
Richard Warren

Gerd Krüssmann, director of the botanical garden in Dortmund, Germany, died in 1980 having made many outstanding contributions to the identification and classification of plants. His most prominent interest was the Coniferae. His first book on the subject, small n size, Die Nadelgehölze, was published in 1955, second and third editions following in 1960 and 1979. After the first two met with great acclaim, Krüssmann prepared a more exhaustive treatise in 1972, Handbuch der Nadelgehölze. The second edition appeared in 1983. Its completion was interrupted by Dr. Krüssmann’s death, but Dr. Hans-Dieter Warda of the botanical garden at Hamburg completed the work. The English translation is by Michael Epp under the auspices of the Timber Press.

A modern German statement of interest in the conifers was ushered in by Ludwig Beissner’s (1853–1927) Handbuch der Nadelholzkunde in 1891. In the dedication to his 1955 volume, Krüssmann gave Beissner full recognition of his pioneer work, and subsequent publications show him to be conscious of the tradition he is part of.

The present volume is the most elegant in format and the first to be translated into English. The translation is superb, but a slight clarification is in order: the English title, Manual of Cultivated Conifers, is etymologically accurate but might be misinterpreted as applying only to cultivated plants. This is not so. The book includes all conifers of whatever origin and is surely the most exhaustively complete modern work available on the subject. The German title, Handbuch der Nadelgehölze, carries no implication of restriction to cultivated plants.

The book is certainly the most up-to-date of any possible competitors. The classification the author uses arranges the conifers into six families, the Taxaceae being in a different order, the Taxales. He includes in addition the other gymnosperms, touching in some depth on the Taxales and to a lesser extent on the Gnetales.

The scope of coverage of the subject reaches from the fossil record to such recently described genera as Microbiota, Falcatafolium, Dacrycarpus, and Decussocarpus. Chrysolanx is mentioned as a modern synonym for Pseudolarix.

The listing of infraspecific forms and cultivars is outstandingly comprehensive. For example, the sum of the cultivars of Chamaecyparis lawsoniana is 241, 25 more than in the 1972 edition and 42 more than in Den Ouden and Boom’s Manual of Cultivated Conifers, published in 1965.

A helpful feature of the work are the hardiness-zone maps of Europe and Asia as well as of North America, and the small-scale, but clear, maps of the ranges of most of the genera and of the important species.

The illustrations are profuse and well
selected, aimed primarily at instruction rather than decoration. They are drawings and silhouettes of cones, leaves en face and in cross section, buds, all done in heavy black lines and shadings, several in one display for comparison. They serve their purpose admirably, but one feels that a more delicate technique would have been more pleasing. The author has included many excellent black-and-white photographs, mostly of foliage and plant habits.

The authors have used as aids in the identification of the plants not only keys, where the dichotomous descriptions are often guided by symbols rather than numbers, but tabular treatment of the contrast between characteristics of the species within a genus. This latter technique is helpful, for it is often less demanding on the reader's eye.

There is a good section listing botanical terms and their meanings in English, French, Dutch, German, and Latin. This was not present in the 1972 edition. It is supplemented by a table focusing on terms used in the book itself, arranged in the order of the conventional handling of descriptions: habit, stem, leaves, flowers, cones, seeds, "fruits."

The authors have carried on the custom of listing important collections of conifers around the world, a very beneficial step for rounding out the reader's knowledge and a useful guide to travel or correspondence in the field of conifers.

There is one inconvenience, not really a defect or major drawback. Readers of books in English are accustomed to a comprehensive index at the end of a work. Relying on the alphabetical arrangement of genera (which obtains in this book) involves more turning of pages than with an exhaustive index, even though space obviously is saved by the present method.

Krüssmann's *Manual of Cultivated Conifers* is a volume that anyone working with conifers, whether a beginning student or a mature expert, should have available for reference. We are grateful to have it now in English translation.

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Opposite. Cones of several species of Keteleera, a genus of tall, evergreen trees of Abies-like appearance from China and Taiwan. In cultivation, the trees are often only shrubby in habit. From *Manual of Cultivated Conifers*, by Gerd Krüssmann.