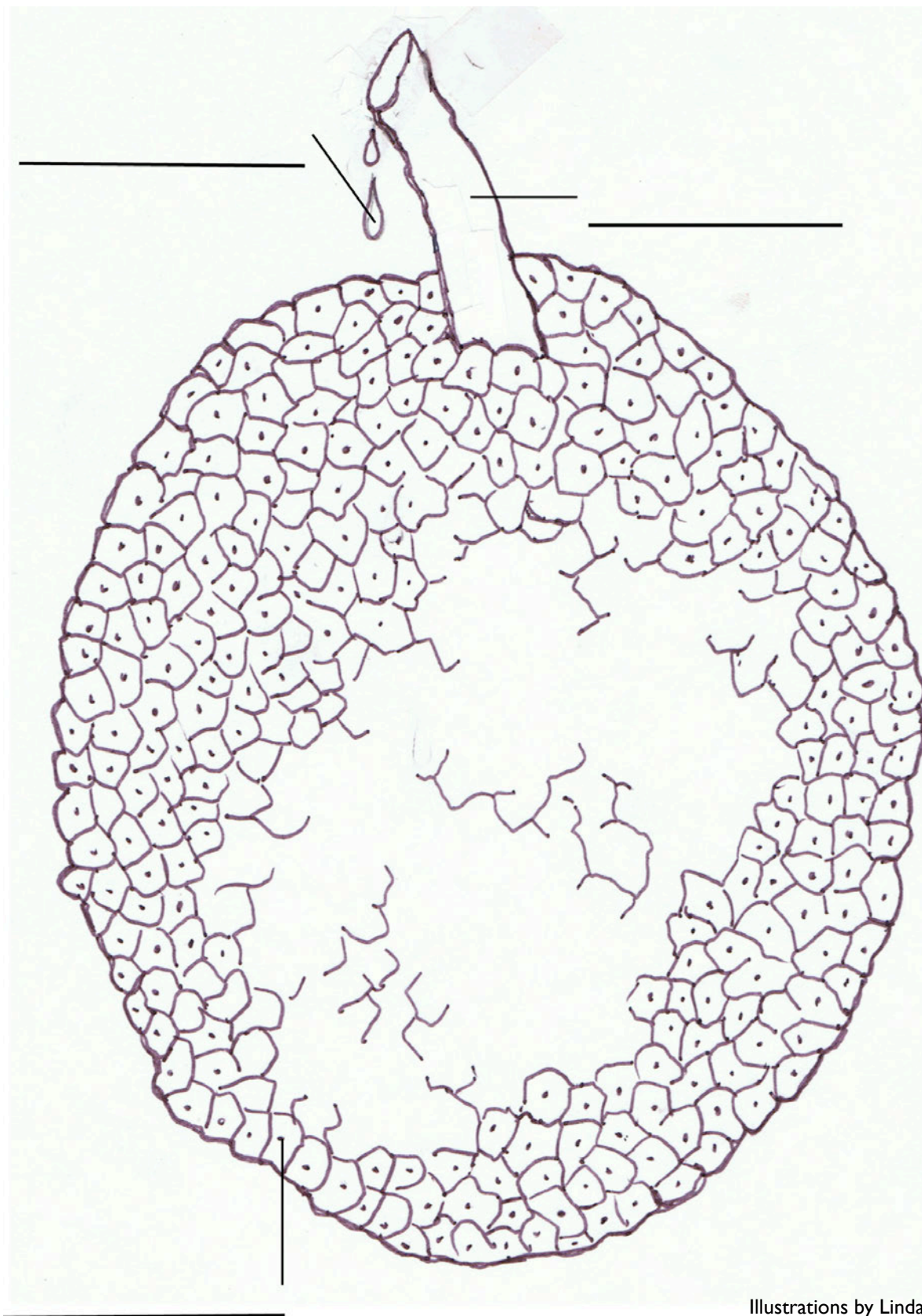


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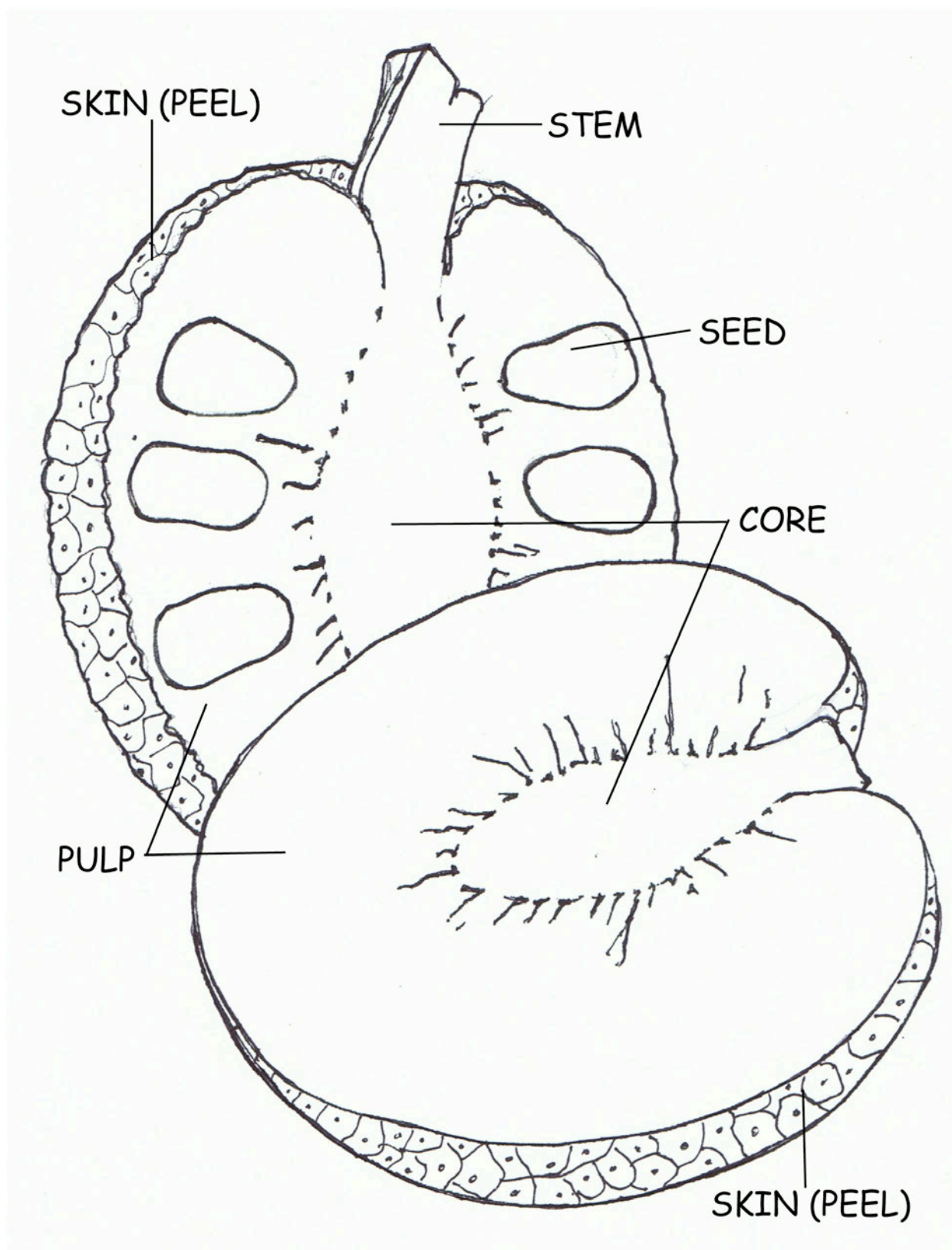


