

Chapter 1

Botanical Survey of the Nakauvadra Range, Ra Province, Fiji

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SUMMARY

The flora of the Nakauvadra Range is described from a rapid assessment survey of its principle habitats. A total of 418 plant taxa (including eight undetermined angiosperm species) were recorded comprising 75 ferns and their allies, five gymnosperms and 338 angiosperms. Of all the recorded species, 338 were native species and 80 were aliens. The 338 native taxa could be divided into two groups; (i) indigenous species (200 species), and (ii) endemic species (138 species) equating to an endemism of 41% of the native flora and 34% for the entire flora. Two species of particular interest were *Degeneria roseiflora* (rare on Viti Levua) and *Neosomitra integrifoliola* (rare in Fiji).

Four principle vegetation types were identified: (1) Talasiga Vegetation, (2) Lowland Rainforest, (3) Upland Rainforest, and (4) Cloud Forest. Most of the lower elevation vegetation types were disturbed or partially disturbed while the higher elevation vegetation types were generally primary forest.

The findings are discussed in a conservation framework that highlights the taxonomic and/or ecosystem value of notable plant species and vegetation types.

INTRODUCTION

The botanical survey in relation to previous surveys

The range of mountains comprising Nakauvadra lies on the northeast side of Viti Levu. It is a mix of disturbed vegetation, such as grasslands, plantations, agroforests, and secondary forest in the relatively flat and accessible land near villages. Native lowland forest, upland forest and cloud forest occur in the more rugged areas and higher elevation areas. There are no known records of any previous botanical expeditions to the Nakauvadra Range as reflected in the lack of botanical specimen records deposited in the SUVA herbarium. In 2004 a forest tree inventory was carried out by Fiji's Department of Forestry but this was restricted to native timber tree species only.

The current survey was conducted in November 2008 and involved several botanists and vegetation ecologists including Mr. Marika Tuiwawa (Curator of the South Pacific Regional Herbarium) and Dr. Art Whistler (University of Hawai'i Botany Department) who were assisted by Mr. Talie Foliga, Mr. Isaac Rounds, and several local field guides. Other scientists not specifically part of the botanical team but involved in the RAP also helped with the collection of fertile specimens encountered during the course of their field work.