Dashek, W.V. (ed.): **Methods in Plant Biochemistry and Molecular Biology.** - CRC Press, Boca Raton - New York 1997. 457 pp. USD 79.95. ISNB 0-8493-9480-5.

This book has been designed for trained scientists as a laboratory manual. The editor has brought together a wide variety of contributing authors to cover the full range of plant biochemistry, including selected areas of plant molecular biology. The contributions come from active investigators who present methods and procedures within the framework of their own research projects. Unfortunately, the result is a rather unbalanced mixture with significant differences in the quality of the chapters. According to Preface, the editor's aim was to write a laboratory manual. This is apparent especially from his own contributions, which surprisingly make more than one third of total number of chapters (14 from 35). The only problem is that most of them is uneasy to survey as high number of schemes, chemical formulae, and protocols makes them difficult to comprehend. I think that at least two chapters would be better to leave out completely (chapters 29 and 30).

The book is divided into four parts along traditional lines such as Structure, Chemistry, Metabolism, and Plant Molecular Biology. Nevertheless, sometimes it is not easy to decide what was the key for a particular chapter placement (*e.g.* chapter 28). Part I, Structures, consists of three chapters describing methods for study of wood structures and wood-deteriorating organisms. Part II, Chemistry, collects methods and procedures concerning isolations, assays, and characterization of different biomolecules such as sugars, plant hormones and regulators, metabolites of secondary metabolism, plant pigments, *etc.* The best chapters in this part were prepared by Clausen and Green (immunochemistry), Lightfoot *et al.* (cytokinin analysis), and Martinson and Plumley (pigment-protein complexes). These chapters are well written and they bring beside useful protocols and references also other important facts, which reader really misses in editor's contributions. Part III, Metabolism, contains chapters dealing with various metabolic pathways and enzyme assays. Chapter on sugars written by Highley and chapter on fatty acid metabolism from Guerra and Dziewanowska belong to the best ones. In Part IV, Plant Molecular Biology, five chapters describe methods of plant genetic transformation, molecular analysis of regulatory elements and using antisense RNA.

The majority of chapters written by active researchers present a relatively up-to-date summary of methods used for investigation of their particular research tasks, and in some cases point out directions for future. In summary, it will be of most interest to researchers, from postdoctoral students upwards, who have interest in plant biochemistry and molecular biology. They can find here useful protocols for their own research.

H. SYNKOVÁ (*Praha*)