

Rosenthal, G.A., Berenbaum, M.R. (ed.): **Herbivores - Their Interactions with Secondary Plant Metabolites. 2nd Ed., Vol. I: The Chemical Participants.** Academic Press, San Diego - New York - Boston - London - Sydney - Tokyo - Toronto 1991. 468 pp. US \$ 99.00.

The first edition of this book in 1979 has been divided into two parts: I. Ecological and evolutionary processes, and, II. The chemical participants. The second part has been now considerably updated and renewed in Vol. I of this edition. The chemically based interactions between plants and their animal feeders have always created favorite objects of studies in chemical ecology. The aims of these studies have been mostly oriented towards possible use of the plant secondary substances as ecologically safe pesticides or pharmacological preparations. In this new edition, these practical aspects have been accentuated, especially in relation to the invertebrate herbivores such as are insects. The recently available phytochemical data have been successfully combined with new pharmacobiological findings. The topics of this new edition include first of all traditional problematics of the plant allelochemicals, which were treated already in the first edition. In addition to these updated and modernized old chapters we can find some new and very interesting problematics related to coumarins and cardenolides. For a more detailed information on the topics of the book it may be perhaps useful to list the contents of individual chapters. These include the following groups of the plant allelochemicals: nonprotein amino acids; cyanide and cyanogenic glycosides; alkaloids; glucosinolates; terpenoids; coumarins; cardenolides; iridoid glycosides; lectins; tannins and lignins; flavonoid pigments and insect hormones and antihormones.

It is obvious that the above topics cover a major part of the plant secondary substances. The information presented in this volume is needed for a number of workers including (as the authors suggest), evolutionary biologists, agriculturalists, crop protectionists, natural products chemists, physiologists, chemical ecologists, biological chemists, and plant and animal ecologists. In addition to the above professionals, fascinating stories about the interactions between plants and herbivores would certainly be enjoyed by ethologists and by a broad spectrum of environmentalists. Congratulations to the authors; looking forward to see the Volume II.

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