

Baradi) and the numerous reviewers from all over the world. This final version is preceded by an initial draft written between 1980 and 1982 and new references have been incorporated. The crops covered are a diverse group of tropical and sub-tropical fruits and nuts, ranging from those of major international importance, such as Citrus, pineapple, mango and date, to locally-important species grown only on a home-garden scale. They also vary in their contribution to nutrition: high caloric and protein ones like Cashew and Pistachio nuts, high fat (the Macadamia nut), high calcium (dried fig), high vitamin A potency ones (Kaki and Canistel (*Pouteria* spp.)), and high vitamin C (Acerola (*Malpighia emarginata*)).

This list of resources is one contribution by the FAO in fighting the present state of genetic erosion influenced by many factors. Without a doubt there is a need for genetic resources conservation measures. The table provided for each crop, or for a few related crops, summarizes the existing germplasm collections around the world. The present publication relates to an earlier IBPGR publication which provides details on addresses and collections and thus has to be used in conjunction with the earlier document. It also emphasizes taxonomy and botany, origins, ecology, distribution, agronomy, diseases and pests, genetics, and improvements. It is, therefore, an important and valuable addition to the summarizing address lists.

H. F. Linskens, Nijmegen

**Mota, M.; Baeta, J.: International Symposium of the Conservation of Genetic Resources of Aromatic and Medical Plants.** Eucarpia Genetic Resource Section, Oeiras 1987. 150 pp., many figs. and tabs.

This symposium, held in 1984 at the Estação Agronômica Nacional, in Portugal, followed a meeting of the Eucarpia Gene Bank Committee. The proceedings presented here have the high-level support of many ministers, secretaries of state and presidents. All eighteen communications are presented in full-length, including their more-or-less politically coloured speeches. The conclusions and recommendations are that much more conservation of endangered species has to be done, seed-sampling has to be supported, and that study and research has to be intensified. A European network of coordinated action programmes has to be established. Nothing new!

No one doubts the importance of aromatic and medical plants in general, and Portugal is a special genetic reserve of aromatic plants. Strangely enough, the emphasis is on conservation; the venerable Sociedade Broteriana has even established a reserve of wild genes of *Lavandula latifolia* near Coimbra. Nothing is said about the breeding and selection of this group of highly important plants! Very little is said on the male sterility of *Silybum marianum* produced by chemical gametocides, and a little cytological study of the genus *Lavandula* is mentioned. Apparently the experts are still functioning at the level of hunters and collectors, with the incorporation of a little pharmacological touch. Nevertheless,

## Announcement

One of our co-editors, Dr. Gudev S. Khush, together with Henry M. Beachell, has been honoured by the Technology Foundation of Japan with the Japan Prize, also called the Japanese Nobel Prize. This prize, endowed with fifty million yen, has been awarded to Dr. Khush for his successful

despite these drawbacks, the report does point out an important group of herbs which deserve the attention of plant breeders.

H. F. Linskens, Nijmegen

**Siddiqui, K.A.; Faruqi, A.M. (eds.): New Genetical Approaches to Crop Improvement.** Atomic Energy Agricultural Research Centre, Tandojam, Pakistan 1986. 1071 pp., numerous figs. Hard bound \$ 65.00.

It is not clear from the foreword, preface, or main body just when and where the First International Symposium on New Genetical Approaches to Crop Improvement, of which this voluminous book is a proceedings report, took place. Since the references cited are only up to 1982, it can be concluded that the meeting took place sometime in the early eighties. No less than 213 plant scientists from 31 countries presented data on 51 different crops. All presented relevant topics in crop improvement: somatic cell genetics and distant hybridization, mutagenesis, ploidy, quality characters, breeding systems and selection theory, physiological genetics and stress breeding, and relevance of molecular and biochemical mechanisms in crop improvement.

There is no doubt that plant genetics has been instrumental in initiating and sustaining the first Green Revolution but progress in crop improvement, including new methods of genetic engineering, occurs so fast, that this volume is a documentary snapshot of the state of affairs at the time the symposium was held. The contributions vary between short eight line summaries to extensive original papers presenting many details, tables, figures, graphs, and discussions. The vast majority of the authors come from Pakistan so the reader gets an excellent impression of the efforts made in a developing country to solve their own food problems. Highlights of the proceedings are the papers presented by G. Wenzel, J. W. Snape, T. Tsuchiya, W.-D. Evans, M. Y. Menzel, J. MacKey, N. J. Thomson and M. D. Gale. A critical examination of the realities and possibilities of crop improvement are the central concern of these scientists. They are trying hard to change the unfortunate situation in which two-thirds of mankind can be found in developing countries which produce only one-fifth of the world's food supply. One can therefore only agree with Munir Ahmad Khan, chairman of the Pakistan Atomic Energy Commission, that "it is vital for the developing countries to strengthen their agricultural base through the adoption of modern technologies and application of scientific methods". It is good to read of this optimism and confidence in modern methods of cell genetics but the classical approaches of plant breeding should not be neglected. Mutation breeding, for which the engagement of the AEC stands, has not brought about the break-through which was expected in the fifties and sixties, neither will somatic cell genetics on its own. It is good to see that the present volume reflects a broad knowledge of classical breeding techniques and an open-minded direction to new crop plants for the special environmental conditions of Pakistan. Looking through this volume makes one optimistic.

H. F. Linskens, Nijmegen

breeding of rice variety 'IR 36', a variety which combines a high yield with high resistance to pests and diseases, and good tolerance against extreme soil conditions.

Congratulations from all your co-editors of TAG