Hyposmocoma case type field guide Hawaiian fancy-case caterpillars

Cases shown roughly to scale

There are 360 described species of *Hyposmocoma*, all are endemic to the Hawaiian islands



'giant purse'

At almost 2" length markedly larger than any other case type. Very rare, mostly found under bark of dead branches of live trees, often near crab cases.



'twist tail burrito'

Like burrito's, but with a typical twist at the tail end. Some are amphibious.



'oyster'

Sister to the twist tail burrito group, different in that opening end flares out with radial build-ups of layers that make the case blend in with the tree bark it can be found on.



Similar to cones but flare out towards the single opening and usually have dark rings. A rare case type that has been found hangin from foliage and fully submerged under river rocks (!)



Found in dead wood, often dead 'õhi'a. A very rare case type.



'burrito'

Several species groups make this case type, it is the most diverse group with cases that can be adorned with lichen, moss, fungi, frass, sand, and anything from their environment. Commonly found on exposed rocks and tree bark.



'purse'

Smooth or ribbed and light brown to black, can be found in dead wood, under rocks, and in dead tree fern brachts before they drop.



'flat purse'

Similar and closely related to purse case types but larger and flattened, with small grains (frass) covering the surface of the case. Found in dead wood.



'candywrapper'

A very diverse group with cases that are constricted near both ends, giving the impression of a wrapped candy. Often covered with lichen. Can be found on leaves, stems, bark, and rocks.





cone

Some are amphibious and live in streams, others are commonly found in wetter areas on rocks or by a trickle of rain water. Found on all the main islands, including some N-W islands, but not on Hawai'i Island.



'cigar

Cases of the carnivorous group, will prey on other Hyposmocoma, native snails or cannibalize. Cases are irregularly ordained with frass and are elongated like cones but have two openings and are symmetrical, not tapering at one end Often found near burrito cases.



'bone collector'

Collects body parts of ants, spiders and other arthropods it finds and incorporates into its case. Mostly found in (dead) tree bark or near spider webs. Only known from O'ahu.



Photos by Zhongqi Wang, design and text by Camiel Doorenweerd & Daniel Rubinoff 2023. v1.4