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BOOK REVIEW

MAYER, A. M., POLJAKOFF-MAYER, A.: **The Germination of Seeds.** — Pergamon Press, Oxford—New York—Toronto—Sydney—Paris—Braunschweig 1975. 192 pp.

In the first edition of this monograph the author critically treated the available information about knowledge of germination of seeds gained in the last 50—100 years. The completely revised second edition again presents an overall view of the morphology, physiology, ecology and biochemistry of the metabolic processes of seeds in general, with particular emphasis on the nature of the germination process. This second edition brings many news, especially in the field of unsolved problems of seed germination, though the original structure of the book in general has been retained.

The first chapter "The structure of seeds and seedlings" is illustrated by perfect figures on glossy paper. While the second chapter "Chemical composition of seeds" and the third chapter „Factors affecting germination" are changed almost negligibly compared with the first edition, the next fourth chapter „Dormancy, germination, inhibition and stimulation", fifth chapter "Metabolism of germinating seeds" and especially the sixth chapter "The effect of germination inhibitors and stimulators on metabolism and their possible regulatory role" contain new subsections, dealing with dormancy-inducing hormones, metabolism and especially protein and nucleic acid metabolism and information on the metabolic effects of growth promoters and inhibitors such as gibberellic acid, cytokinins and abscisic acid. A section on seed establishment has been added in chapter seven "The ecology of germination".

This well printed book is a monograph for advanced undergraduate students in biology, agronomy and botany and will be also useful to research workers. Its usefulness to botanists is evident. The significance of metabolites of germinating seeds in the colonization of the seedlings' roots with microorganisms in soil is well known, and since the metabolites of germinating seeds are important in plant nutrition and health this book is useful also to soil microbiologists and phytopathologists.

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