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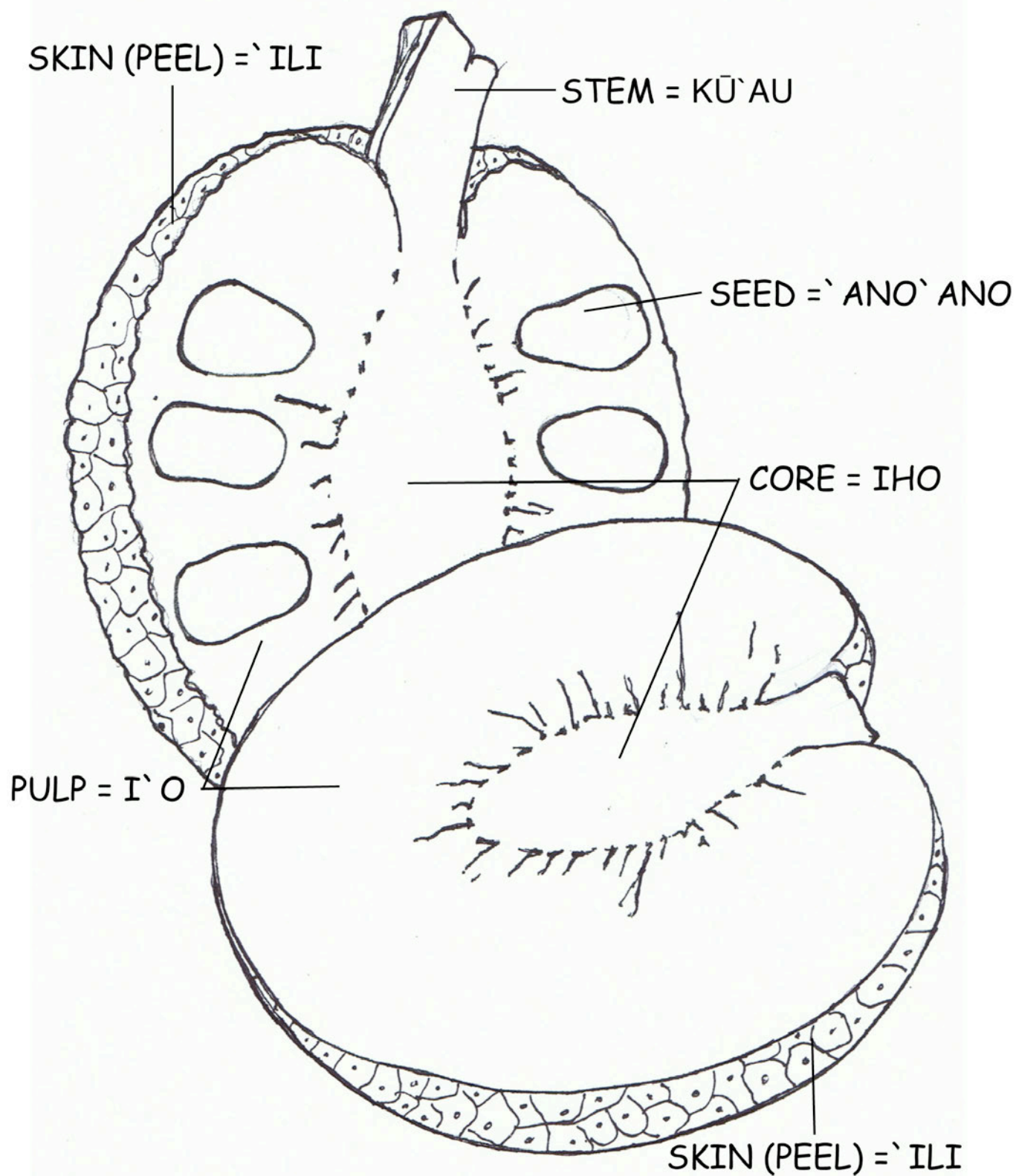
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BREADFRUIT = 'ULU

