

## 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 helophytic 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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Cape Lowland Freshwater Wetland is a critically endangered vegetation type of the Western Cape, South Africa. This type of riparian vegetation and its accompanying ecosystem is found in the Western Cape, South Africa, on freshwater floodplains, along the lower stretches of rivers and around seasonal vleis and estuaries. The terrain is typically flat and the soil is rich and silty. It is restricted to a winter rainfall area. Aquatic plants develop explosively large populations only when the environment is altered either physically or through the introduction of pollutants. Investigations in other parts of tropical Africa also indicate that floating and submerged macrophytes do hamper navigation and are detrimental to hydro-electric facilities. Surface water and wetlands, and consequently aquatic plants, are constantly threatened by a number of factors which include: drainage of wetlands for crop production and for public health reasons (e.g. mosquito control), stream channelization and flood control, housing development, construction of dykes and dams, solid waste disposal, discharge of industrial waste and nutrient loading from domestic sewage and agricultural runoff. The Zambezi River, southern Africa's largest river, rises from a swamp at 1400 m altitude on the southern slopes of the South Equatorial Divide. Through an easterly course it flows over nearly 2500 km to the Indian Ocean. Read more. Article. Full-text available. Planation surfaces in the Southern Africa: Evolution and preservation. April 2015 · Geomorfologiya. E. V. Lebedeva. Guinea-Bissau has several kinds of aquatic and wetland ecosystems. A first survey of the flora of these environments is attempted, including its distribution patterns within the taxonomical and chorological groups. More than 300 species, from 49 families, are listed, the Poaceae and Cyperaceae being the most representative families.