

BOOK REVIEWS

Some Iridaceae of Southern Africa. It was due to an oversight that the review copies of Peter Goldblatt's account of *Moraea* (published in 1986*) and of *Watsonia* (published in 1989**) reached me simultaneously, but having these two considerable volumes to review together invites a quick consideration of work on southern African Iridaceae as a whole.

South Africa is famous for its wealth of Iridaceae, plants of great beauty and botanical interest and now of immense horticultural importance (one has only to mention *Gladiolus* and *Freesia*). The second half of the twentieth century is proving something of a golden age for their study, largely due to the activities of three gifted and enthusiastic botanists. The first of these was Dr Gwendoline Joyce Lewis, who sadly died in 1967 when at the height of her powers; but since then the work has been ably pushed ahead by Professor Miriam de Vos and by Dr Peter Goldblatt. The two volumes now under review are published in the series *Annals of the Kirstenbosch Botanic Garden*, which is a direct continuation of the supplements to the *Journal of South African Botany*, now discontinued. Over the years the combined series has devoted five volumes to accounts of Iridaceae: *Babiana* (no. 3 by G. J. Lewis), *Romulea* (no. 9 by M. de Vos), *Gladiolus* (no. 10 by G. J. Lewis & A. A. Obermeyer) and *Moraea* (no. 13) and *Watsonia* (no. 19) by Peter Goldblatt. All these accounts are illustrated in colour. In addition these same authors have published revisions of other genera in scientific journals: including *Ixia*, *Anapalina* and *Synnotia* by Lewis, *Ferraria*, *Syringodea* and *Tritonia* by de Vos, *Sparaxis*, *Freesia*, *Geissorhiza*, *Homeria*, *Hesperantha*, *Dietes* and some smaller genera by Goldblatt. That list is incomplete but nonetheless bears witness to much commendable effort and achievement.

Turning first to Goldblatt's volume on *Moraea*, this is restricted to the species of southern Africa (here interpreted as including Zimbabwe but not Angola, Zambia or Malawi) and these number 103. The positions of 16 'tropical' African species are indicated in the synopsis of the genus (Table 3, pp. 12-13) and it is interesting to note that these all belong either to subgenus *Moraea* sect. *Polyanthes* or to subgenus *Grandiflora*. The very useful synopsis shows the genus divided into five subgenera, of which the largest, subgen. *Moraea*, is further divided into nine sections (not eight as the numbering suggests, as the no. 6 is repeated). Although *Moraea* is well represented in both the winter and summer rainfall areas, there is virtually no overlap of species, so Goldblatt gives keys for these two areas separately. For each species references, synonyms and type specimens are quoted, there is a description and distribution map and notes on occurrence, relationships and history. For 66 of the 103 species there is a splendid colour illustration (usually full page) from a water colour painting by Fay Anderson. These are not only invaluable as an aid to identification, they provide a wonderful survey of the beauty and the remarkable range of form and colour to be found in *Moraea*. Where no material was available for a painting there is often a helpful little line drawing by M. L. Branch or J. E. Klein.

Strangely, the colour plates are not numbered: they only bear the number of the species illustrated; nor are they listed nor indicated in the index. The reviewer had to turn the pages and count to find out how many there are! One, opposite p. 26, bears neither name nor species number! The production detail that cannot escape a worse criticism is the setting of the indented keys. Despite being printed across the full width of the page, the indentation is so excessive that a sudden jump back to the left hand margin has sometimes been found necessary. Lead 12 (misprinted 12') follows easily on 6' (p. 21), but to find 12' needs careful search because it is masked by 37, which follows it (p. 22) and has been brought back to the margin. This is quite unnecessary. Davis' *Flora of Turkey* provides an admirable example of key-setting. A run of six leads shows a total indentation of 8mm, and gives perfect clarity: in this volume on *Moraea* the same number of leads involves indentation totalling 32mm!

Nevertheless *Moraea* is a splendid volume that can be handled with pleasure. *Watsonia* is designed on a rather less lavish scale (but with equally excessive key indentation). The general pattern of treatment is the same, though here herbarium specimens are cited for each species. There are no species of *Watsonia* north of the Transvaal and this is a complete revision of the

*Goldblatt, P. *The Moraeas of southern Africa*. Pp. xi (unnumbered) + 1-224 + 62 colour plates and 150 line drawings. 33 x 23cm. ISBN 0 620 09974 7, ISSN 0 258-3305. *Annals of Kirstenbosch Botanic Garden*, vol. 14. National Botanic Gardens, Cape Town. 1986.

