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BOOK REVIEW

PANKHURST R.J.: PRACTICAL TAXONOMIC COMPUTING. Cambridge University Press, Cambridge, 1991, 202 pp. ISBN 0-521-41760-0. Price 32.00 GBP.

The identification of biological objects is a problem with which Richard Pankhurst is concerned daily in his work at the Natural History Museum, London. Since 1970 he has been publishing computer programs which assist with the construction of keys to identification and with other identification methods.

The book explains concepts of classification and identification of biological objects and the use of databases to enter, store and use taxonomic data. It describes a variety of conventional identification methods and states the rules of their construction by the most effective way and of the selection of alternatives.

In the main chapter existing computerized techniques are described: for preparing the data in a proper format (for example suggesting the use of the DELTA format as a world standard), the use and statements of on-line identification, construction of printed keys, either automatically or in a dialogue with a specialist, the use of computerised or printed matching methods, preparing punched cards and other special techniques.

The book is completed with a list of possible applications of any of the computer methods. There is a brief description of expert systems which resemble the identification programs. All the methods are illustrated with real examples, mainly with identification of plant taxa.

R. Pankhurst is also the author of a program package PANKEY, which enables the user to prepare his own taxonomic databases and to use a majority of the methods described in the book, in his PC. The package is sold with practical useful example data – the British species of orchids – with colourful whole-screen images.

Both the book and the program are recommended to all research workers who require the preparation a key to identification of species or other objects and to the lecturers teaching taxonomy.

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