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## **Promotion of Resistant Varieties of Wheat and Disease Monitoring for Enhanced Productivity**

A three days training programme was organized by the ICAR-Indian Institute of Wheat and Barley Research, Karnal in collaboration with Bidhan Chandra Krishi Viswavidyalaya, Mohanpur and Uttar Banga Krishi Viswavidyalaya, Coochbehar during 19th-20th January, 2021 on virtual mode. The aim of the programme was to create awareness for wheat disease management among farmers and promotion of newly released resistant wheat varieties in NEPZ; Preparedness of the cooperating centres for tackling diseases in wheat of NEPZ and Interaction meeting with state officials of Agri. Departments, NSC and State Seed Corporations of NEPZ. During this programme, more than 50 farmers from Nadia, Murshadabad, Malda, Dinajpur & Coochbehar districts of West Bengal participated and series of lectures on disease monitoring and disease management in wheat. During the programme information on recent varieties of wheat (DBW187, HD3249 and DBW252) and barley variety (DBW137) was disseminated to the state departments so that the varietal replacement rate in the region can be increased.

### **INTRODUCTION**

ICAR- Indian Institute of Wheat and Barley Research, Karnal in collaboration with Bidhan Chandra Krishi Viswavidyalaya, Mohanpur and Uttar Banga Krishi Viswavidyalaya, Coochbehar organized Farmers Awareness Programme on "Promotion of resistant varieties of wheat and disease monitoring for enhanced productivity" in North Eastern Plain Zone (NEPZ) through virtual mode during 19th-20th January, 2021.

**OBJECTIVE**

1. Awareness for wheat disease management among farmers and promotion of newly released resistant wheat varieties in NEPZ.
2. Preparedness of the cooperating centres for tackling diseases in wheat of NEPZ
3. Interaction meeting with state officials of Agri. Departments, NSC and State Seed Corporations of NEPZ

Aforesaid programme was organized with an aim to create awareness among the wheat growers about major diseases in wheat and promotion of new varieties in seed chain in eastern India.

Inaugural session of the programme was graced by chief guest, Dr. B. S. Mahapatra, Hon'ble Vice Chancellor, BCKV, Mohanpur wherein Chairman of the programme was Dr. G. P. Singh, Director, ICAR-IIWBR, Karnal. Various experts from ICAR-IIWBR, Karnal viz., Dr. Gyanendra Singh, PI, Crop Improvement, Dr. Sudhir Kumar, PI, Crop Protection, Dr. A. K. Sharma, Nodal officer (Seed) and Prof. P.K. Sahu, Director Research, BCKV, Mohanpur and Prof. Aashutosh Sarkar, Associate Director Research, UBKV, Coochbehar graced the occasion.

During the inaugural session, Dr. A. K. Sharma welcomed the dignitaries and farmers from the eastern region. Dr Gyanendra Singh urged to promote recently notified wheat varieties in the region to harness the better yield and providing resistance to various wheat diseases. Dr. P. K. Sahu underlined the importance quality seed availability for sustained production and better coordination among SAU's and ICAR Centres for enhanced outreach. Dr. Sudhir Kumar exhorted the essentiality of disease management and prevention of diseases is crucial for desired productivity. Prof. Aashutosh Sarkar assured all cooperation in various activities in limiting the spread of wheat blast in India from Bangladesh and appreciated efforts of ICAR-IIWBR in developing short duration wheat varieties viz., DBW-187 and DBW-252 for eastern India.

Dr. B. S. Mahapatra, Hon'ble Vice Chancellor, BCKV, Mohanpur lauded contributions of ICAR-

