Die Vegetation der Erde.

Sammlung

Pflanzengeographischer Monographien

herausgegeben von

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VII.

Die Pflanzenwelt von West-Australien südlich des Wendekreises.

Mit einer Einleitung über die Pflanzenwelt Gesamt-Australiens in Grundzügen.


Von

Dr. L. Diels.

Leipzig
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einer im Auftrag der Humboldt-Stiftung der Kgl. Preussischen
Akademie der Wissenschaften 1900-1902 unternommenen Reise.

Von

Dr. L. Diels.
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Mit 1 Vegetations-Karte und 82 Figuren im Text, sowie
34 Tafeln nach Original-Aufnahmen von Dr. E. Pritzel.

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The

Vegetation of the World

A series of

Plant Geographical Monographs

Edited by

A. ENGLER and O. DRUDE
Professor of Botany
Professor of Botany
Director of the Botanic
Director of the Botanic
Gardens in Berlin
Gardens in Dresden

VII

The Plant Life of
Western Australia south of the tropics

With an Introductory Part dealing with the salient features
of the vegetation of the whole of Australia

The results of an expedition carried out during 1900-1902
under the auspices of the Humboldt Foundation
Royal Prussian Academy of Science

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A translation by
Emeritus Professor B.J. GRIEVE, Professor B.B. LAMONT
and Dr E.O. HELLMUTH

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Knowledge of the plant life of Western Australia was very limited at the time of my visit. While the floral elements were well known, no studies had been made on their inter-relationships in the field. Again, although their external affinities had been noted by Hooker, little was known about the conditions that determined the inner relationships of the endemic flora. These aspects were considered as being fundamentally important. Because of the variation in form of its vegetation and the fact that this variation occurred in a winter rainfall area of the earth (where the vegetation is more closely defined and shows a more regular gradation than in any other part) it appeared that it might provide solutions to many questions of general interest. Also the country's unrivalled richness in species could be expected to prove rewarding to those who studied its vegetation.

For these reasons I proposed a study visit there and in 1900 submitted my plan to the governors of the Humboldt-Foundation for Biological Research and Travel. The account of the vegetation formations of Western Australia and the investigation of the conditions influencing the development of the wide range of species existing in the flora were considered to be the most important matters to be investigated.

The governors of the Humboldt-Foundation approved my plan and I was able to travel to Australia and engage on a two-year research programme. Fourteen months were allocated for studies in Western Australia.

The taxonomic results which formed the first part of my researches have already been published in collaboration with Dr E. Pritzel (L. Diels and E. Pritzel, Fragmenta Phytographiae Australiae occidentalis. In Englers Botan. Jahrbüchern XXXV [1904, 1905]). The second part, which deals with the plant geography and botany of the area, represents the fulfillment of the main objective of my expedition.

I am most grateful to those who financed my research work. The Royal Prussian Academy in Berlin and the governors of the Humboldt-Foundation have, through the funds provided by the latter, enabled me not only to travel extensively in the area which formed the main subject of my researches, but also to become more familiar with the problems facing me by providing me with the opportunity to visit the Cape region [South Africa] and eastern Australia. I wish to thank the authorities for their munificence and in particular the President of the Governors, Medical Privy Councillor, Professor Waldeyer, for his constant sympathetic support.

I am deeply indebted also to the Government of Western Australia, which greatly assisted me. I wish particularly to express my most sincere gratitude to the Rt. Hon. Sir John Forrest, P.C., G.C.M.G., at that time Premier of the State, for his active interest which contributed significantly to making my visit so successful.

I was accompanied by Dr E. Pritzel during the tour and I wish also to thank him for his great help during our travels. He placed at my disposal all the photographs he took during the trip, and also assisted in proof-reading the manuscript.

Finally, I must thank Privy Councillor Professor Engler, my esteemed teacher, for advice during the preparation of this volume. It was, for instance, at his suggestion that the introductory section dealing with the vegetation of the whole of Australia was presented. This was designed to serve as a setting for the picture of the botany of the more restricted area of Western Australia and to help to highlight the features that give that region its greatest individuality.

BERLIN, May 1906

L. DIELS
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