

Lack, A.J., Evans, D.E.: **Plant Biology**. - BIOS Scientific Publishers, Oxford 2001. 332 pp. GBP 14.99. ISBN 1-85996-197-5

Instant Notes Series is the useful series of textbooks for undergraduate students and this book covers all important areas of plant biology. Its scope and depth are suitable for a first year undergraduate students. The knowledge obtained from this book enable them easy access to the core information in the respective fields. Plant biology changes radically in the last two decades due to a new information deriving from techniques in molecular biology. This deepened understanding of many plant processes, opened possibilities for plant biotechnology and shed new light on the relationships among plants, and among plants and other organisms. All these modern approaches are reflected in this textbook.

The book is divided into four major parts: Structure (Sections B - D), Physiology and regulation (Sections E - J), Ecology, genetics and wider significance (Sections K - O), and Plant Diversity (Sections P - R).

Three section of the first part describes ultrastructure of the plant cell and its organelles, and the anatomy of vegetative and reproductive plant parts. The second part starts with brief description of *Arabidopsis* and other

model plants. It continues with sections devoted to growth and development, biochemistry of growth regulation including action of phytohormones, photomorphogenesis, tropisms, floral development and reproductive physiology. Further sections deal with water relations, mineral nutrition, photosynthesis, respiration, and metabolism of sugars, amino acids, lipids, and secondary products. The third part offers basic knowledge from ecology and describes interactions between plants and other organisms. This part includes also human uses of plants. The last section of this part is focused on genetic engineering and biotechnology. The section of the fourth part survey main aspects of plant systematics and mechanism of evolution.

The book format is ideal for learning and rapid revision. Each topic begins with a summary of the essential facts, followed by detail explanations accompanied with numerous clear and simple illustrations. Further reading at the end of the book offer useful sources of more detail information.

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