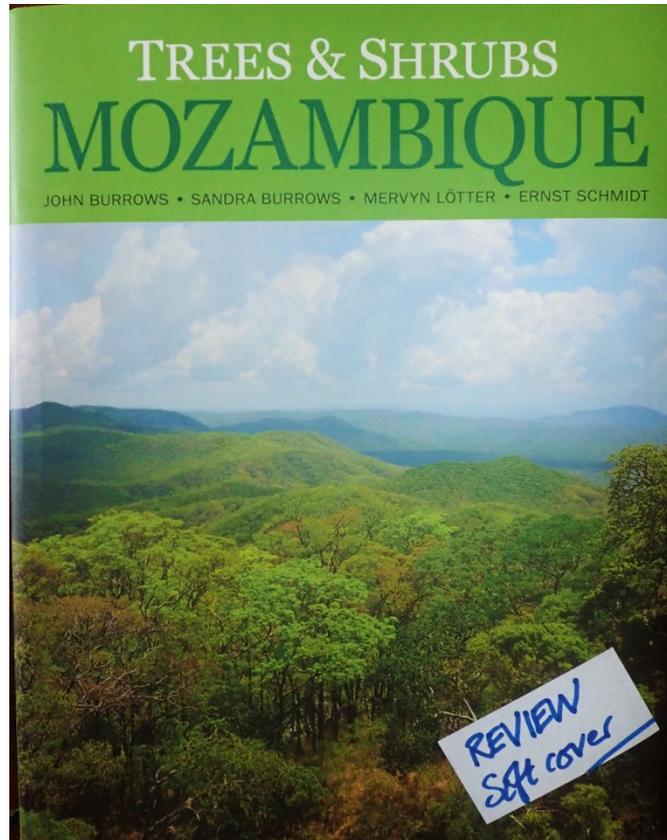


BOOK REVIEW

Trees and Shrubs of Mozambique

By John Burrows, Sandra Burrows, Mervyn Lotter & Ernst Schmidt. Print Matters (Pty) Ltd, Noordhoek, Cape Town, 2018. Pp 1124, illustrated. ISBN 978-0-9922403-7-0 (Hard Cover).



This is a heavy book. My kitchen scales say 3.6 kg (that is my soft cover, review copy not hardback!) and you don't carry that around in your back pack without noticing it! At long last the “Trees and Shrubs of Mozambique” (TSM) has arrived—apparently 15 years in the making, and the result is stunning. Never possible before, the evolution of digital reproduction, brings to this botanical reference book, a delicious splash of photos of all parts and pieces of Mozambique's woody flora. The only book that comes close in photo quality and quantity is Coates Palgrave's *Trees of Southern Africa* (TSA), but that was of an age that had to place the photos in blocks to keep the costs down. TSM gives you 3–4 photos (on average) below each and every species showing (nearly always) the whole plant, flowers, fruits and bark. There is no flipping backwards and forwards to marry-up the description

with the illustrations—it is all there before you. And it is not just the photos—each half page species entry also has a clear distribution map and a line drawing of a leaf (by Sandra Burrows).

This is not just a dry botanical reference book for professionals—the amateur plant lover can troll through to identify a species almost as easily as an expert using the botanical dichotomous keys. But it does beg the question “why would an East African reader want to buy this book” unless he or she was planning an extensive safari through Mozambique. The answer lies in the fact that Msumbiji (the Swahili name for Mozambique) is at the crossroads of many different floras. Geographically it borders Tanzania, Malawi, Zambia, Zimbabwe, South Africa and Swaziland and stretches more than 2000 km end to end. Many of the coastal species are found all the way through Tanzania into Kenya and, some, into Somalia. Many of the inland species, particularly the “Afromontane”, are found all the way to Ethiopia. I did a little exercise by taking the first page of the list of genera on page 1110 of TSM and counting how many DID NOT occur in the EA region. Of 117 on that page, only eight are missing in East Africa, or roughly 93% are covered! Until we have an equivalent book for our area, TSM will be extremely useful in helping with identifications and providing information on many of our woody species.

