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BOOK REVIEW

BAJAJ, Y. P. S. (ed.): *BIOTECHNOLOGY IN AGRICULTURE AND FORESTRY, VOL. 2. CROPS I*. — Springer-Verlag, Berlin—Heidelberg—New York—Tokyo 1986. 608 pp. Hard cover DM 348.—

This second volume of the series dealing with crops comprises 33 chapters organized into 3 sections: Cereals, Vegetables, Legumes and tubers, and Future agricultural crops. A great part is devoted to wheat and rice (9 chapters, 167 pp.) with emphasis on (1) anther culture with respect to the generation of genetic variability, applications in crop improvement, haploid production and performance of doubled haploids, (2) problems of establishments of callus and regeneration of plants from callus cultures, and (3) on cryopreservation of cell cultures in rice. The next chapters deal with the following crops: corn, barley, sorghum, pearl millet, soybean, *Phaseolus* spp., tomato, pepper, eggplant, cucurbits, *Allium* spp., celery, butter-bur, potato, sweet potato, sugar beet, globe artichoke, triticale, hordecake, winged bean, amaranths and buckwheat. The selected biotechnological methods described differ according to species and include: anther culture for induction of haploids and of genetic variability, establishment of cultures and plant regeneration, induction and use of somaclonal variability, and embryo cultures for hybrid production.

The large volume of accumulating information and considerable progress achieved in the field of plant cell and tissue culture are promising for the future practical applications of the *in vitro* techniques in research programmes of the genetics and breeding. With the increasing interest in this and related areas of research activity this book will surely become an invaluable source of information for scientists working in various fields of botany, as well as for university teachers and students.