

REFERENCES

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BOOK REVIEWS

JACOBS, W. P.: *PLANT HORMONES AND PLANT DEVELOPMENT*. — Cambridge University Press. Cambridge—London—New York—Melbourne 1979. 338 pp. Hard cover £ 18.00, paperback £ 5.95.

This book is written by Professor of Biology at Princeton University who is well known for his extensive research into all the plant hormones. The book is designed for advanced undergraduate and beginning graduate students of biology. The book shows great experience in teaching this subject. It covers the most important aspects of plant growth and development, with the plant hormones controlling them. The biological aspects of hormone action are discussed briefly, physiology and anatomy of action being emphasized. The auxin action is discussed particularly in the chapters devoted to polarity, phototropism, apical dominance and differentiation of vascular tissue. Cytokinins are treated as an integral part of control of bud production, leaf growth and leaf senescence and control of cell division. The gibberellins are presented in connection with the development of theories on regulation of floral development, whereas the action of abscisic acid is described in the chapter of abscission and senescence. On the background of this basic plan a well-balance overview of the interaction of different hormones in all the discussed aspects of plant development is given.

Polar movement of hormones, which lies in the centre of author's own research, is discussed thoroughly in a separate chapter. The author uses the historic approach because, as he says: "The presentation only of the current opinion as to the finished theories distorts the students' understanding . . . it presents a fixed and frozen body of knowledge, whereas the knowledge of science is in fact fluid, challengeable and incremental". The problems are discussed critically, including the most recent findings and theories, the perfection of methods being strongly stressed. A description of the most important methods and an extensive bibliography of selected papers is supplied. The book presents the up-to-date state of developmental plant physiology. Though designed for beginners in science it is useful for the advanced scientific workers engaged in developmental biology. Reading the book one feels with the author that: "aside from art there is probably no human activity where one can approach as close to perfection as in beautifully planned, executed, and interpreted series of scientific experiments".

FRIDETA SEIDLÓVÁ (*Praha*)

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Fundamenta Scientiae is the new international journal for critical analysis of science and the responsibility of scientists, published quarterly by the Pergamon Press Ltd. Papers in English and French will be interesting for many kinds of scientists. Fundamenta Scientiae explores problems of interest both to members of the scientific community and to the educated layman, that is the function and foundations of science. By removing the blinkers of specialization the journal will establish the relationship between the sciences placing them in their overall context. Another of the chief topics will concern the need of a constant redefinition of the ever-changing relationship between science and philosophy.

This Journal will include a limited number of book reviews. All issues will contain a list of articles to appear in the following issue.

J. ČATSKÝ (*Praha*)