

**Book review: Edgar, E. and H. E. Connor. 2000.
"Flora of New Zealand Vol V. Grasses".**

At last, a comprehensive grass flora of New Zealand, that even those of us in (early) retirement have been anxiously awaiting for all of our professional lives. Its completion represents dedication beyond the normal call of duty for its co-authors Elizabeth Edgar and Henry Connor, who both retired from Botany Division, DSIR, more than a decade ago and have served as Research Fellows at Landcare and Canterbury University, respectively, to see the job through.

Compilation of this flora represents the fifth and last in the series on the New Zealand flora and clearly has been the most demanding one of all. It is a real credit to its authors, in terms of both accomplishment and determination. All of the currently known grasses in the N Z Biogeographical Region are included, comprising 157 endemics, 31 other indigenous species, naturalised grasses (226 spp.) and even "transients" (46 spp.), some 460 in all. They have all been treated equally apart from synonymy, which is complete only for the native species. There is a valuable key to the 21 tribes and to each of the genera. Each species predictably has a comprehensive taxonomic description as well as generally brief notes on distribution.

The extended preface (29 pp.) is highly informative, with some content and style that are unmistakably Henry, being both perceptive as well as provocative, even acerbic in places. It is thoroughly delightful and offers great relief in an otherwise inevitably technical production. There are sections dealing with aspects of history; the challenge of unravelling the taxonomy of many of the indigenous taxa (we are told the authors spent "no longer than necessary" on nomenclatorial matters so as to devote as much time as possible to the more demanding taxonomic studies); experimental aspects; floral dimorphism and reproductive biology; typification; biogeography; ecology (e.g.

calcicoles and weediness, including "surveillance grasses"); conservation status (of endemic species); and naturalisation (the naturalised flora exceeds the indigenous component); chromosome numbers; and lastly an insightful, more personal perspective in a section headed "*De Auctoribus*" (about the authors), which I wouldn't attempt to *précis*.

We are also told that "the names of New Zealand grasses reflect nothing of indigenous origin at generic level and there are only two Maori words, "*toetoe*" and "*unarede*" used at specific level. Thus "no political overtones, no conservation ploy, no historic person, event or place is called into commemoration, even though there were many opportunities. Our grass flora is singularly free of overtones."

There is also a valuable 40 page section devoted to "*Annals of taxonomic research*" in New Zealand, as well as 24 very helpful whole-page figures of floral parts of indigenous and exotic grasses plus 12 high quality colour plates that range from landscapes to single specimens, or their more diagnostic parts (e.g. tiller bases of some *Chionochloa* species). There are also two superb plates of dorsal views of florets from 16 species of *Rytidosperma*.

Obviously bugged by the cladists involved in refereeing the many revisions, the authors justify their refusal to accede in terms of the still inadequate, relevant information. In a book of this size and complexity, there are inevitably a few typos and other glitches but these are quite minor and do not detract from this book of great value (which also acknowledges the generous financial support of the Hellaby Indigenous Grasslands Research Trust). I strongly commend this book to the many others who I know have been struggling for decades to acquire a better knowledge and understanding of our distinctive New Zealand grasses. Now there is no excuse!

Alan Mark.