So how many plants are covered in this weighty book? The intro says 1780 (I have not checked this!) and I was unable to find a figure for TSA, but calculated it was in the region of 1865, BUT TSA only weighs 2.4 kg. So, more weight for less species equates to better value per species!

The book uses a plant family order popular in southern Africa (used in TSA) that is the Engler and Prantl system. Books in our area have tended to use the Bentham & Hooker system or a modified version thereof, as do both the Flora of Tropical East Africa (FTEA) and the Flora Zambesiaca (FZ). This can be a little irritating if you are used to one system and find the other in use but, with the major tsunamis going on at present, both in the evolutionary order and the generic composition of families, it is of no great importance.

The introduction is brief with a quick look at the history of botanical publications and collectors in Mozambique. The Portuguese colonial period has such stars as Torre, Barbosa, Mendonca, Andrada and Cavaco. German botanists Stuhlmann and Schlechter make an appearance, as does the industrious Vice-Consul of Zanzibar, Sir John Kirk. The long period of unrest and civil war after independence is used to explain why the flora was so incomplete up to modern times and why so many new species have been discovered recently (particularly in the north). A brief chapter on vegetation by ecologist Mervyn Lotter (with John Burrows) is illustrated with well chosen, clear photos and gives the dominant species for each. I was a bit confused by the numbering of these vegetation types until I read the beginning, which tells you they link to the vegetation map in FZ by Wild and Barbosa. I think it would have been good to include the map or remove the numbers. There are a few corrections needed in the species names: *Olea capensis* ssp. *hochstetteri* is better known as ssp. *macrocarpa*; *Bombax rodognaphalon* is, I think, changed to *B. schumannianum*; *Swartzia madagascariensis* is now accepted as *Bobgunnia madagascariensis*; *Eugenia multiflora* does not exist unless as a subsp. of *E. capensis*; *Clerodendrum glabrum* has been moved to *Volkameria glabra*.

The species treatments are a delight: I have not had the opportunity of testing the keys, but I'm sure that, since the authors are all field people, the keys will be sensible and practical; a great deal of thought has gone into the knotty problem of how to deal with common names. I sympathise greatly but I still object to the creep of South Africa common names up the continent. I am finding tourist guides in the Maasai Mara referring to

Diospyros abyssinica as Giant Jackal Berry and *Syzygium cordatum* as Waterberry and it makes me very unhappy! I sincerely hope that, over time and with better education, Mozambicans will adopt local names that are more meaningful than those from across the border.

The effort made in tracking down and translating the Latin names deserves great praise. I think it interests most people and goes a long way in helping people remember the scientific names. I have no objection when these translations are then used to develop a common name.

The authors adopt the symbol “*” placed in front of the species name to denote “a species that is not indigenous to Mozambique”. This is often a difficult call, but I would not agree with its use for *Elaeis guineensis* or *Pisonia aculeata*. I have collected the latter in very natural situations in Kenya and would dispute that any human agency had introduced this hooky plant.

The simple, but not too simple, scheme the authors adopted for the species descriptions is clear and not overly botanical. The headings—stem, leaves, flowers, fruits, distribution and conservation—are in bold and draw your eyes immediately to the section you are interested in. The distributions are sometimes a bit SA-centric (no *Cycas thouarsii*, *Ficus usambarensis*, *Pseudoprosopis euryphylla* or *Guibourtia schliebenii* shown for Kenya) but, generally, well researched. The “Conservation Status” has ENDEMIC or NEAR-ENDEMIC printed in red for restricted range species and the IUCN threat category for those plants that have been assessed (and often with a comment about why or how the plant is threatened).

The last section, not present for all entries, is entitled “General” and contains the fun bit. Either a comment how that particular taxon can be distinguished from a closely related one or some snippet of medicinal or ethnobotanical interest. I always maintain that it is this information, if hyped-up a little bit, that sticks in readers’ memories and helps them remember a plant name. I choose a random example to illustrate this point:

“*Albizia versicolor*- young pods very toxic and cause Albiziosis in cattle, which may lead to death in 48 hours of consumption. Wood said to resemble Kiaat (*Pterocarpus angolensis*) and causes sneezing when worked.”

