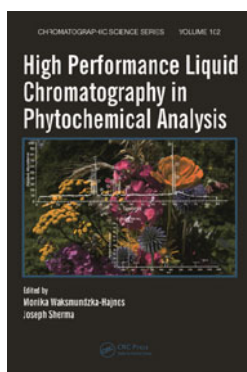


Monika Waksmundzka-Hajnos and Joseph Sherma (Eds.): High Performance Liquid Chromatography in Phytochemical Analysis

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Bibliography

High Performance Liquid Chromatography in Phytochemical Analysis
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This is another of this publisher's large compendia weighing 1.9 kg. To adapt a well-worn football cliché, it is a book of two halves (albeit of slightly unequal size). The first half consists of 15 chapters on the “how” and “why” of HPLC applied to phytochemical analysis which vary from pedestrian to excellent. For example, Chapter 4 on taxonomy (or chemisystematics as the authors prefer to call it) is a good description of the subject and its importance in the study of phytochemicals whereas Chapter 6 on “Sample Preparation of Plant Material”, whilst there is nothing wrong with it per se, contains material that can be found more fully in numerous other texts such as those recently reviewed by Ramos in *Chromatographia* (72, 11/12 December 2010, 1235 & 1237). Similar comments could be applied to many of the other chapters in this first part of the book. A more positive comment is that each chapter gives numerous and mostly up-to-date references to the topic described.

Part 2 is a totally different and rewarding book consisting of 19 chapters on the composition of a variety of groups of compounds and metabolites derived from plants, starting with three chapters on primary metabolites (carbohydrates, lipids, amino acids, peptides and proteins) and then a further 16 chapters on secondary metabolites (shikimic acid derivatives, isoprenoid and amino acid derivatives and ending with polyacetylenes and quinonoids). The scope of the book can be gathered by this abbreviated list of the types of compounds, covering as it does a vast area of organic chemistry. Each chapter is an authoritative account of the individual subject with many up-to-date references. One could make some quibbling criticisms, e.g. under “Secondary Metabolites, Shikimic Acid Derivatives” the shikimic acid pathway could well have been described. Although it has been covered in other texts, it would have done no harm to repeat it here, considering some of the rather trite information included in Part 1. The inclusion of mono and sesquiterpenes is slightly questionable since many (most?) of these compounds are volatile and readily amenable to GC. However, these are minor criticisms of a book which, after a rather disappointing first part, really does develop into an outstanding reference work for all those interested in phytochemicals (which must include all the pharmaceutical companies). The index is not as comprehensive as I would have liked—I believe that first time round I came across several pages on artemisinin but could not find it again from the index.

The largest group of contributors are Polish colleagues of one of the editors, but overall there are contributors from no less than 18 countries. Considering that nearly all of these are non-native English speakers, the text contains very few infelicities, none of which are important to the meaning. This is not a cheap book but one that I can recommend as well worth the cost.

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