**Goldblatt, P. *The genus Watsonia*. Pp. ix + 148 + 27 colour plates and 44 line drawings. 28 x 21cm. ISBN 0 620 125179, ISSN 0 258-3305. *Annals of Kirstenbosch Botanic Garden*, vol. 19. National Botanic Gardens, Cape Town. 1989.

genus; 52 species are recognized here, no less than 13 of them being described for the first time. Only five of these are species from the winter rainfall area of the Cape, where the genus is most richly developed; the other eight are all from the Eastern Cape north to the Transvaal, the area of summer rainfall. This distribution of new species reflects the fact that the genus has been sadly neglected in the northern part of its range, a fact not unusual in genera that have their centre of diversity in the winter-rainfall area further south. The *watsonias* of the northern area still require more careful collecting and study, as the author himself is aware (see his notes on *W. pulchra*, p. 82). Perhaps *W. confusa* will also prove to deserve closer study; certainly the remark 'seldom above 1000m' is flatly contradicted by at least the first four collections cited, which all come from above 1500m.

One practice that cannot be commended is the introduction in a printed work of names that are not taken into use and have previously only appeared on herbarium labels. Here we find *W. parvifolia* Lewis under *W. paucifolia* (p. 56), *W. tysonii* L. Bolus under *W. inclinata* (p. 67), *W. elegans* N. E. Br. and *W. imbricata* N. E. Br. under *W. pulchra* (p. 81) and these last two are actually used as handles in describing the variation of the species. This is simply inviting future confusion. If it is necessary to mention a name to dispose of its use on distributed herbarium sheets this can easily be done: for example 'Brown used the epithet *elegans* on some specimens included here under *W. pulchra*'. If that is not necessary, manuscript names should be left entombed in the herbarium. One specific name requires comment: *W. vanderspuyiae*. On the analogy of *Vanda lindleyana* (ICBN Rec. 73Cc) this should be corrected to *W. vanderspuyae*, which is how Mrs Bolus originally spelt it.

Both books are set in double columns, but otherwise the production is good and the misprints that I have noted are not serious enough to warrant comment. Taken together these revisions represent another valuable step forward in the classification of southern African Iridaceae.

B. L. BURTT

Supplement to the Flora of Turkey*. The culmination of fifty years' work on the flora of the Middle East by Professor P. H. Davis was marked by a Symposium at Edinburgh on the flora of South-West Asia at which his friends and colleagues celebrated the imminent publication of this Supplement to the Flora of Turkey. There is, of course, no easily defined end point to reach with a Supplement as there is with a Flora, and the timely completion of the Supplement is all the more extraordinary when one remembers that P. D. and his assistant editors Robert Mill and Kit Tan finished the project without the benefit of Research Council funding which terminated in 1985.

One of the most noteworthy features of the Supplement is the evidence it presents of the powerful stimulus given to Turkish botanists by the publication of this foreign-edited Flora. It is hard to appreciate, from a north-west European viewpoint, what a major obstacle existed to understanding Turkey's own flora when so many of the previously published treatments (written in a plethora of foreign languages) were based on hastily snatched and often inadequately localised plants of the kind which, to quote P. D.'s own words, were '... decapitated by British Consuls riding fast to Trebizond' (Hints for Hard-Pressed Collectors, *Watsonia* 4(6): 283, 1961).

The need for a Supplement was foreseen in the 1960s, and was formally announced at the 2nd OPTIMA meeting in Florence in a paper later published in *Webbia* 34: 135 (1979). Its scope was redefined when detailed plans for the volume were made, not least because it was found to be impractical to compile the thousands of published and unpublished grid square records which were made in recent years. The emphasis given to improvements in the taxonomy of groups treated in the Flora is appropriate, since it provides a more workable framework for future distributional studies.

Certain authors' treatments get short shrift. Whereas, in *Acantholimon*, F. K. Meyer's four new species from the Flora area are given only a brief mention under *A. ulicinum*, his numerous new species of *Thlaspi* (many placed in new segregate genera) are at least listed under un-numbered headings using the combinations in *Thlaspi* made by Greuter and Burdet. J. Ponert fares slightly better, in that one species of *Astragalus* is accepted 'with reluctance' (anyone puzzled by the tartness of this comment should consult A. Huber-Morath's paper in *Bauhinia* 5: 153, 1975), but with well over a page devoted to a demolition of Ponert's 250 other combinations and novelties this hardly represents an endorsement of his scientific method.

The chapter devoted to 'Additional taxonomic literature' (pp. 255-316) updates the floristic bibliography published in 1979 and includes over six pages of references to the non-vascular

*P. H. Davis, R. R. Mill and Kit Tan (eds). *Flora of Turkey and the East Aegean Islands* (Supplement), vol. 10. Pp. xxi + 590. ISBN 0 85224 559 9. Edinburgh University Press, 1988. Price £70.