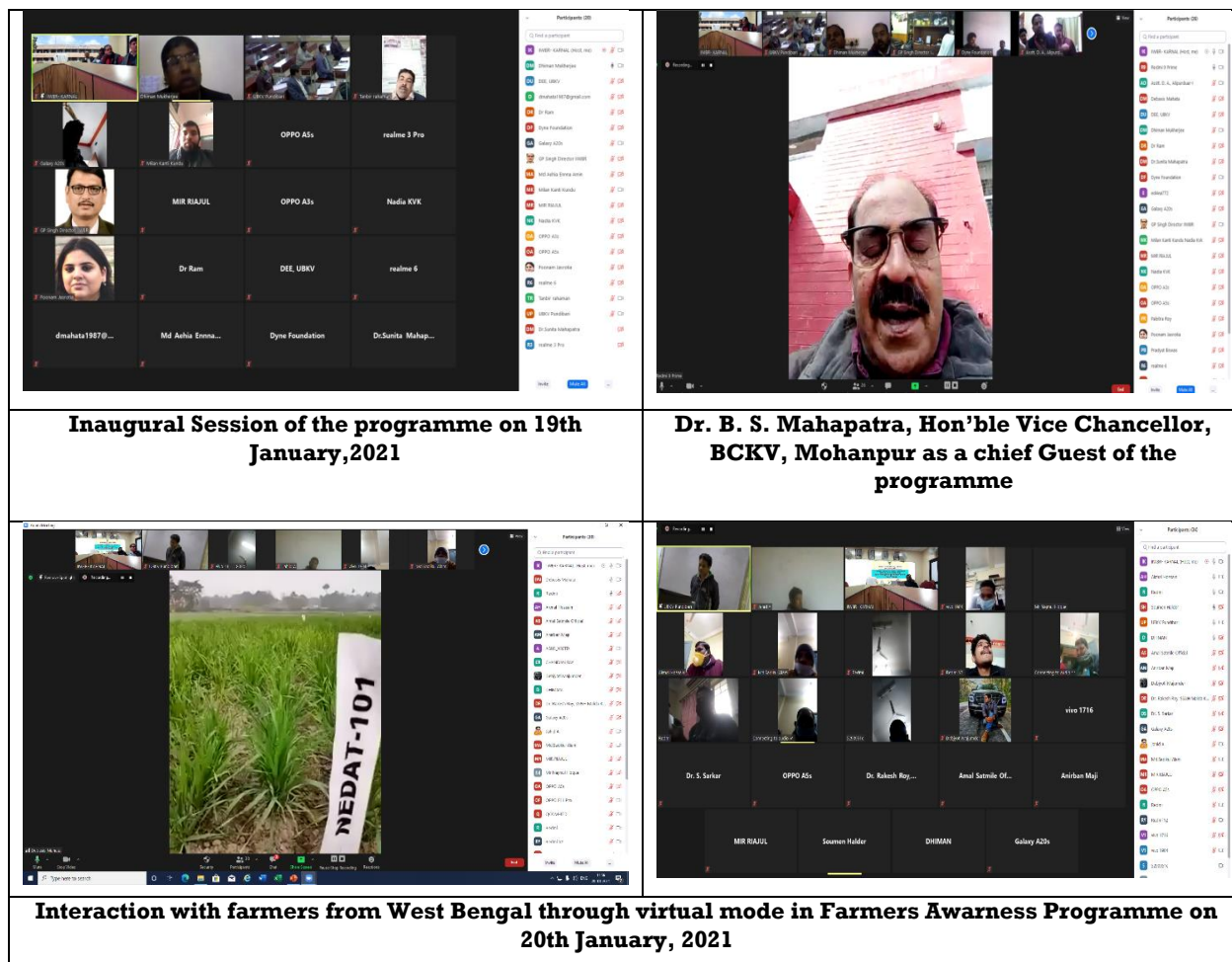
IIWBR in accelerating wheat production in India to the tune of 107.20 Million Tonnes during 2019-20. He urged to enhance wheat productivity of eastern India by providing short duration and adaptive varieties and strengthening of seed chain in the region.

Dr. G. P. Singh, Director, ICAR-IIWBR, Karnal appreciated the efforts of various agencies, state department of agriculture and BCKV, Mohanpur & UBKV, Coochbehar in limiting the spread of wheat blast in India from Bangladesh. He underlined the availability of seven new varieties of wheat suitable for eastern India and assured that special emphasis is given to develop several new varieties/entries for blast resistance suitable for eastern India.

During this programme, more than 50 farmers from Nadia, Murshadabad, Malda, Dinajpur & Coochbehar of West Bengal participated and series of lectures on disease monitoring and disease management in wheat, possibilities of wheat seed production in West Bengal and adoption of new varieties in the region were organized.

During the programme Dr Sudhir Kumar PI Crop Protection ICAR-IIWBR, and Dr. S. Hemram from UBKV, Coochbehar, informed the farmers about the disease of the wheat, their identification and management through adopting recent wheat varieties and chemical control. Dr. Dhiman Mukharjee, from BCKV, Kalyani briefed about the agronomic management for wheat seed production. Dr. Saikat Das from UBKV, Coochbehar, presented about the Possibilities and prospects of wheat Seed Production in WB. Dr. Amit Sharma, briefed the farmers about the latest wheat varieties and the seed availability of these varieties.

