POLYSCIAS VERTICILLATA (ARALIACEAE), A NEW SPECIES FROM THE SOLOMON ISLANDS ¹

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THE GENUS POLYSCIAS IS REPRESENTED on many Pacific Islands by local species, some of them narrow endemics. Some islands or archipelagoes possess two or more species, excluding the frequently cultivated forms (Polyscias fruticosa, P. pinnata, P. scutellaria, and P. guilfoylei), which are nearly ubiquitous. Thus in Micronesia, Kusaie is the sole habitat of Polyscias subcapitata Kanehira; in the Society Islands, P. tahitensis (Nad.) Harms is a local endemic; New Caledonia has a number of species exclusively, some of which, at least, are thought to form the separate genus Tieghemopanax; P. corticata Gibbs and P. joskei Gibbs are found only in Fiji; P. neo-ebudara (Guillaumin) B. C. Stone, P. excelsa (Guill.) Stone, and P. nusedhul (Guill.) Stone are strictly New Hebridean; and New Guinea also has several endemic species. Therefore, it is not surprising that in a study of specimens of Polyscias from the Solomon Islands an undescribed species was found among collections from that region, which still remains a virtual "terra incognita" from the botanical point of view.

Although the genus Polyscias has been involved in a number of taxonomic questions at the generic level, for example, the distinguishing of the genus Tieghemopanax R. Viguier, mentioned above, and the genus Nothopanax Miquel (now treated as a synonym), the species described in this paper corresponds in all pertinent generic features with P. pinnata J. R. & G. Forster, which is the type species of the genus, and therefore, presents no difficulties of generic placement. Furthermore, it is reasonably distinctive in its specific characters, though it seems to be of close affinity to P. multijuga (A. Gray) Harms, of Fiji, and somewhat less close but similar to P. grandifolia Volkens of Micronesia. From the Fijian P. multijuga, this new species differs in the structure of the inflorescence, having verticillate secondary branches bearing terminal and lateral umbellules, rather than having the secondary branches irregularly but mostly alternately arranged on the main rachis and bearing numerous lateral, short-pedunculate umbellules. Furthermore, the new species exhibits a marked, though short, columnar style, from which the two stylose stigmas diverge, rather than the disjunct styles characteristic of P. multijuga. From P. grandifolia this Solomon Islands species differs in its considerably taller habit (the Micronesian plants are rarely more than 4 m. tall), as well as in the

¹ This is the fifth in a series of studies of plants of the Solomon Islands. The previous papers are listed in Proc. Biol. Soc. Wash. 76: 1. 1963.

structure of the inflorescence, while the Micronesian plants share the more open, non-verticillate branching characteristic of *P. multijuga* and, indeed, of many other species of *Polyscias*. Furthermore, *P. grandifolia* shows

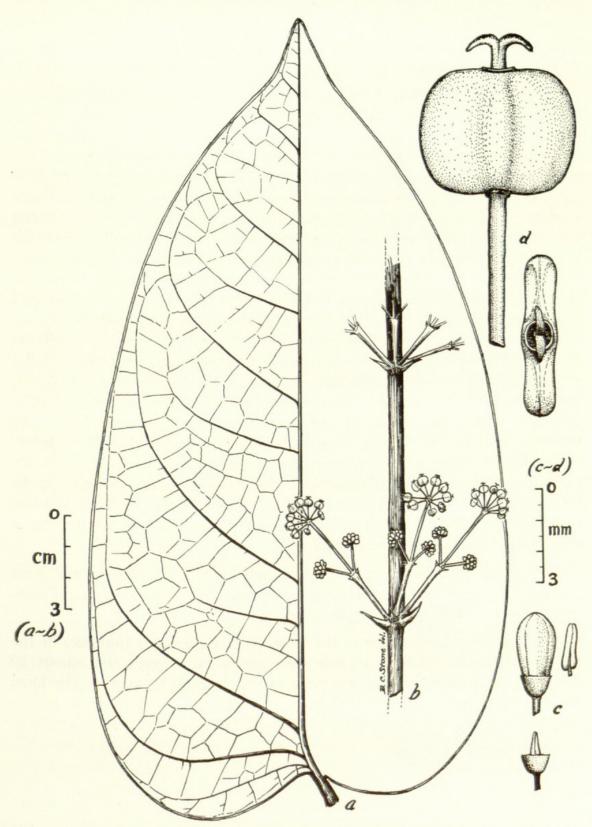


Fig. 1. Polyscias verticillata B. C. Stone. a, leaflet, showing venation; b, portion of an inflorescence; c, flower (in bud), a stamen, and (below) bud with corolla removed, showing calyx and styles; d, two views of a mature fruit.



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