FRUIT = HUA



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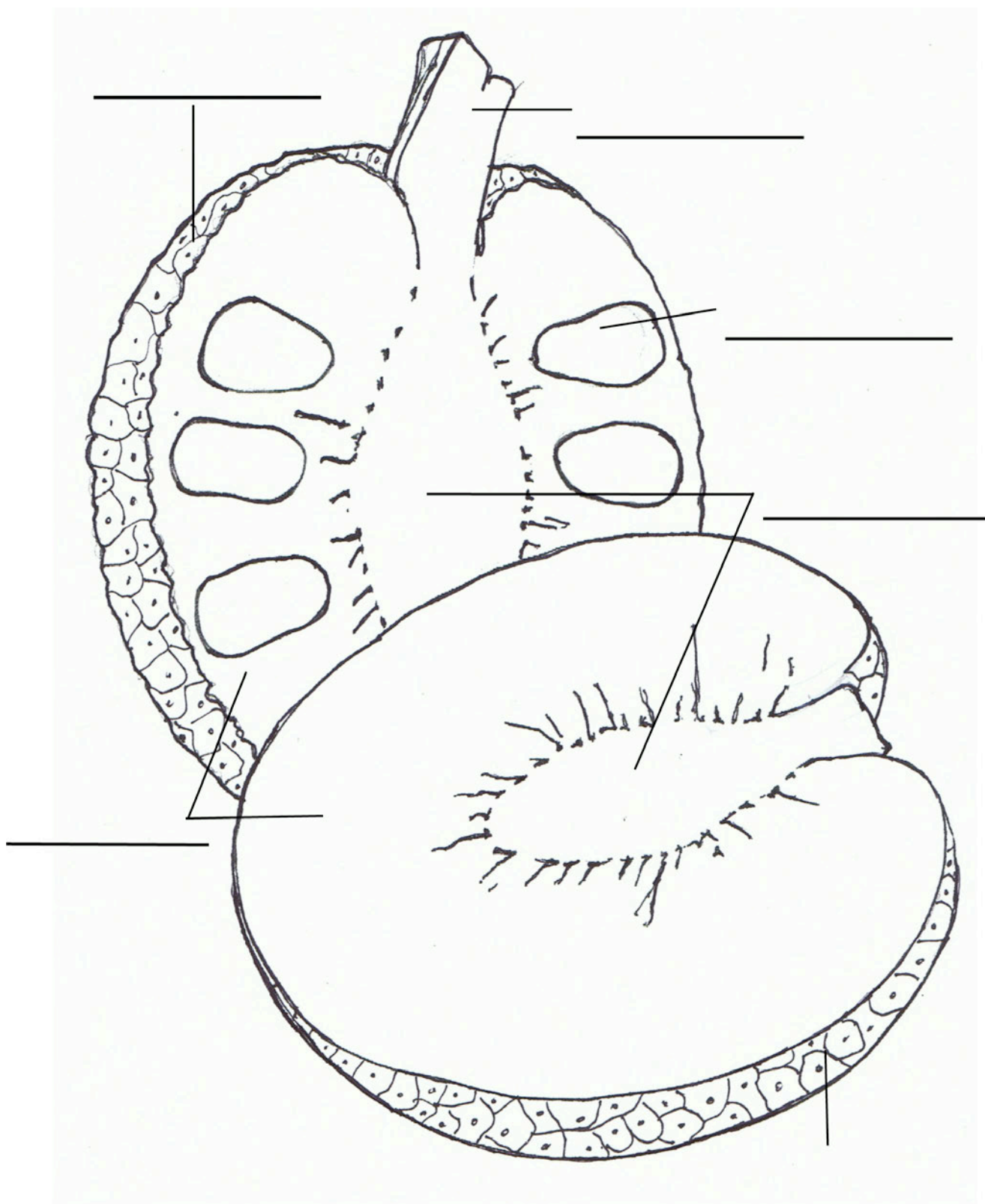
