

THE IDENTITY OF *SENECIO CAPILLARIS* GAUDICHAUD

HAWAIIAN PLANT STUDIES 26

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Tetramolopium capillare (Gaud.) St. John, comb. nov.

Senecio capillaris Gaud., Bot. Voy. Uranie 468. 1830.

T. Bennettii Sherff, Bot. Gaz. **95**: 498. 1934; B. P. Bishop Mus., Bull. **135**: 11-12, fig. 2. 1935.

The holotype of *Senecio capillaris* Gaud. is in the Museum National d'Histoire Naturelle, in Paris. The writer examined it in 1936, and again in 1954. The species is little known, and it seems that no one has confirmed its identity since the time of Gaudichaud in 1819. The original description, with nine descriptive words, in the account by Gaudichaud, has been insufficient for a full knowledge of the plant. He described the shrubby habit, the sparse linear-capillary glabrous leaves, the leafy 1-flowered terminal peduncles. Hillebrand in his Flora of the Hawaiian Islands, 229. 1888, translated this latter, "pedunculis unifloris," as peduncles single-headed, and this was apparently true to Gaudichaud's meaning, and the 60 or so scars on the receptacle of the heads of the holotype confirm this view. Gaudichaud described the leaves as glabrous; and the older ones are so, but the young leaves are minutely glandular atomiferous when seen under a binocular dissecting microscope, such instruments not existing in 1830. In every other detail the original description exactly matches the holotype. Gaudichaud did not illustrate it, though he did so with most of his other new species.

The holotype is a single branch 29 cm long. Its naked glabrous lower stem is 10.5 cm long, reddish-brown, and at its apex parts into four strong, and one weak, upper branches which are scabrous-puberulous. The numerous leaf blades when dried are 1-2.5 cm long, 0.1-0.4 mm wide, sessile, filiform, acute, and ascending. The peduncles are 2-4 cm long, nearly naked, minutely puberulous, 1-headed. The ten heads are all post-mature, have the involucrel bracts in about three rows, those of the two inner rows being subequal, 2.5-3 mm long, 0.2-0.3 mm wide, linear, tapering, acute, ciliolate, and with the center line thickened and dark. The receptacle is flat on top, with the edges rounded.

The holotype has no flowers left. None were mentioned by Gaudichaud in his description, and perhaps this lack explains why his new species was not illustrated. It well imitates the aspect of a *Senecio*, so his placement was a good guess. Now that the Hawaiian flora is better known, it is evident that *Senecio capillaris* Gaud. (1830) is the same as *Tetramolopium Bennettii* Sherff (1934) from Lahainaluna and Wainee, both on western Maui. Gaudichaud also collected in the mountains back of Lahaina, western Maui. As every detail of structure and the locality seem to coincide, the writer decided to make the necessary new combina-

tion under *Tetramolopium*. Several days later during the 1954 visit to the museum in Paris, the writer located a 295-page folio collector's number list made by Gaudichaud on the voyage of the Uranie. For each stop he wrote a chapter, entering the plants found, and he usually added at that time a detailed description of the minute or dissected parts of the flower for each one. Notes for these details must have been made daily, but in some parts of the list it is evident that the plants or the notes had been sorted into groups, such as by placing all the ferns together. Pages 196-230 cover "Plants examinées aux îles Sandwich." In the margins of the pages are his later determinations or comments added while studying the plants in Paris. For this one his annotation is "*Senecio capillaris*." His notebook entry is "64. Syngénèse nommé Pamocani = Pamokani. Fleurs radiées-ecailles filiformes, sur plusieurs rangues, velues. Demi-fleurons de la circonférence blancs, en languette, très étroites, obtuses au sommet. (ou légèrement \pm Bifides?). Deux stigmates jaunepales.

"Fleurons du centre-jaune, à cinq divisions—deux stigmates ne dépassant pas la corolle. Réceptacle presque plan, légèrement alvéolé, conique au centre (très légèrement conique). Fleurons et demi-fleurons chargés d'aigrettes capillaires, denticulées. Tige ligneuse. Feuilles filiformes."

This field description gives much detail for the flowers which are now missing from the specimen. The white ray flowers contrast with those of *Senecio*, and agree with the characters of *Tetramolopium*.