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Three Polynesian Ferns

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Gonocormus samoensis, species nova (fig. 1).

Rhizomate filiforme, intricato; stipite ca. 2 cm. longo, terete; lamina saepe 5 cm., rarius usque ad 7 cm. longa, 1.5-3.5 cm. lata, bi-tri-pinnatifida, rhachi deorsum angustissime sursum latius alata; pinnis infimis brevissime stipitulatis sequentibus sessilibus et adnatis, rarius flabellatis, plerisque pinnatifidis ovatis, segmentis saepius apice furcatis, rarius subpinnatifidis, segmentis uninervatis ca. 0.6 mm. latis; soris segmenta inferiora acroscopica occupantibus, 2 mm. longis, tubiformibus ventro rarius paullo dilatato, alatis, ore dilatato, receptaculo vulgo tubo aequante; rhachi interdum more generis pinnas frondiformes emittente, rarius furcata, rarissime rhizoma radiciferum gerente.

Samoa: Tau, Palapala, alt. 900-1,000 ft., Wray Harris lot 2522 Sta. 253, type in Bishop Museum Herbarium.

This is the plant discussed in my monograph of Trichomanes (Philip. Jour. Sci. 51:144, last paragraph), Powell 102 in the Gray Herbarium, collected in 1863. With an ample new collection, it seems necessary to give it a name, although Gonocormus is the last genus in which I willingly coin a new one. "The architecture is pinnate throughout, except as disturbed by the proliferation", and it is remarkable in its genus for the commonness of symmetrical fronds, without any proliferation at all, looking much like those of Vandenboschia pyxidifera. It may not well be Trichomanes novo-guinense Brause, because the stipe is wingless and much shorter than the lamina, and the sori very unlike those of Vandenboschia Colensoi.

Polypodium lepidum Brause.

Samoa: Tutuila, Christophersen 1055, 1072; Savaii, Christophersen and Hume 2062.

The very near affinity is not to *P. blechnoides*, but to *P. Seemanni*, from which it is distinguished by restriction of the sori to the apical portion of the frond, with more or less contracted and then finely crenate fertile pinnae. The typical frond described by Brause (Einige neue Samoa-Farne, Notizbl. Bot. Gart. Berlin-Dahlem 8: 139, 1922)

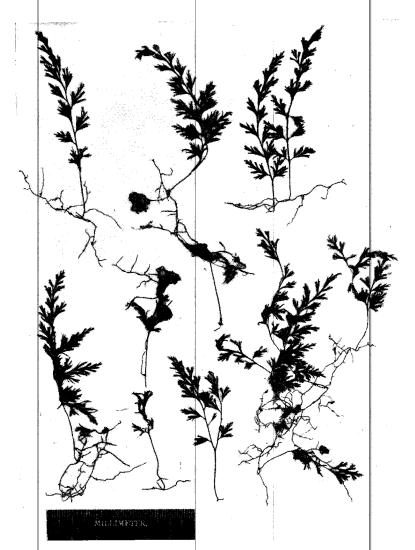


Figure 1.—Gonocormus samoensis.

had this apical portion dilated, 8 cm. wide as contrasted with a lower sterile portion 3 cm. wide. But, as he noted, "Die Art scheint zu Abweichungen geneigt zu sein." In two of the collections in hand, the fertile portion is slightly dilated, and in the third, Christophersen 1055, not at all so. It is a local derivative of P. Seemanni, not well fixed in its distinctive features, and still blending with the parent species. The line of evolution parallels that of Aglaomorpha meyeniana.

Selliguea Feei Bory.

Polypodium Feei var. marchionicum E. Brown, B. P. Bishop Mus., Bull. 89:87, 1931.

Typical enough S. Feei is correctly distinguished by Mrs. Brown from S. feeioides of Tahiti by the paleae. She could have escaped the invention of a new name by noting that caudiforme is originally Blume's name, not Nadeaud's. The specimen sent me, Jones 1711, a "reference type" of Mrs. Brown, is S. Feei rather than P. caudiforme Blume. The occurrence of this plant in the Marquesas is surprising, S. feeioides taking its place in Fiji, Samoa, and Tahiti.

The author is responsible for all statements in this paper.