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Book Review

Aquatic and Wetland Plants of Southern Africa

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2004, Backhuys Publishers, PO Box 321, 2300 AH Leiden, The Netherlands
281 pages with 290 figures
ISBN 90-5782-142-7, price €86 (Hardcover)
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This book was written as an identification manual covering the stoneworts, liverworts, mosses, quillworts, ferns and flowering plants found in aquatic and wetland systems of southern Africa (Namibia, Botswana, Swaziland, Lesotho and South Africa). The term 'wetland' was taken in its broadest sense to encompass any environment where the soil is saturated for at least 60 consecutive days each year or inundated for at least 14 days. The plants described include both hydrophytic and heleophytic plants with only the specialised mangroves and woody species omitted as these are already well documented elsewhere. Both indigenous and introduced species are included.

The Introduction begins with a background as to why the book was written. This is followed by a brief discussion on other general topics such as endemism and red data information on extinct, endangered, threatened and vulnerable plants and a comprehensive Reference list. The Introduction also describes how the illustrations were prepared with an emphasis on the diagnostic features rather than as 'plant portraits' with an aim of aiding plant identification. There is also an explanation on how the distributional records of species were interpreted from herbarium specimens. Geographical abbreviations of the various political boundaries are provided as well as a map of the region. A simple dichotomous key is included of the various growth forms used to describe aquatic and wetland plants. The terminology has been kept simple such as using 'hair' in place of 'trichome' and a good glossary is provided.

The Introduction is followed by a dichotomous 'Identification Key' to the major groups. The key is biased towards easily seen vegetative characters to enable most plants to be identified in the field without the use of a microscope. The rest of the book is divided into Subdivisions, Classes and Families with Taxonomic and Ecological notes as well as practical information such as how best to preserve specimens. Dichotomous keys lead directly to genera and where appropriate, to species and varieties. In this book, 482 species, subspecies or varieties are given with a full taxonomic description, ecological and distribution notes, growth forms and illustrations. Vernacular English and Afrikaans names are included. In total, there are 290 illustrations.

This book was written as an aid for field biologists in the identification of wetland and aquatic plants and it achieves its aim. It is well laid out, self explanatory, easy to use and provides a comprehensive list of aquatic and wetland macrophytes. I am sure it will prove to be useful to those involved in management of these vulnerable but important ecosystems. Interest should be generated in other plant enthusiasts.

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Archeogeology and Quaternary environment in the interior of southern Africa. In Southern African Prehistory and Paleoenvironments, ed. Klein, R. G.. Rotterdam: Balkema, pp. 1â€“64. Dippenaar, M. A. (2014). Towards hydrological and geochemical understanding of an ephemeral palustrine perched water table â€œwetlandâ€ (Lanseria Gneiss, Midrand, South Africa). Environmental Earth Sciences, 72, 2447â€“2456. Douglas, R. M. (2006).Â Classification system for wetlands and other aquatic ecosystems in South Africa. Pretoria: SANBI Biodiversity Series 22, 110pp. Rabumbulu, M. and Holmes, P. J. (2012). South Africa is home to more than 22 000 indigenous seed plants from almost 230 different families. It is also the proud home of 10% of the worldâ€™s ...Â The diversity and abundance of South African plants is impressive, and is one of the reasons that South Africa is such a popular tourist destination. The flora acts as the natural habitat for the many different animal species that call South Africa home, and is a key contributing agent for the biodiversity and ecological health and wealth of this land. Some of the plants, particularly succulents, have long been used for their medicinal qualities by the indigenous folk that have roamed the South African plains for centuries. The aquatic and wetland plants in the Ar-boretum are unique in that their status has been assessed from time to time throughout the history of the institution. E. J. Palmerâ€™s Spontaneous Flora of the Arnold Ar-boretum, the first account of wild plants in the Arboretum, was written in 1930. Palmer, who was a botanist on the staff of the Ar Aquatic plants fulfil a wide range of ecological roles, and make a substantial contribution to the structure, function and service provision of aquatic ecosystems. Given their well-documented importance in aquatic ecosystems, research more. Aquatic plants fulfil a wide range of ecological roles, and make a substantial contribution to the structure, function and service provision of aquatic ecosystems. Given their well-documented importance in aquatic ecosystems, research into aquatic plants continues to blossom.Â Anthropogenic disturbances in wetland ecosystems can alter the composition and structure of plant assemblages and affect system functions. Extensive oil and gas extraction has occurred in wetland habitats along the. Save to Library.