SYMPOSIUM

SOIL—PLANT RELATIONSHIP

During the last decade, considerable work has been done to improve the understanding of the influence of edaphic variations on the availability of mineral nutrients and water to crop plants. The complex soil-plant relationship encountered in some of the problems on soils like the calcareous, saline, sodic, acidic and the highly eroded soils which constitute vast areas in the country have drawn attention of our soil scientists and plant nutritionists, and it has been increasingly realised that a proper understanding of these is necessary for their efficient management for improving crop productivity. Recently, the importance of controlled culture studies for resolving nutritional problems under field conditions and for obtaining information helpful in predicting crop response to fertilizer amendments has been realized. With the introduction of the high fertilizer responsive varieties, deficiencies of several micronutrients, specially that of zinc, and the genotypic variations in response to nutritional and water stress have come to fore.

In organizing the symposium on soil-plant relationship on the occasion of the First Indian Geophytological Conference at Lucknow, the Palaeobotanical Society aimed to focus the attention of the Indian Scientists to these varied aspects of soil-plant relationship.

Papers were invited to assess the current knowledge on the following related topics:

- (i) Soil physical conditions and plant growth.
- (ii) Soil water regime and plant growth.
- (iii) Total and available plant nutrients in soil; soil fixation of plant nutrients.
- (iv) Problem soils and their management for better plant productivity.
- (v) Controlled culture experiments for solving problems of soil-plant relationship. In all, twenty seven contributions were received and most of them were presented at the symposium which was chaired by Professor S. C. Agarwala whose own contribution to the understanding of soil-plant relationship under Indian conditions is next to none.

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