BOOK REVIEWS

Phogat, B.S. and G.D. Sharma. 2000. Underutilized Food Crops: Their Uses Adaptation and Production Technology. All India Coordinated Research Project on Under-utilized crops, National Bureau of Plant Genetic Resources, New Delhi. 58 p.

This bulletin provides a well-synthesized information on about 15 underutilized food crops; their cultivation, production and uses are briefly discussed. The crops dealt with are- pseudocereals such as grain amaranth, buckwheat; minor cereals like jobs tears; food legumes such as faba bean, adzuki bean and winged bean; oilseeds like *Simarouba glauca* and *Perilla frutescens*; vegetables like *Momordica* spp., and *Citrullus lanatus*. It is hoped that this publication will be very useful to all those interested in research related to under-utilized crops.

Srivastava, Umesh., R.L. Sapra and G.D. Sharma. 2000. Evaluation studies in world germplasm of tomato (*Lycopersicum esculentum* Mill.) and Developing Core Set. National Bureau of Plant genetic Resources, New Delhi. 212p.

The NBPGR over the years, has assembled 2900 germplasm accessions including wild species from diverse agro-climatic zones of the world (from 47 countries). This publication is based on characterization and evaluation of these accessions using 41 descriptors. One of the major issue that Gene Bank managers (curators) face is the need to increase the accessibility of their collection to a large group of users. Developing procedure for reducing the size of a collection to a manageable and accessible level is becoming one of the most important issues in the management and utilization of large germplasm collections. Concept of developing core germplasm set as a minimal, yet diverse set, representing the diversity of the germplasm collection has attracted wide attention in recent years. Developing a core set for efficient management of germplasm helps in maintaining comparatively fewer accessions rather than entire set of accessions. Principal Component Analysis (PCA) strategy was used to estimate the inertia and the corresponding relative contribution (RC) of each accession. Fourteen principal components with eigen values over 1 and explaining a total of 65 per cent variation were selected for computing the inertia and relative contribution of each accession. An improved method based on RC score and requiring low number of accessions to be sampled, is suggested for establishing the core set. For tomato core, an optimum sample size of 140 was estimated on the basis of pooled diversity A sample of 140 accessions (nearly 7 per cent of the base collection of 2021 germplasm lines) was finally selected for the final core (of 2021 tomato germplasm lines). The methodology adopted in selecting accessions is efficient and can be safely used, even when the passport information is partially available or unavailable. Retrieval of useful information for specific characters is also given. It is hoped that this publication will be very useful to botanists, tomato breeders, Gene Bank managers, curators and students alike in selecting germplasm material of their choice and use them in tomato improvement programme.

Sardana, Saroj, R.K. Mahajan, Dinesh Kumar, Mahendra Singh and G.D. Sharma. 2000. Catalogues on cowpea (*Vigna unguiculata* (L.) Walp.) Germplasm. National Bureau of Plant Genetic Resources, New Delhi. 80 p.