



DR. RAJESH KUMAR

Principal Scientist

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Dr. Rajesh Kumar initiated his research work in genetic improvement of tomatoes after joining at ICAR-Indian Institute of Vegetable Research, Varanasi in 1999 and thereafter worked on genetic improvement of garden peas and currently focusing on chillies and seed technology. He has developed 11 vegetable varieties (4-tomato, 5-chillies and 2-garden peas) and has published more than 50 peer reviewed research publications published in journals of national and international repute, besides 65 technical articles, 13 book chapters, one book and several extension folders. His work chillies led to identification of resistant lines against chilli leaf curl virus and anthracnose diseases along with high level of pungency in chillies. He received 'Harbhajan Singh Gold Medal Award for best paper' published in Vegetable Science journal and his contribution fetched 'Distinguished Scientist Awards 2010' from the Society for Recent Development in Agriculture, Meerut. He is recipient of Fellowship of Uttar Pradesh Academy of Agricultural Sciences (UPAAS) in 2017 and Indian Society of Vegetable Sciences (ISVS) in 2017. Dr Rajesh Kumar is member of several reputed societies and national committees. He has supervised 11 students for M.Sc. (Hort.) and one for Ph.D. degree program.

Presentation Summary

Nursery Management in Vegetable Crops

Vegetables play a significant role in providing quality food and nutritional security as well as poverty alleviation. They are embedded with vitamins, proteins, minerals, carbohydrates and fibers. Nursery raising is a very important and critical assignment in vegetable cultivation. A number of vegetable crops are being cultivated by transplanting method, wherein seeds are sown in nursery beds to raise seedling and then seedlings are transplanted in the main field. The major vegetable crops which are usually cultivated through transplanting method are: tomato, brinjal, chilli, capsicum, cauliflower, cabbage, knol-khol, Chinese cabbage, Brussels sprouts, broccoli etc. Healthy nursery raising is most crucial step in vegetable production, which up to larger extent determine the productivity and profitability from vegetable cultivation. Although many of these crops can also be cultivated through direct seeding in the main field, transplanting method is highly recommended because of several advantages:

1. It is very easy and convenient to care young tender seedlings growing in small areas against biotic and abiotic stresses.
2. Required growing condition can easily be provided for raising healthy seedlings and crops harvesting can be adjusted accordingly.
3. Sufficient time is available for the preparation of main field because nursery is grown separately.
4. Because of less seed requirement and less mortality, transplanting method is more economical, especially when seeds are very costly (e.g. hybrids).