

Emphasis on developing pest-resistant crop varieties

Dr HC Sharma, Hon'ble Vice-Chancellor of Dr YS Parmar University of Horticulture and Forestry, Nauni, has emphasised on the need to develop crop varieties resistant to various insect pests. Dr Sharma addressed the faculty and students of the university on the topic '**Developing Varieties Resistant to Insects- A Key Input for Zero Budget Natural Farming**' on 16th February, 2018.

Because of overdependence and misuse of fertilizers and pesticides, the Governor of Himachal Pradesh, Acharya Devvrat, has been emphasizing on the adoption of Zero Budget Natural Farming for producing safer food and conservation of the environment. To move in this direction, the university has placed major emphasis on the development of crop varieties that are resistant to insect pests and diseases.

Dr Sharma, an internationally renowned entomologist, has over 40 years of experience in developing crop varieties with resistance to insects in sorghum, chickpea, groundnut, and pigeonpea, which are being cultivated by the farmers in India. The varieties with resistance to insects are also used in the breeding programmes all over the world, which have been estimated to save over 2 billion dollars in crop loss, and in terms of cost of pesticide application.

Addressing the gathering, Dr Sharma explained the techniques to screen and select for insect resistance, mechanisms and inheritance of resistance, and the strategies to develop varieties with insect resistance for cultivation by the farmers in vegetables, fruits and flowers. He emphasized the need to develop cultivars with resistance to insects and diseases, which will minimize the use of the pesticides and also reduce the direct hazards to the farmers, and air and water pollution. These will also help to minimize the toxic effects of pesticides on human health due to the reduction in pesticide residues in food and food products.

The development of pest-resistant cultivars will also reduce the crop losses and improve the food and nutritional security of the country. These pest-resistant varieties will be one of the key elements of Zero Budget Natural Farming, which has been envisioned for the state by the Hon'ble Governor of Himachal Pradesh. He also called upon the scientists and staff of the University to put in a collaborative effort to accomplish the goal of doubling farmers' income in the state by 2022.