

## **First All India Workshop on Crop Protection—Summary of Weed Control Session**

The First All India Workshop on Crop Protection was held at Lucknow from November 8 to 11, 1971 under the joint auspices of the Department of Agriculture, U. P., Indian Council of Agricultural Research and the Directorate of plant Protection, Govt. of India. There was a whole session devoted to Major Weed Problems which was held on November 9, 1971. The session was presided over by Dr. O. N. Mehrotra, Professor and Head, Division of Plant Physiology, U. P. Institute of Agricultural Sciences, Kanpur with Sri V. S. Mani, Agronomist (Weed Control), I. A. R. I., New Delhi as the Convener. Delegates from different parts of the Country and abroad representing universities and research institutions, foreign aid agencies, agro-industries and farmers participated in the deliberations of the Session.

In all 12 papers were contributed, out of which 9 papers were presented by the participants. These papers dealt with some of the major weed problems of field, vegetable, commercial and plantation crops, obnoxious weeds and their control, aquatic weeds, physiological and biochemical aspects of weed control and economics of weed control and presented the results of researches in progress on these aspects. The information projected during presentation and discussions brought into relief the advances made in weed control in recent years as well as the gaps which need to be filled in on priority basis. The following papers were discussed :-

1. Herbicide usage in India by N. S. Negi and V. B. Bhan.
2. Herbicide research in crop fields by V. S. Mani, K. C. Gautam, B. N. Mishra and Bhagwan Das.
3. Major Weed problems of Field Crops and Vegetables by A. K. Ghosh.
4. Obnoxious weeds and their control by V. M. Bhan.
5. Physiological and Biochemical aspects of Weed Control by J. N. Singh.
6. The aquatic weed problems and their control by N. K. Behl.
7. Major Weed Problems of Field, Vegetable, Fruit Plantation and Commercial Crops by Jai Parkash.
8. Economics of Chemical Weed Control by T. V. Jagadisan.
9. Demonstrations of Weed Control Practices by N. C. Joshi.

The Session concluded with the following recommendations :

1. For better planning and control of weeds, systematic surveys should be carried out to collect reliable information regarding the distribution pattern of weeds in different areas and for important crops. Proper assessment of losses due to weeds be made and farmers enlightened about them.

2. Although some useful work on weed control has been done in our country, the herbicide research needs reorientation with particular emphasis on safe, effective and economical use of herbicides. Necessary steps should be taken to initiate and encourage research at the various research centres on new and important items such as weed-crop competition, weed control in grassland production, commercial and high value crops like spices, control of aquatic and parasitic weeds, weed problems in changing cropping pattern, multiple or relay cropping, heterogenous and mixed cropping, residual toxicity and herbicide fertilizers mixtures and development of of suitable machinery for such a use.

3. Since crop protection includes weed control besides insect control, plant disease control and pesticide analysis, a Department of Weed Science should be added at selected centres to undertake research on all aspects of weeds.

4. There are no two opinions that the results of researches should reach the farmers and that he should accept the new method with enthusiasm. As there is rapid progress in chemical technology and in order to keep pace with the latest developments in herbicide usage, practical training and refresher courses for different categories of workers in proper use of these chemicals is urgently needed.

5. In order to coordinate the activities of herbicide research, industry and usage, a Weed Science Cell should be created at the central level. Complementary efforts shall have to be made by research, extension and industry in future to achieve the desired objective.

6. Demonstrations of weed control practices with effective herbicides be popularized in cultivator's fields and possibility of reducing the cost by subsidising may be explored. Steps should also be taken to manufacture weedicides as they are in short supply in the country.