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FRUIT



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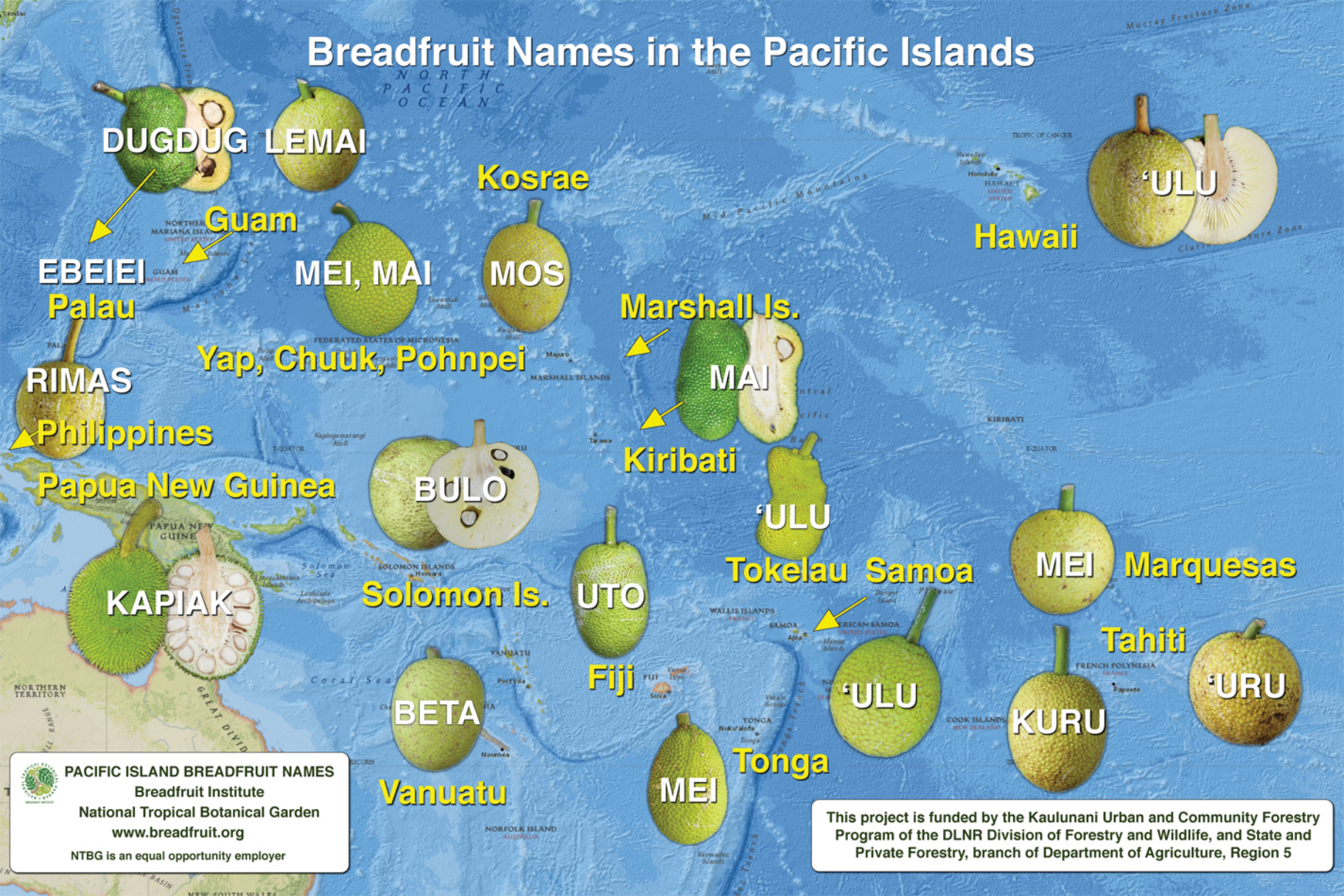


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Breadfruit Names in the Pacific Islands



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