

## 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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Invasive aquatic plants: a guide to the identification of the most important and potentially dangerous invasive aquatic and wetland plants in South Africa PPRI Hand Book No 16. Pretoria: Agriculture Research Council 2002.]. They are: water hyacinth (*Eichhornia crassipes* (Martius) Solms-Laubach), Kariba weed or salvinia (*Salvinia molesta* Mitchell), water lettuce (*Pistia stratiotes* L.), parrot's feather (*Myriophyllum aquaticum* (Vell.) In about the same year 30% of the Xakanaxa Lagoon on its southern part, on Maunachira River was occupied by salvinia. By 2000, the weed extended further along the entire length of the 60 km Khwai River. A notable observation in 1996 was the 80% coverage of the weed in Dombo Lake, an important tourist spot in MGR. 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 world's ... Start planning your horticultural exploration of South Africa here. Accommodation on SA-Venues.com is presented complete with reviews, photo galleries and online booking functionality, but allows you to deal directly with each establishment represented. You will be spoilt for choice as the options for accommodation in South Africa are varied and include excellent hotels, lodges, guest houses, smaller B&Bs and many self catering options for you to choose from, such as holiday homes, cottages and apartments. Enjoy your travel planning. South Africa has a long history of managing the establishment and spread of invasive floating macrophytes. The past thirty years of research and the implementation of nation-wide biological and... Reductions in wetland floral and faunal biodiversity are expected. The extent of the alteration to sedimentation processes, hydrology and subsequent wetland ecosystem service provisioning are not known, but are likely to be significant. In South Africa, mechanical control of aquatic plants is not promoted, but there are some examples, particularly in the City of Cape Town where managers have adopted a "zero tolerance" approach to aquatic invasive plants, and deploy mechanical harvesters to remove invasive vegetation, particularly from canals in the city (Fig. 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.