Exceptional families in terms of species numbers and outstanding photographs

Annonaceae—though I query the upper right fruits of *Uvaria acuminata* and there is a typo in *Sphaerocoryne* (should be ssp. *gracilis*). I have a record (*Burrows J* 10751) as *Artabotrys modestus* ssp. *macranthus* and *Luke et al.* 9983 *Uvariadendron gorgonis* (identified by Kaj Vollesen) that didn’t make it into the book.

Capparaceae—lovely informative photos.

Fabaceae—Mimosoideae. Wonderful *Acacia* spp. (50 taxa!). Congratulations to the authors for standing up for African *Acacia*! I’m still smarting from having been the first to find *Acacia latispina* in 2003 and had taken it to Kew to be told by the *Acacia* expert that it was merely a variation on *A. amythethophylla* and not worth describing! Generally, the whole of Fabaceae is great, with good photos to distinguish difficult genera.

Moraceae—the fig section is stupendous as could be predicted following the Burrows’ Figs of Southern Africa, a gigantic publication that appeared some years ago. In this book lies their interpretation of *Ficus thonningii* and explanation for the retention of *F. rokko*, *F. burkei* and *F. petersii*. I’m delighted that I can apply the last name to the ‘weeping’ figs of Baringo with the long-stalked leaves and not call them *F. thonningii*! I do have a problem with *F. modesta*. Whilst flipping through the photos, and without being primed, I looked at the photos for No.34 and wrote ‘looks like *F. ottoniifolia* ssp. *ulugurensis* to me’. This is quite a common species in coastal east Africa, so I feel I know it! Then you read what the

Burrows have to say and realise there is a strong difference of opinion between them and C.C. Berg the Moraceae expert for FTEA and FZ. May the best ‘man’ win!

Rubiaceae—incredibly rich with over 120 pages and with so many photos that even the amateur can get to grips with the bewildering genera. No botanical taxonomist can be fully up-to-date with name changes, indeed, he (she) is totally within their rights to ignore changes and stick to older names, but it becomes increasingly difficult when the changes are backed by genetic sequencing. It also becomes difficult if some changes are incorporated and not others. The Swedish botanist, Henrik Lantz, had good reasons to move *Tapiphyllum*, *Lagnias* and *Pachystigma* to *Vangueria* and this is noted on <http://www.theplantlist.org> that the authors mention (on page 21) as their nomenclature authority of choice. This, in itself, is strange because the Plant List is no longer ‘alive’ *i.e.* kept up-to-date and it is better to use <http://www.ville-ge.ch/musinfo/bd/cjb/africa/> although, in this case, they have NOT updated! However, the changes to *Afrocanthium*, *Empogona* and *Coptosperma* are incorporated.

General points: I think some of the scale bars for the *Xerophyta* drawings must be wrong; there are two species of *Borassus* in Africa, not one; a German researcher has recently returned *Dracaena mannii* in eastern/southern Africa to *D. usambarensis* (and included *D. reflexa*); Chenopodiaceae has been sunk into Amaranthaceae; *Colophospermum* should, at least, have *Hardwickia* as a synonym; I have witnessed *Hymenaea verrucosa* as being deciduous, not always evergreen; *Mezoneuron angolense* should have *Caesalpinia angolensis* (Oliv.) Herend. & Zarucchi as a synonym, if not as the correct name; *Hyptis suaveolens* is now known as *Mesosphaerum suaveolens*; typo in *Solanum aculeastrum*; *Tecomaria* moved to *Tecoma*; *Baccharoides*, split from *Vernonia* not generally accepted (other than *B. adoensis*); *Inhambanella henriquezii* with a ‘z’ according to IPNI; all *Chionanthus* to move to *Noronhia* (?); *Carissa spinarum* for *C. edulis* is fairly well accepted.

What other sections are there? Some ‘Taxonomic Notes’ towards the end dealing with some new species and new observations. A nice glossary, extensive bibliography, acknowledgements, a full index and the “Generic Quick-Guide” completes this mammoth work. I know three of the authors personally (but have not met Ernst Schmidt yet), and I congratulate them, without reserve, for a job well done—fifteen years of hard slog, dedication, stubbornness, doubts and, I’m sure, fun and deep fulfilment! Muito obrigado!

Quentin Luke