

A New *Sciaphila* (Triuridaceae) from the Palau Islands¹

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AMONG THE MORE NOTEWORTHY discoveries made during recent botanical explorations in the Palau Islands, is a tiny new saprophytic plant of the genus *Sciaphila* Blume (Triuridaceae), described below. It was found by Lani Stemmermann, of the University of Hawaii, and Joan Canfield, Peace Corps Volunteer, on the large limestone island of Eil Malk (Mecherchar), in the southern part of the archipelago. The plant was growing on the forest floor near one of the saline sink-hole lakes. It is a tiny, threadlike plant, and is very inconspicuous, which may account for its not being found before.

Sciaphila stemmermanniae Fosberg & Sachet, n. sp.

Figures 1, 2

DESCRIPTION: Planta monoecia gracilis filiformis simplex rarius ramosa; foliis late ovatis 1.5–2.0 mm longis amplectentibus; racemis simplicibus, pedicellis 2–3 mm, floribus masculis foemineisque irregulariter dispositis; segmentis perianthii subaequalis ovato-lanceolatis acuminatis comosis; staminibus 3, antheris contiguis sessilibus 2-ocularibus; gynoecio globoso, carpellis bulbosis circa 15, stigmatate laterale leviter incrassato breviter viscido-puberulo; fructu subpyriforme dehiscenti.

Plants filiform, pink, to at least 29 cm long, usually much shorter, glabrous, sparsely branched or unbranched, with a tiny tuber at base; leaves very reduced, up to 7, remotely disposed, 1.5–2.0 mm long, broadly ovate, acute to obtuse, clasping at base, prominently marked with dark red pencilling; floral bracts similar to leaves, only distally

marked with carmine, the upper ones gibbous, tending to be acuminate; inflorescence a simple raceme forming the upper half or less of the plant, pedicels closely lineate with dark carmine, spirally disposed, 2–3 mm long, to 5 mm in fruit, usually recurved below summit so flowers are nodding, when pressed and dried often appearing subsecund; buds obtuse, densely carmine-dotted, staminate and pistillate flowers irregularly mixed on rachis, staminate more numerous; staminate flowers with 6 ovate-lanceolate acuminate strongly reflexed segments about 1 mm long, brownish with red marks, a tuft of long tangled septate early deciduous hairs at and inside apex, septa of hairs dark carmine, cell walls transparent, pale purplish; anthers 3, yellow, contiguous, triangular with rounded angles, sessile or almost so, two-celled, connective large, yellow, resembling a third anther cell; pistillate flowers similar to staminate but lacking staminodes and with a dense cluster of about 12–16 carpels at the summit of a very short thick gynophore, carpels bulbous, minutely papillate at summit, with a curved spatulate stigma coming out of one side, as long as or scarcely longer than body of carpel, with short viscid hairs on the convex side, slightly thickened toward apex; fruitlets 1–16 developing, straw-colored, obovoid, 0.8–1.0 mm long slightly papillate, with faint longitudinal striations when fresh, vestige of stigma persisting near base, dehiscing apically and down one side, the opened single valve obovate, slightly emarginate.

This plant is apparently very local, possibly rare, as it has only been collected in one locality, on one of the larger limestone islands in southern Palau.

SPECIMENS SEEN: Caroline Islands, Palau, Eil Malk (Mecherchar), on northwest bank of largest marine lake on southwest side of

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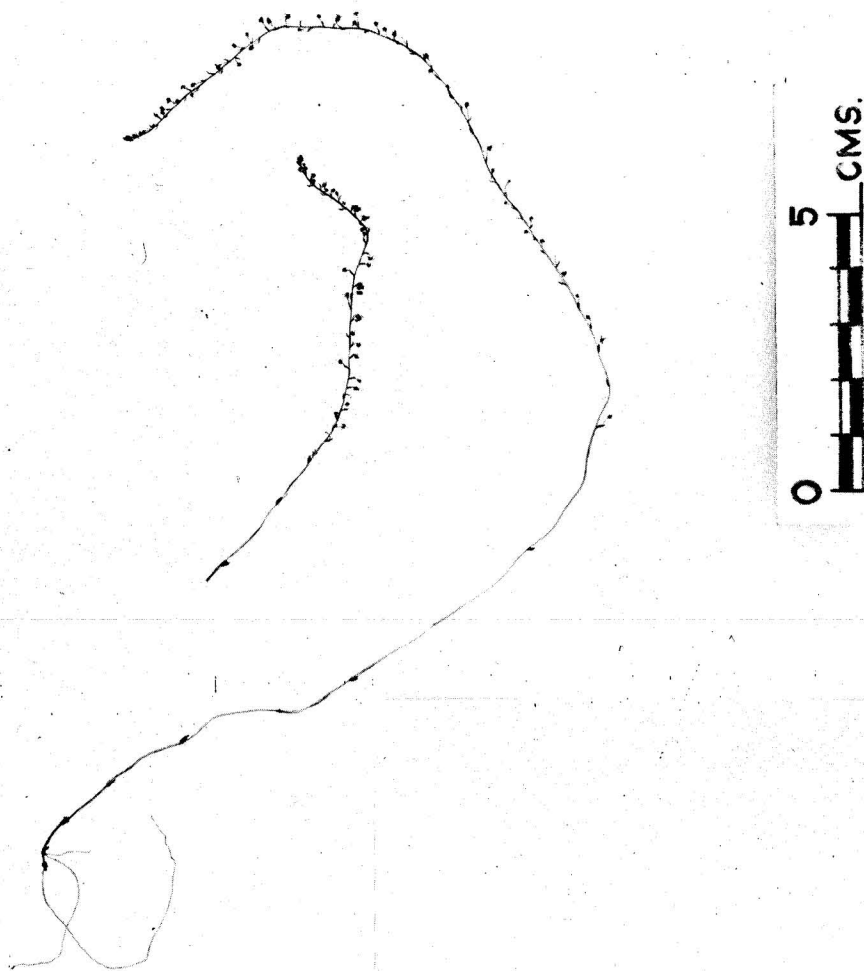


