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A New Zealand Phytochemical Register—Part II.

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Abstract

A phytochemical register of New Zealand species of the order Coniferales is compiled and compounds obtained from each source are cross-indexed according to chemical types. Selected references to the chemistry of some diterpenes and diterpenoids which are common in New Zealand species are also given.

INTRODUCTION

IN Part I (Brooker, Cain, and Cambie, 1963) a phytochemical register of species endemic to New Zealand was compiled, which covered all native plants except the Gymnosperms and Lichens. Part II is concerned with the former group. The format of this Part follows that of the earlier one in which the order of species, the botanical authority, and the aims of compiling this register were detailed. Again, no attempt has been made to review the chemistry or to draw relationships between the botanical classification and the type of compound found.

A few modifications require comment. Wherever possible, references to preliminary communications have been omitted, except where all the information reported therein is not repeated in a later or main paper. Reference to the detection only of compounds or classes of compounds have been omitted, but attention is drawn to the paper of Cain, Scannell, and Cambie (1961) in which is reported the occurrence and identification of leucoanthocyanins in all the endemic gymnosperms mentioned here.

The New Zealand species of the gymnosperms are characterised by the occurrence of diterpenes and diterpenoid compounds and indeed it is mainly for this reason that these species have attracted considerable attention from chemists concerned with natural products. In view of this interest, where considerable work has been reported on the elucidation of the structure and stereochemistry of a diterpene or diterpenoid, its reactions, synthesis, occurrence in other species, or its utilisation for chemical purposes, a separate list of selected references is included on pages 220–231. These lists are not exhaustive but include the majority of major papers concerned with a particular compound. In general the patent

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