

Bookreview

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FLOWERING PLANTS OF WALES

National Museum of Wales, Cardiff, 1983, 338 pp., 1 + 4 Plates, 7 Tabs., 3 Figs., 3 + 1028 Maps.

The main sources of information on the flora of Wales have so far been the two editions of "Welsh Flowering Plants" by H. A. HYDE and A. E. WADE (1934, 1957). The present work was inspired by them but differs from them substantially in several ways. First, the number of species is more than doubled (increasing from 1343 to 2784). This is due partly to the systematic field research made since 1954 when an extensive mapping programme was launched by the Botanical Society of the British Isles, partly to the taxonomic analysis of some critical genera, such as *Rubus*, *Taraxacum*, *Hieracium*, *Rosa* and the like. The treatment of plant distribution is much more detailed than in earlier works. The system of vice-counties devised by H. C. WATSON in the last century has been retained but at the same time the 10 km square distribution is given for each species. In describing distributions, distinction is made between new records (until the end of 1981), those from the previous editions of "Welsh Flowering Plants", those documented in the herbarium of the National Museum of Wales, introductions, extinctions, etc. Rare species have the initials of their recorders given (for a list of names, see Appendix I) as well as the year of recording and references (see Appendix II). At first sight, the treatment may appear complicated but it is extremely effective and space-saving and not difficult to understand. The presentation of maximum information in a concise form is characteristic of the book.

The book is divided into several parts. The introductory section (40 pages) deals with the history of botanical recording in Wales (including information on the herbarium of the National Museum of Wales) and in the Welsh vice-counties, the composition of the Welsh flora according to the status of the constituent species (native, denizen, colonist, naturalized alien, established alien, introduced species; in the special part, this status is given for each species), the geology of the area with rocks of many different types, origins and ages (some being over 700 millions years old), the effects of climate on plant distribution from the Late Glacial to the present day with changes in soil chemistry and structure induced by chemical pollution, and the geographical components of the Welsh flora. The latter are those recognized by J. R. in 1955. A survey of them will be found in Appendix III and their abbreviations are given for each species in the index, thus confirming the above characteristic of the book as one charged with information. Data given in the index can readily be used in compiling spectra of area types in phytocoenology. The sequence of families, genera and species follows Flora Europaea. It is the first time that Welsh plant names are given for most species. Habitats are described using a simple system of abbreviations.

An important part of the book is 1028 distribution maps (10 × 10 km grid). Wales is covered by 282 squares; unlike the Atlas of the British Flora, coastal squares are mapped separately. Different symbols are accepted for pre-1930 and post-1930 records (it now seems that a later time boundary would be more appropriate), introductions and, in *Hieracium*, for records not verified by specialists. Transparent sheets are provided to show vice-counties, grid squares, geology, altitude and rainfall. A useful supplement is the colour turn-over bioclimatic map of Wales on the frontispiece.

The impression of a serviceable and technically perfect book continues when we close it: colour illustrations of 15 plants characteristic of Wales on the dust-cover with silhouettes and text on the inside confirm the ingenious concept of the work.

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