Interface meeting with officials of State department of Agriculture from states North eastern region viz., Uttar Pradesh, Bihar, Jharkhand & West Bengal, representatives of National Seed Corporation, State Seed Corporations (Bihar, Jharkhand and West Bengal), KVK's, FPO's and private seed companies engaged in wheat seed production in eastern India was organized by ICAR-IIWBR, Karnal with an aim to promote new varieties of wheat and Barley in NEPZ.



**Inaugural Session of the programme on 19th January, 2021**

**Dr. B. S. Mahapatra, Hon'ble Vice Chancellor, BCKV, Mohanpur as a chief Guest of the programme**

**Interaction with farmers from West Bengal through virtual mode in Farmers Awareness Programme on 20th January, 2021**

Meeting was started with brief presentation on "Status and scenario for Breeder seed production in NEPZ" by Dr. A.K. Sharma, Nodal officer (Seed), ICAR-IWBR, Karnal. In his presentation, issues of Indent of proper recommended varieties, phasing out of old varieties, non-lifting of breeder seed, linkages with line departments, KVK, FPO and private seed industries for promotion of new wheat varieties were discussed.

Dr. A.P. Srivastava, Director Agriculture, Uttar Pradesh highlighted that Uttar Pradesh is one of the largest wheat producer in the country and requires special attention to promote suitable varieties as per agro- climatic zones. Further, he emphasized that in coming years, bio-fortified varieties of wheat will be given due importance to assure nutritional security of the region. He also stated that all out efforts are made by state government to enhance Seed Replacement Rate (SRR) in the region.

Mr. Deepak, representative of FPO, Bihar mentioned that in Bihar State still old varieties of wheat are in seed chain and needs special programme to phase out old varieties from seed chain. He further mentioned that the real challenge is to FPO's is to sell out foundation seed produced at Farmers field and support by state govt. in this regard will be beneficial to FPO's. Mr. Dilip Agarwal, Pan Seeds Company (WB) shared his experience of wheat seed production in West Bengal and underlined that ample scope is present for newly released varieties of wheat in the state.

Dr. Chander Mohan, Assistant Commissioner (Seeds), DAC&FW, New Delhi appreciated efforts of ICAR-IWBR in organizing interface meeting for eastern region and assured required support in finalization of indents, lifting of breeder seed by various agencies and accelerating VRR in the eastern region.

Dr. R. C. Srivastava, Hon'ble Vice Chancellor, RP CAU, Pusa, chief guest of the meeting stated that, fertile plains of Bihar and eastern Uttar Pradesh holds the tremendous potential in wheat production and current level of productivity of Bihar is only 2.20 ton/ha which is far less than the western plains of India. He urged that providing sufficient quantity of quality seed of newly released varieties of wheat to the farmers holds the key for accelerating wheat productivity in the region. He further mentioned that, in Bihar and eastern Uttar Pradesh farmers are forced to grow wheat under late sown conditions due to paddy harvesting and water logged conditions. Therefore, there is need to map water logged conditions in the region and promote of late sown suitable varieties of wheat for better productivity. Further, he urged to develop or identify genetic material of wheat which is able to germinate at higher temperature i.e. 31-32°C.

Dr. G. P. Singh, Director, ICAR-IIWBR, Karnal as a chairman of the programme, highlighted the prospects of wheat and barley cultivation in the eastern plain zone of the country. He exhorted that

second green revolution will be assured through eastern zone of India and underlined that various state government officials, representative of NSC & SSC should be proactive in providing breeder seed indents of newly released varieties of wheat. Further he stated that, to transfer genetic gain achieved by the breeder of any variety in term of yield requires stable seed supply system and robust seed multiplication chain. He requested to all the officials of State Department of Agriculture for inclusion of new and recommended varieties in seed multiplication chain for assuring higher productivity in the region. He lauded efforts of Uttar Pradesh State government for continued efforts to improve seed replacement rate and varietal replacement rate during last few years.

### CONCLUSION

Awareness programmes are helpful in providing information about the latest varieties to the farmers. The association with the state departments, FPOs and private seed growers would help in improving the varietal replacement rate and seed replacement rate in the north eastern plains zone of the country.