

REVIEW

K. KUBITZKI (ed.): *The families and genera of Vascular Plants. Volume 1*: K. U. Kramer & P. S. Green (eds.): *Pteridophytes and Gymnosperms*, Springer Verlag, Berlin etc., 1990, xiii + 404 pp., 216 figs. Hardcover. DM 298.00. ISBN 3-540-51794-4 and 0-387-51794-4 (USA).

The first, long-awaited volume of a series that may become as important in our times as Engler & Prantl's *Pflanzenfamilien* have been, if it can be finished within a reasonable time. Authors and especially editors must be congratulated.

The authorship of this volume is shared by 29 collaborators: K. U. Kramer and 20 others produced the Pteridophyte families, C. N. Page the Conifers, L. A. S. Johnson & K. L. Wilson the Cycads, and K. Kubitzki the Gnetales. Chapters on Chemosystematics and on Conservation show another 4 authors.

The classification used in this work, is a monument of simplicity. Pteridophyta (maybe not considered to be a taxon but only a convenient grouping) are divided into 4 classes with the ending -atae (not -opsida as recommended in the Rules!) and these directly in families treated in alphabetical order. Orders are mentioned sometimes but they are not visible in the classification. Gymnospermae are subdivided into two subdivisions, Coniferophytina with the two classes Ginkgoatae and Pinatae, and Cycadophytina with the two classes Cycadatae and Gnetatae.

Although fossil groups are sometimes mentioned in the introductory sections of the groups, they are not treated and not even entered in the classification, so we remain in the dark about the author's views on the systematic position of Voltziaceae, Bennettitales, and Pteridosperms, to mention a few.

Interesting to note is also the complete absence of any illustration that could be interpreted as a phylogenetic diagram. As becomes clear from the text and indeed already from the preface, the intention of the editors and authors is to produce 'conservative' families, to avoid extreme standpoints, but to mention the different opinions that exist about their classification, relationships, and phylogeny.

So this is what is to be expected from this new 'Families': not an authoritative view on higher-level systematics but an objective array of older and newer facts with a discussion on how different people have handled these facts in their systematic views. Its importance seems to be restricted to the level of family and genus and that is exactly what the title promises.

Apart from short general chapters on the higher groups we find in the book descriptions of the classes, families, sometimes subfamilies, and genera. Family descriptions are followed by paragraphs discussing anatomy, morphology, karyology, ecology, distribution, subdivision, affinities, and phylogeny, and by a practical key to the genera. Genera are described with number of species, distribution, and selected synonyms and references. Species names are sometimes given but not consistently. The quite extensive illustration (under the supervision of E. Götz) consists mainly of drawings, some new but mostly taken from older or newer sources, but there are also photographs mainly of plants and some of spores or pollen. For each family (sometimes order) a selected bibliography is given.

Naturally this is not a cheap book, but one certainly gets value for money. At least in my opinion this is one of the landmark publications of our time. C. KALKMAN