FIGURE 1. *Sciaphila stemmermanniae*. General view of plant.

island, on limestone soil, 2 m, 23 January 1978, *Stemmermann* 3369 (US, BISH); same location; 30 m, 19 June 1979, *J. E. Canfield and G. Bright* 782 (holotype, US; isotypes, BISH, L).

DISCUSSION: This species is not close to the other Micronesian *Sciaphila*, *S. corallophyton* var. *gracilis* Giesen, of Ponape, but

belongs, in Giesen's scheme, to section *Oliganthera* subsection *Trilobatae* Giesen, where it seems to be related to *Sciaphila mindanaensis* Giesen, of the Philippines, differing in the form and closeness of the anthers, in the smaller flowers, and in the style viscid puberulent, not notably penicillate.

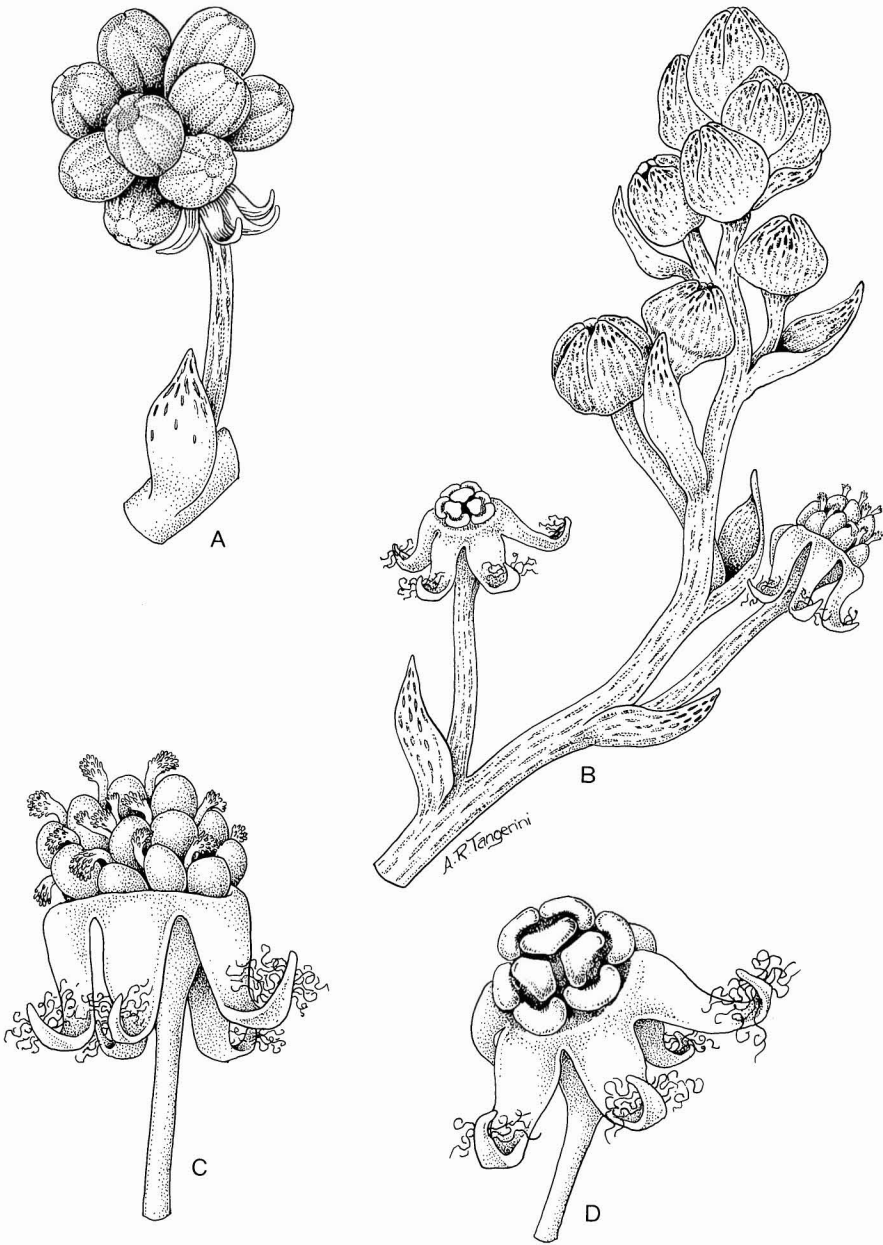


FIGURE 2. *Sciaphila stemmermanniae* (J. E. Canfield and G. Bright 782). A, mature fruit ($\times 15$); B, habit ($\times 15$); C, pistillate flower ($\times 30$); D, staminate flower ($\times 30$).