préciser quelle est la contribution que l'absorption du P à partir du milieu externe, telle que nous venons de l'étudier, apporte à la nutrition phosphorée globale de la plantule.

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BOOK REVIEW

STANLEY, R. G., LINSKENS, H. F.: **Pollen.** — Springer-Verlag Berlin, Heidelberg, New York 1974. 307 pp., 59.80 DM.

Pollen transmits the male genetic material in sexual reproduction of all higher plants. It is also a suitable research tool for studying many patterns of plant metabolism and, in addition, a sound knowledge of pollen may help plant breeders in their effort to improve the world's food supply. This volume focuses upon pollen biology and chemistry; it attempts to integrate these facts with management practices involved in pollen applications.

The book includes 3 main sections. The first part — Biology — deals with the development of the pollen from the meiosis up to the origin of spermatic cells. The question of the formation and function of the pollen wall is considered in relation to the maturation of the pollen grain.

The techniques of collecting and preserving pollen are dealt with the second section — Management. Observations on the pollen viability of about 80 species stored at low humidity and a low temperature are reviewed in detail. The authors discuss the application of *in vitro*, *in vivo* tests and non-germination assays for the assessment of the pollen capacity to germinate and grow normally. The use of pollen as human food supplement of nutritional and health benefit is the subject of the chapter — Nutritive role of pollen.

The last section — Biochemistry — with 9 chapters occupies two thirds of this book. The individual chapters describe chemical analysis and function of minerals, carbohydrates including starch content, callose and cellulose, then organic acids and lipids, amino acids, enzymes and growth regulators and pollen pigments. A separate chapter is devoted to pollen alergens, human reaction and preparation of extracts.

The book is written in a good style, is instructive and clear. The text is illustrated with 64 figures and 66 tables.

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