BOOK REVIEW

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A Review of *Plant Drug Analysis*

REFERENCE: Wagner, H., Bladt, S., and Zgainski, E. M., *Plant Drug Analysis*, Springer-Verlag, Berlin, 1984, 320 pp., $58.00.

The 170 color plates in this book are of art book quality and the graphic organization deserves a design award. The book is a pleasure to own and peruse. However, the effort and expense to produce these features were, I expect, for more practical than aesthetic purposes. The extraordinary color photography and reproduction have the goal of matching the true colors of the striking fluorescence and color reactions seen in thin-layer chromatography. This book achieves this better than any other this reviewer has seen before. The book will function as a useful handbook for identification and interpretation of composition of plant products, especially for those laboratories who have the duty of assaying medicinal plant products for meeting pharmacopeia standards. All laboratories that have occasion to assay plant material for the presence of pharmacologically active compounds will find this a useful addition to their reference shelf.

The graphics design also has a practical function. It allows rapid location of the botanical and chemical information on each plant as well as unambiguous indentification of the thin-layer bands displayed on the facing pages. The entries include helpful direct information on chemistry of the plant components as well as extraction and sample preparation notes. Solvent systems and conditions are given for each plate.

The organization of the entries by drug properties, then plant groups, and finally species and variants illustrates for the student of pharmacognosy the organizing principles of the field and many precepts. The heuristic value of the book is enhanced by the inclusion of chemical structures for the active components of the plants. For instance, the reader finds that many different plant species produce the same chemical compound, that plants often contain pharmacologically active compounds of strikingly different chemical properties, and that the same species from different locations or obtained at different seasons contains different amounts of the active components.

Many books are available on the history, folklore, and mythology of plant drugs, but very few can be found on the scientific aspects of the subject. This book presents a fine reference on thin-layer chromatographic analysis of the chemical composition of plant drugs and comprehensive laboratory notes to enable individuals to reproduce the experimental results. It is no doubt meant to be used in the laboratory and will be very valuable for that purpose.

The book has very little in the way of explanatory text. There is no mention of pharmacology of the chemical substances discussed. It presumes an extensive education in chemistry pharmacy or pharmacology and advanced laboratory skills. There are few references in the book and none in the text. People who are not fascinated by the chemistry and analysis of the plant sources of our modern day medicines or intrigued by the potential of plants to provide the basis of tomorrow's medicines will find this a boring and overly technical book.

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