

Proceedings of the Workshop cum Awareness Program on Impact of Fusarium – TR-4 in Banana held at Police Complex Dimapur on 09/11/2019 at 9.30 a.m. organized by Central Institute of Horticulture, Medziphema and ICAR

The program was chaired by Sh. Kikheto Sema, IAS, Commissioner & Secretary (Horticulture), Nagaland and presided by Dr. N. Krishna Kumar, Regional Representative in South and Central Asia, Bioversity International. Dr. B. N. S. Murthy, Commissioner of Horticulture, Government of India delivered the welcome address and highlighted the need for the awareness on the dreadful wilt disease of banana that had entered the country from neighboring countries. He thanked Madam Smt. Vasudha Mishra, I.A.S., Special Secretary, DAC&FW, MOA & FW for her support and guidance in organizing the program at Nagaland.

Later Dr. N. K. Krishnakumar showed the international picture of the disease and how it had spread from the Asian countries to Latin American countries. He emphasized that unless there is a strict quarantine measure initiated by North Eastern Region there is a strong threat of the disease entry in the region. He also pointed out that other countries have initiated stringent quarantine measures where they were able to manage the entry of the disease material in the region to a greater extent. He even urged the government of India to have a collaborative program with SAARC countries and India can initiate the role of the leader in managing the disease in the SAARC countries.

The meeting was proceeded further with detailed presentations made by experts from the country. Dr. Azeze Seyie, Scientist, ICAR Research Complex for North Eastern Region, Jharnapani presented in detail about the varietal status and market situation of the banana in the North Eastern Region. Dr. Thangavelu, Principal Scientist from National Research Centre for Banana clearly showed the symptoms of the disease, its diagnosis and the status of the disease in India. Dr. Prakash Patil, Project Co-ordinator, AICRP Fruit Crops, ICAR showed the regions in North eastern region that were affected with the Race 1 of the banana wilt disease.

Dr. T. Damodaran, Principal Scientist, ICAR-Central Soil Salinity Research Institute explained in detail the role of the bio-formulation ICAR-FUSICONT in the management of the disease. He also shared the success story of Uttar Pradesh and Bihar farmers in the control of the disease using the ICAR-FUSICONT. He also stressed that the formulation can be used and tested for the control of other soil borne diseases in horticultural crops and therefore if required a collaborative program with Central Institute of Horticulture (CIH) can be initiated.

Later Dr. S. Rajan, Director, Central Institute for Sub-tropical Horticulture, Lucknow showed the mapped regions of the North eastern region which are under the threat of the TR-4 strain of *Fusarium* wilt due to the conducive climatic conditions.

The Chief Guest Sh. Kikheto Sema, IAS, Commissioner & Secretary (Horticulture), Nagaland addressed the gathering by stressing strong collaborative

program between CIH and ICAR scientist for addressing the problems of North Eastern Region farmer's. He pointed out that banana fusarium wilt being such a serious issue will be taken on priority by his department and considers implementing all the recommendations that comes from the deliberations. He pointed out that good technologies like ICAR-FUSICONT developed by ICAR should demonstrated for the farmers of Nagaland and other states for addressing the key issues in organic farming.

Finally the program was ended with the vote of thanks by Dr. N.K. Patle, Deputy Commissioner (Horticulture), DAC & FW & I/C Director, CIH who had organized the event.

The following recommendations were drafted after the daylong deliberations and discussions.

- The states should focus and stress on the management of quarantine system at every entry point of the region (Action – State Government, Nagaland and other North Eastern states).
- Use of planting material from outside source should be discouraged. Instead steps may be taken by ICAR Institutes for North East Region and CIH to collaborate with ICAR-CISH, ICAR-CSSRI and ICAR-NRC, Banana for establishing a mass multiplication unit of local varieties like Cheeni Champa, Malbhog and Jahaji at Nagaland (Action – ICAR Research Complex For NE Region, Barapani, CIH, CISH, CSSRI and NRCB).
- ICAR Institutes working in North East Region may develop a germplasm conservation centre at its farm for the conservation of the local varieties of the North Eastern Region (Action - ICAR Research Complex For NE Region and NRCB).
- A training program on detection techniques of the banana Fusarium wilt TR-4 disease may be organized by National Research Centre of Banana to the technical staff and scientist of North Eastern region. (Action- NRCB and CIH)
- The application of ICAR-FUSICONT should be demonstrated to the North eastern banana growing regions and places that are reported to be affected with Race 1 (Action - ICAR-CISH, ICAR-CSSRI and CIH).
- The Central Institute of Horticulture, Medziphema, Dimapur may develop a collaborative proposal with ICAR-CISH and ICAR-CSSRI for addressing the issues of management of other disease of the regions that affects the cardamom (Viral and fungal disease) , ginger (rhizome rot) and vegetables as the product ICAR-FUSICONT seems to have positive impact on the soil disease management (Action – CIH, CSSRI and CISH)