

## 111 Roadside plants

# Stop and have a look!

Text and photographs **Antje Burke**



Blister beetles chewing the large, attractive flowers of the desert broom, *Sisyndite spartea*, one of the most abundant large shrubs in southern Namibia.



Although many hibiscus species are used in gardens, the horticulture potential of Namibia's striking desert hibiscus, *Hibiscus elliotiae*, has not yet been explored.

"My greatest ambition is to make information on Namibia's flora more widely accessible – particularly to the young, upcoming breed of Namibian naturalists who, unfortunately, seem to be heading towards becoming an 'endangered species'. The selection of only 111 roadside plants to write about was not easy, but hopefully readers will find some of their favourite plants in this book, and will enjoy reading about them."

What a strange flower... it's remarkable how many dwarf shrubs there are... what are all these different grasses? Have you ever entertained such thoughts while travelling from one destination to the next through Namibia's vast and largely unspoiled, wide-open spaces? My advice is to stop, get out of your car and take a closer look. You will be well rewarded!

Namibia's flora is fascinating, diverse and special. There are well over 4 000 species, possibly enough to make even the most dedicated naturalist give up in despair! By comparison, the bird diversity in the entire southern African region is only about 20% of the plant diversity of Namibia. On the other hand, we are losing biodiversity faster than ever. It is therefore critical that we know what's out there, before it's too late.

My new book is designed to help in this regard, as it gives a user-friendly and jargon-free introduction to Namibia's flora by illustrating some of the most common plants. While I've entitled it 'roadside plants', we're looking well beyond the road reserve, as it includes plants commonly seen in the wider vicinity of Namibia's most-travelled routes.



Heavily armed to ward off would-be plant eaters, with fruit that is poisonous to humans but not to birds, the thorny solanum, *Solanum rigescentoides*, is endemic to Namibia. It grows largely along the escarpment and on inselbergs in the Namib Desert.





Common throughout the country, sweet-thorn, *Acacia karroo*, has the ability to fix nitrogen through root-inhabiting bacteria, but can only do so when it receives sufficient water.

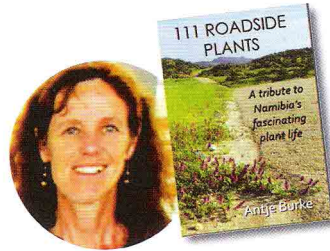
And this is not all: the book is much more than a flower guide. It synthesises the many years of research on Namibia's plant life and presents an up-to-date account of Namibia's vegetation, the distribution of plant species and explanations of why certain plants grow where they grow, and where we are likely to see them.

A wealth of information was gleaned from Namibia's well-catalogued and computerised plant database – not necessarily something to take for granted in a developing country. Without the many 'busy bees' working behind the scenes at Namibia's National Botanical Research Institute, the 111 distribution maps of plants included in the guide would not have been possible.

*Well over 50% of the plants included in this book have some recorded, direct economic use, be it medicinal, for building purposes, or for human consumption.*

Yet, as elsewhere, there are also many threats to Namibia's flora: poor land management, clearing of vegetation for crop farming, the built environment, mining developments, invasive alien plants and illegal collecting of iconic species, such as rare succulents, are all threats to the survival of some of Namibia's plants. Charismatic stem succulents such as the halfmens (*Pachypodium namaquanum*) and the giant quiver tree (*Aloe pillansii*) have been dug up ruthlessly in the past to be planted in gardens. As a result, *Aloe pillansii* is now on the endangered species list. To reverse these negative trends, the new book also provides tools for managing Namibia's plant life better, and includes maps that pinpoint where particular attention is needed.

Above and beyond their all-abundant use as fodder, browse or grazing and firewood, and considering the services plants render to maintaining healthy ecosystems and thus our environment, well over 50% of the plants included in the book have some reported economic uses, whether for medicinal and building purposes, or for human consumption. So there is no question that Namibia's plant life has an enormous and largely unappreciated economic value.



*Having loved plants since early childhood, and worked and lived in Namibia for 24 years, Antje Burke knows Namibian flora well. After completing*

*her PhD at the Gobabeb Research and Training Centre, she worked as a lecturer and then as an environmental consultant. But she never lost sight of her real passion – plant ecological research. Her recent book reflects this, and it is her greatest wish that the book will also entice others, particularly the young generation of scientists, to develop a passion for Namibia's remarkable flora.*

## Did you know?

- That the renowned Namib endemic pencil bush (*Arthroa leubnitziae*) does not absorb fog water, because wax crystals in the furrows of its stems render them water repellent, causing the water to run off, thereby ensuring that the breathing pores of the plant are not blocked.
- That many of Namibia's nitrogen-fixing acacias fight to achieve a balance between water efficiency and nitrogen fixation, and support nitrogen-fixing bacteria only at their roots, where they can obtain adequate water. So under water-stressed conditions, no nitrogen fixation takes place.
- That Namibia has an exceptionally rich endemic flora (well over 600 species), matched only by South Africa in the southern African region. Most of these are restricted to the Namib Desert, having evolved special adaptations to this harsh environment over 43 million years.