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Book Review

Plant Resources of South-East Asia No. 12 (1). Medicinal and Poisonous Plants 1

L.S. de Padua, N. Bunyapraphatsara and R.H.M.J. Lemmens. Backhuys, Leiden, 1999, pp. 711, numerous botanical and some chemical line drawings, bibliography, indexes (compounds, pharmaceutical terms, scientific plant names, vernacular plant names), hardcover, ISBN 90 5782 042 0 (350 Dutch Guilders — ***ca*** US $180)

PROSEA (Plant Resources of South-East Asia) is an interdisciplinary, international programme, focusing on plant resources in South-East Asia and has co-ordinating offices in Indonesia (Bogor) and the Netherlands (Wageningen Agricultural University). These plant resources include numerous agricultural and silvicultural products. So far volumes on edible fruits and nuts, dyes and tannin-producing plants, forages, timber trees, rattans and the like have been published. PROSEA's goal is to make the wealth of dispersed knowledge on plant resources of South-East Asia available for education, extension, research and industry. This goal is achieved mainly by publishing a multivolume handbook and a data bank.

The 12th volume is dedicated to medicinal plants. It will consist of three parts with the medicinal plants being grouped into the three parts based on their respective pharmaceutical importance. The first part which is reviewed here includes monographs on 92 taxa (species and genera) which yield widely used medicinal drugs. These include native species as well as ones introduced from other continents and now widely used or grown in South-East Asia.

In an extensive introduction an overview of the medical systems of the countries involved in the PROSEA project, the groups of natural product of relevance in phytotherapeutic preparations, chemotaxonomy, ecology, agronomy, harvesting, post-harvest handling and conservation is given. This chapter cannot (and indeed does not intend to) give a complete overview of the respective topics. Instead it provides the reader with the background required for understanding the subsequent drug monographs.

The genus *Plantago* may serve as an example for such a monograph. The major species used, their vernacular names in the national languages of South-East Asia and English, the distribution, uses, botanical description and — if applicable — the production and trade, properties, adulterations and substitutes, growth and development, ecology, propagation and planting, husbandry, diseases and pests, harvesting yield (of the drug), post-harvest handling, genetic resources and breeding as well as the prospects for further development are discussed. Great care is taken to list the relevant literature for each species. Small but precise botanical line drawings and in some cases chemical structures are provided in many cases, too. Native South-East Asian (e.g. *P. asiatica*) as well as introduced species (e.g. *P. major*) are discussed. In the example given a total of four pharmaceutically relevant species are presented.

The information generally is detailed and all relevant data are included. The species selected as the most important medicinal plant from South-East Asia seem to be the ones which really deserve particular attention. The data are well presented even though it is sometimes difficult to find the specific information one may be looking for in the often overlapping categories of a monograph. It might have been better to use a more hierarchical organisaton of the information. But more importantly, the goal to unite the information on South-East Asian useful plants scattered through a large number of very diverse sources has been achieved. The dedicated phytochemist may find that not all information relevant to her/him has been included, but this clearly would be beyond the scope of this excellent book. Since the book contains a wealth of information relevant to researchers and practitioners in a variety of fields it will hopefully find a wide distribution with ecologists, biologists, natural product chemists, agronomists and the like. It should also be available in every research library focusing on tropical plants, economic botany, medicinal plant studies and ethnobotany/ethnopharmacology.

Exclusively for developing countries a cheaper paperback edition (US $25.00, ISBN 979-8316-27-4) is already available from the PROSEA Network Office

(P.O. Box 332, Bogor 16122, Indonesia). Another paperback edition of this important volume will to be published in 2001 (approx. 140 Dutch Guilder or US $65.00).

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Biotechnology
Second completely revised edition. Edited by H.-J. Rehm and G. Reed in cooperation with A. Pühler and P. Stadler, Vol. 5a, 1998, pp. 562, Volume Editors A. Mountain, U.M. Ney, D. Schomburg: Recombinant Proteins, Monoclonal Antibodies, and Therapeutic Genes. ISBN 3-527-28310-2. Wiley-VCH, Weinheim, Germany, 545.-DM.

The series Biotechnology of VCH aims to give an overview of the state-of-the-art for a broad range of people working in biotechnology and related fields. Volume 5a covers in the first part some basic aspects of protein structure and function, technical aspects related to inclusion bodies together with recent examples of medical and industrial applications of recombinant proteins. The second and more detailed part is devoted to monoclonal antibodies, mostly in medical applications but including a chapter on immunoaffinity chromatography, and ranges from basic principles of antibody engineering and expression to clinical case studies. The third part provides an overview of the emerging field of gene therapy with an introduction to the concept and overviews of established viral and non-viral delivery systems. This part includes also overviews of the regulatory mechanisms, mostly in the US and the EU, to be considered for antibody and gene therapeutic applications. This wide range of topics is mostly covered by a more or less comprehensive review of presently established projects and applications, briefly discussed but referring the reader to the primary literature, covered approximately up to 1995–98, for details.

As biotechnology is a quite fast developing field, the book, as well as the corresponding chapter, is, in the words of one of the authors (p. 173), '...like a snapshot in a family photo album, serving to document events of the past...'. But in enumerating the present concepts and applications it can provide the reader with valuable reference points to be followed up for details and future developments in the primary literature and/or by using the information available on the web. On the other hand this may be one of the weak points of the book as beginners in the field probably would prefer, at least in some instances, a broader conceptual discussion including the present limitations and expected trends, while people already working in the field may be more interested in the details of specific topics. On the whole it is a comprehensive reference book for people active in, and already familiar with, some aspect of biotechnology but wanting to keep up with recent developments in related topics.

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