

Romberger, J.A., Hejnowicz, Z., Hill, J.F.: **Plant Structure: Function and Development. A Treatise on Anatomy and Vegetative Development, with Special Reference to Woody Plants.** - Springer-Verlag, Berlin - Heidelberg - New York - London - Paris - Tokyo - Hong Kong - Barcelona - Budapest 1993. XIX + 524 pp. Hardcover DM 298.00.

The book appeared in cooperation of two authors from the U.S.A. from Beltsville Agricultural Research Center - West, Beltsville, Maryland, and one from the Silesian University, Katowice, Poland. This book is focused on vegetative growth and development of plants, especially of woody plants. The text of the book is divided into two main parts: 1) Functional Anatomy (11 chapters), and 2) Developmental Anatomy (10 chapters). The chapters on Functional Anatomy started with an introduction to a little bit history in the spirit of Haberlandt's (1924) "Physiologische Pflanzenanatomie" followed by the explanation of some terms as, *e.g.*, cell wall, symplast, apoplast, and morphological classification of plant tissues. Next topics were the main plant systems as protective systems, absorbing systems, supportive systems, photosynthetic systems, storage systems, transporting systems, secretory and excretory systems, aerating systems, movement systems and positional perception, and intra-organismal communication systems. Simultaneously structure of these systems and their functions were treated. Part 2 included chapters on cellular aspects of development, leaf development, root development, the vascular cambium, secondary xylem, secondary phloem and periderm development. A list of approximately 1220 references and a subject index were added. The illustrations are drawings of good quality. One might have expected more numerous illustrations in a book on plant structures. But this is an advanced textbook intended for those who have already studied anatomy and development of plants. It is addressed to advanced students, teachers and researchers in the field of botany, forestry, horticulture, agronomy, ecology and related fields.

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