

Book review

Sharma, J. R.; Principles and Practice of Plant Breding. New Delhi: Tata McGraw-Hill Publishing Company, Ltd, 1994. 599 pp., 32 figs., 80 tabs. Hard bound. Rs 101.00.

After the early 60' ies there was a period when up-to-date handbooks in plant breeding were lacking. During the last ten years the situation has become better. The book now in view has a somewhat original disposition in that it tries to separate principles and practices in two distinct parts. Principles are held general as well as breeding schemes, but examples of progress have an interesting, more Indian accentuation than generally found.

It is difficult to say whether this disposition gives definite advantages. Once read through, the book will easier function as reference work. This is especially true, since there is a clear tendency of trying to explain each principle or technology by shortly listing different aspects.

There have, however, been some difficulties to set the dividing line between principles and practices and some repetitions can hardly be avoided. The chapters on induced mutation may be taken as an example. In spite 70–80% of higher plants and especially crop plants are considered to have polyploidy somewhere in their evolutionary pathway, there is e.g. here no chapter on principles. The chapter on applied polyploidy includes strangely enough also haploidy and aneuploidy which are two mainly analytical and in practice bridging procedures.

According to the preface, the manuscript of the book was completed already in 1980 but has to some extent been updated when published now. In spite of this effort, the book does not feel quite fresh. Recent progress in understanding correlative restraints in connection with the ecoideotype concept, the potentials of near-isogenic lines and the whole approach beyond somatic fusion in modern gene technology are examples where the presentation is in a way somewhat obsolete. Especially in developing countries, where emphasis on conventional plant breeding is urgently needed in order rapidly to provide more food for more people, such shortages should perhaps not be too essential. Plant breeding is not only an applied science. Each agroecological niche with its own costs of manpower etc. offers different approaches. Especially for post-graduate students in countries like India but also in general this new textbook has definite merits.

James Mac Key, Uppsala