

Truthful seed production of Newly Release Wheat Variety Karan Vandana (DBW 187): A Case Study of Progressive Farmer

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Introduction

Quality seed is very important things for getting optimum level of production. It is necessary to maintain the varietal characteristics of seed, and control the seed borne disease for the production of high-quality seed. The scientists of Krishi Vigyan Kendra's involved to improve the knowledge of farmers about technical and managerial activities of agricultural and allied sectors and also support to the farmers for improvement in quality seed production. The improved technical and management farming activities will be supportive for quality seed production, and raising livelihood of farmers. Every farmer should able to access or produced healthy seeds which are genetically pure, with high seed vigour and good germination percentage. Timely availability of good quality seeds at reasonable price ensures good yield and profit to the farmers. The purity of seeds plays a vital role in agriculture and acts as a carrier of the genetic potential of varieties.

Salient features of newly released wheat variety (DBW 187)

DBW187 also known as “Karan Vandana” is a newly released wheat variety for irrigated timely sown conditions of North Eastern Plains Zones (mainly Eastern UP, Bihar, Jharkhand, Assam and West Bengal) and was identified by the Varietal Identification Committee Meeting held during 57th All India Wheat workshop at Ranchi, Jharkhand on 25th Aug 2018. The variety was identified on the basis of significant yield superiority over the checks during all the three years of testing. It had significant yield advantage over the checks HD 2967 (8.9%), K 0307 (7.3%), HD 2733 (7.0%), K 1006 (5.8%) and DBW 39 (4.7%) and possess better resistance against leaf rust and leaf blight. The variety also has high resistance against the wheat blast disease. This variety flowers in 77 days and matures in 120 days after sowing. The average height of the variety is 100cm and has the potential of 64.70q per ha. This variety has better Chapati quality with 7.7/10 score and high iron content (43.1ppm) in the

grains. DBW 187 (Karan Vandana) has been notified vide notification S.O. 1498(E) dated 1st April 2019 for providing better economic and quality replacement of the existing varieties like HD2967, K1006, K0307, HD 2733 and DBW 39 to the farmers of the region.

District's agro-climatic situation

Gorakhpur district is a part of the North Eastern Plain Zone of Uttar Pradesh. The soils of district are alluvial, calcareous and salt affected. The district has a large number of streams, ponds and rivers, which brings tremendous flood during the rainy season and miseries to the human and animal population. The average annual rainfall is about 132.09 mm but it varies in various part of the district. The maximum and minimum temperature varies from 48 to 04 °C. This makes agriculture the most important profession of people.

Process Undertaken for seed production and popularization

In order to popularize and promote this variety, ICAR-IIWBR Karnal in collaboration with Mahayogi Gorakhnath Krishi Vigyan Kendra, Chauk Mafi (Peepiganj), organized the training programme on 16th Nov 2018 for wheat farmers in which the minikit trials of 2.5 Kg each seed was given to 100 farmers. Mr. Ramnewas Maurya from village Rakhukhor, Jungle kaudiya, Gorakhpur also participated in the training programme and received the



Training programme organized for wheat farmers

minikit of 2.5 kg seed of DBW 187 (Karan Vandana). After getting the seeds he carried out the wheat sowing in line in third fortnight of November, 2018. Under the supervision of scientists of Mahayogi Gorakhnath Krishi Vigyan Kendra, he applied all the recommended package and practices of wheat. He harvested 150 kg wheat and stored as a seed (truthful seed) for next year.



Mr. Ramnewas Maurya received seed of DBW 187

Profitable income

From getting support through Mahayogi Gorakhnath Krishi Vigyan Kendra, Gorakhpur, Mr. Maurya started seed production of DBW 187 in an area of 2.5 acre and he got 48.00 quintal seed (after processing). The seed demand of this variety is very high in eastern Uttar Pradesh as well as other state of the country because its higher productivity. From the supports of Mahayogi Gorakhnath Krishi Vigyan Kendra, Mr. Maurya sold their seed @ 40 Rs/kg in the wheat growing farming community of Gorakhpur, Deoria and Gonda district of Uttar Pradesh. The economics performances of grain and seed production of the farmer were estimated and the results have been presented in table 1. Mr. Maurya received higher net returns and benefit cost ratio from their quality seed as compared to the grain.



Monitoring of Wheat Crop by scientist of MGKVK at Farmer Field

Table 1: Economic performance of grain and seed production of the farmer

Year	Area (Acre)	Production (quintal/ha.)	Cost of cultivation (Rs/ha.)	Selling price (Rs/Kg)	Gross Income (Rs/ha)	Net Income (Rs/ha)	BCR
Grain Production (2018-19)	2.5	52.00	48500	18.00	100800	52300	2.08
Seed Production (2019-20)	2.5	48.00	51500	40.00	192000	140500	3.73

Impact of DBW 187

Mr. Maurya getting more income in seed production of wheat as compared to grain production of wheat. He is becoming one of the progressive and learned farmers for other with regards to popularization of seed production and marketing of DBW 187 variety of wheat. This technology helps him for empowerment, livelihood and nutritional security. Now this technology is adopted by farmers



by seeing and believing in nearby villages. Mr. Maurya also supply seed to the farmers of Uttar Pradesh as well as other state of the country because of its higher demands and productivity. Mr. Maurya is very happy to improvement in their income, livelihood security and set forth example for others.

