

## REVIEWS

*An Irish Flora*. D. A. Webb. 8vo., pp. xxx + 250, 160 line drawings. Dundalgan Press Ltd., Dundalk, second edition 1953; 13/6.

The first edition of Professor Webb's *Irish Flora* was of rather limited appeal to the British botanist since it omitted descriptions of all the rarer plants and was intended as an introduction to a flora which is considerably smaller than our own. The second edition has been enlarged in effect by about 50 pages and now includes at least a brief diagnosis of all Irish plants and a fuller, though still 'introductory,' treatment of critical groups. It should therefore appeal to a wider botanical public, though its usefulness to the complete beginner has been skilfully preserved.

The descriptions of species are concise (they average about 5 lines) but clear, and usually adequate for distinguishing the plants in the field. The number of technical terms employed is small and simple definitions of them, often supplemented by reference to the figures, are given in the glossary.

Vegetative characters are extensively and, as far as can be judged, effectively used, particularly in the keys. The key to the ferns is especially notable in this respect and it will be interesting to test it in the field, though it appears to work well in the herbarium. It would have been an assistance to the user if the genera had been numbered in the keys as they are in the text. In families such as *Cruciferae* and *Compositae* one is left, after working through the key to genera, with several pages to search through until (if ever) the arrangement of the genera in these families has been learned by heart.

It will be regretted by many that Professor Webb has continued to give measurements in inches and fractions of inches. These units are much less convenient for the measurement of most parts of plants than centimetres and millimetres, though there is perhaps less risk of errors appearing in the text. It is noteworthy that no dimensions are given for the lemmas and anthers of the species of *Glyceria* section *Fluitantes*, though to anyone using the metric system these provide the easiest means of distinguishing the species.

This is, however, a minor drawback and any botanical visitor to Ireland will find this book very useful and of a convenient size to go in the pocket. It will also prove of great assistance to anyone beginning the study of the British flora, as it provides an easy means of identifying the great majority of our common species.

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*Nordisk Kärlväxtflora I*. N. Hylander. xv + 392 pp., 54 figs. and a map. Almqvist and Wiksell, Stockholm, 1953; Sw. Kr. 58.

The appearance of the first volume of a new critical Flora of the 'Nordic' countries (Finland, Sweden, Norway, Denmark, Iceland and the Faeroes) is an event of major importance for European systematic botany. It is a tribute to the Linnean tradition in Sweden that such an ambitious project could be planned and executed, and this first volume sets a remarkably high standard in format, style and content.

The ten-page Introduction to the work contains much of interest to taxonomists concerning the scope of the Flora, the policy of admission of non-native species, nomenclatural treatment, and the like. Perhaps the most interesting general remarks concern the treatment of intraspecific variation. A glance at the main body of the Flora reveals the detailed nature of this treatment - *Sparganium erectum* L, for example, is given two pages of text and one of fruit illustrations - and the author's policy has been to concentrate attention on variation consisting of morphologically more or less distinct populations of reasonably wide distribution. In this field, as Dr. Hylander states, there is much that is obscure; and he has not hesitated to point out where knowledge is inadequate or entirely lacking. To risk a free translation (p. xiv): 'most Floras seem to me all too easily to give to the reader the dangerous impression that their treatment of systematic questions is final. A Flora must assuredly give as good a presentation as possible according to present knowledge; but it is almost equally important that it should indicate what we do *not* know but ought to!'

This first volume contains the Pteridophytes, Gymnosperms and the Monocotyledons, up and including Gramineae, but excluding Cyperaceae. Some idea of the value of the contents can perhaps best be given by selecting a few examples of the treatment of particular species.

Under *Sparganium erectum* L. (p. 83), already quoted, three subspecies are recognized, viz. ssp. *polyedrum* (A. & G.) Sch. & Th., ssp. *microcarpum* (Neum.), and ssp. *neglectum* (Beeby) Sch. & Th.; a detailed note in smaller type discusses the validity of this taxonomic treatment, giving valuable information on the apparent interfertility of the forms in different parts of their range, and accurate diagnostic descriptions, with illustrations, for all three. A purely nomenclatural point of interest is illustrated by this example; 'the author refuses to adopt the 'type subspecies' rule of the Stockholm *International Code* (1952), believing it to be impossible to reconcile with sound systematics.

*Phleum pratense* L. (p. 336) may be taken as a second example. Here the author has two subspecies *nodosum* (L.) and *vulgare* (Cel.); he discusses the cytological difference but stresses the difficulty of separating morphologically certain forms of the hexaploid from the diploid *nodosum*. A similar 'conservative' view is shown in *Anthoxanthum* (p. 346), where a careful discussion of Löve's diploid *A. alpinum* (quoting also Tutin 1950) shows the author's inability to find the necessary morphological basis for a division into a southern tetraploid and a northern diploid species.

Other notes on intraspecific variation of particular interest to British botanists include *Pteridium* (p. 24) where the larger, softer southern Swedish form is said to be very probably identical with the British one and rather strikingly different from the common Scandinavian plant; *Ophioglossum* (p. 15), under which there is a discussion of the possible identity of the Icelandic variety (occurring around thermal springs) with the British and Atlantic European ssp. *polyphyllum* (Seub.); and *Sesleria* (p. 229), in which is illustrated the remarkable microscopic difference in leaf epidermis between the British and Swedish subspecies.

The choice of text-figures, the majority of which are reproduced from a wide variety of other works (including a few of the excellent drawings from Hyde and Wade, *Welsh Ferns*), seems on the whole to be a remarkably useful one, although, perhaps inevitably, the treatment of groups is very uneven and certain families, which would have benefited considerably (e.g. *Juncaceae*) are not permitted a single illustration.

The author's very considerably knowledge of the taxonomy and nomenclature of cultivated plants ensures that the treatment given, e.g. to the included non-native *Liliaceae*, *Amaryllidaceae* and *Iridaceae*, is informative and up-to-date, although naturally less space and smaller type is given to garden escapes, casuals, etc. The general policy of inclusion seems to be not unlike that familiar to British botanists in Clapham, Tutin & Warburg's *Flora of the British Isles*.

British botanists will also find refreshingly few points where the nomenclature differs from the new British Flora; there are of course the perennial sources of disagreement such as *Potamogeton pusillus*; and the grass genera *Bromus* and *Agropyron* are very differently circumscribed; but there are very few startling innovations such as *Asplenium scolopendrium* and *Arrhenatherum* including *Helictotrichon*.

There can be no doubt that Dr. Hylander has set himself a gigantic task which few could hope to discharge with anything like his ability. Volume 2, to contain the rest of the Monocotyledons, and the Dicotyledons up to the *Polygonaceae*, is well under preparation, and we can only hope that this great and valuable work can be carried through to a successful conclusion with no undue delay.

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