

Book reviews

D.J. Collins, C.C.J. Culvenor (Eds.), *Phytochem Australia: A Database on Australian Plant Chemistry 1940–2000*, CISRO Publishing, 2003, ISBN 0643066322

Australia contains a large and varied flora, much of it endemic to Australia, which contains many compounds of chemical and medical interest. In 1940, the CSIRO initiated a phytochemical survey, continuing until the mid seventies, originally intended to find medicinal plants to aid the war effort. With the increased interest in phytochemistry in recent years, chemists from outside Australia have also published many papers dealing with the extractives of Australian plants.

This database attempts to include all such papers published between 1940 and 2000. The contents is believed to include all relevant papers published in Australia, but the coverage of external papers is not complete, the total number of references is some 2700.

The database contains a number of tables, including a bibliography, which is alphabetically listed by the first author; an author index; a plant species index, listed by species, family and genus; a compound index, mainly consisting of trivial names, except where the authors have used a more systematic name; and a compound type index. Where a paper deals with more than one species, it is not stated in which species a given compound is found.

I have three criticisms of this database, one of which is less significant than the others. The less important one is that many of the papers included are of the kind where a large number of plant species are scanned for some type of compound, using a reagent that is not specified in the abstract. Such papers have their uses, mainly as

a source of ideas for future work, but always seem to the present writer to be rather disappointing when found in a literature search. Of the other two, one is the failure to include all papers in non-Australian journals. Thus, a paper by the present writer including chemicals extracted from *Owenia acidula* (Phytochem. 1992, 31, 4163) is not included. Thus using this database one can never be certain that one has not missed something important. The other criticism is of the paucity of the information given, including the lack of non-trivial names or structures, rather in spite of the pretty structural formulae illustrated on the case. In Australia, one may well have access to the necessary original journal, but this is less certain overseas, which means the searcher is driven to Chem. Abs. or some suitable dictionary. In this case one might perhaps as well have looked there first.

The database undoubtedly contains a great deal of information in a readily accessible form, and if it were provided cheaply there would be a good case for having the C.D. available for at least a preliminary search. However, at the price listed, it seems to the reviewer to be rather expensive and uncertain and unless one has a set of the less usual Australian journals at hand, I doubt if it will prove of much real use.

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D. Arora (Ed.), *Handbook of Fungal Biotechnology*, second ed., Marcel Dekker, Inc., New York and Basel, 2004, ISBN 0-8247-4018-1, p. 592

The Handbook of Fungal Biotechnology is a collection of essays on a wide range of topics in fungal biology. The book is divided into four sections. The first includes papers on basic aspects of mycology biology with a strong emphasis on cellular and molecular biology. The subjects are rather mixed and range from general topics such as the description

of hyphal organisation that is so typical of many fungi, biology of the fungal cell including nuclei and mitochondria, fungal genomics and three chapters on metabolism, its regulation and aspects of signal transduction. This section has also five chapters that review practical aspects of genetic manipulation and analysis of fungi. Chapters that were particularly pleasing to read and informative included a very personal account of research into the cytology of the fungal nucleus by Ben Lu and an excellent discussion on (in)stability of the fungal genomes, by John Clut-