
Book Reviews

Summerfield, R.J.; Bunting, A.H. (eds.): *Advances in Legume Science*. Vol. 1 of the Proceedings of the International Legume Conference, Kew, 31 July-4 August 1978. Richmond, Surrey Royal Botanical Gardens Kew, 1980. 668 pp. Soft bound £ 15.00.

Legumes combine extreme morphological diversity with a world-wide distribution and are of particular economic importance as sources of high protein seeds, as vegetables, as green manures for soil improvement and in the production of hay, pasture and silage. Add to this the symbiotic relationship between soil bacteria and the majority of the legumes which renders them almost independent of nitrogenous fertilisers and you have a botanical family of economic importance which is also of great scientific interest.

It is hardly surprising, therefore, to learn that there were participants from 48 countries who attended an International Legume Conference at the Royal Botanic Gardens, Kew from 24th July to 4th August 1978. The first volume of the proceedings contains the papers presented during the second week of the conference, a week devoted principally to scientific studies considered to have a bearing upon the more efficient use of legumes in agriculture with an intended emphasis upon research in the tropical regions.

In Sections 1 to 4 of this volume, a series of reviews covering legumes in general is followed in Sections 5 to 10 by contributions devoted to the most important crop plants.

Section 1 contains five papers about diversity, structure, adaptation, growth physiology and yield; the main physiological variables being photoperiod, air temperature and water-relations.

Section 2 deals with nutrition and has six papers discussing the symbiotic relationship between *Rhizobium* and Legumes, one paper dealing with the carbon and nitrogen nutrition of selected legumes and a final paper which discusses the often ignored and

possibly underestimated importance of mycorrhizal relationships in nutrition.

Section 3 contains five contributions which deal with the nutritional and anti-nutritional attributes of grain legumes together with suggestions as to where and how improvements in protein quality might be achieved. The importance of improvements in grain yield and stability of yield as factors associated with increasing the supply of protein in agriculture have not been ignored.

Section 4 refers to pests and diseases and there are six papers covering insects, mites, nematodes, fungi and bacteria; the last paper dealing specifically with approaches to breeding for disease resistance.

Each of the remaining sections, dealing with specific crop plants, tends to contain the same topics as those found in Sections 1 to 4 thus maintaining a general theme throughout the whole volume. In all, there are 34 contributions and the genera are dealt with in the following sequence

Section 5. *Glycine*

Section 6. *Phaseolus, Psophocarpus*

Section 7. *Vigna*

Section 8. *Arachis*

Section 9. Fodder, forage & cover legumes

Section 10. *Lupinus, Cicer, Lens, Vicia faba, Pisum*.

With so many speakers and with so many genera and topics for discussion in one week it was obviously impossible for these review papers to be as detailed as one normally expects. However the broad coverage of legume research is good and this volume is likely to be of interest not only for its articles but also as a valuable source of references.

B. Snoad, Norwich

Announcements

First International Symposium on 'Genetic Specificity of Mineral Nutrition Plants'

Serbian Academy of Sciences and Arts organizes the First International Symposium on 'Genetic Specificity of Mineral Nutrition of Plants' that will take place in Beograd from August 30 – September 4, 1982.

President of the meeting and the organizing committee is Dr. M.R. Saric (Yugoslavia). More information and registration: Serbian Academy of Sciences and Arts, 35, Knez-Mihailova, 11000 Beograd, Yugoslavia.