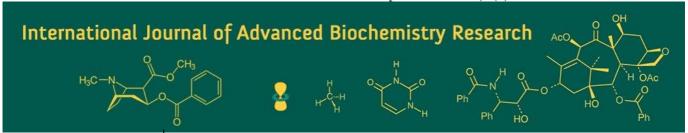
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#### **Anant Kumar**

Senior Scientist and Head, Krishi Vigyan Kendra, Auraiya, Uttar Pradesh, India

#### Rashmee Yadav

SMS, Department of Home Science, Krishi Vigyan Kendra, Auraiya, Uttar Pradesh, India

### Ankur Jha

Programme Assistant, Department of Agriculture, Krishi Vigyan Kendra, Auraiya, Uttar Pradesh, India

## Brij Vikas

SMS, Department of Animal Science, Krishi Vigyan Kendra, Auraiya, Uttar Pradesh, India

Corresponding Author: Anant Kumar Senior Scientist and Head, Krishi Vigyan Kendra, Auraiya, Uttar Pradesh, India

# Varietal evaluation of mustard crop in district Auraiya

# Anant Kumar, Rashmee Yadav, Ankur Jha and Brij Vikas

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#### Abstract

Conducted On Farm Trail of Mustard fields from 2015-16 in the humid south-western plains to increase the productivity of Mustard in the fields of 05 farmers in selected, in Village Ghasa Ka Purva Block Sahar of Auraiya District Uttar Pradesh during Rabi 2015-16. Farmers were selected on the basis of Participatory Rural Appraisal (PRA) action plan. Krishi Vigyan Kendra, Auraiya tested higher yield of Mustard compared to T<sub>1</sub>-Kranti, T<sub>2</sub>-RH-749 and T<sub>3</sub>-RH-406. Best Result T<sub>2</sub>- Grain yield 26.50 net return Rs 84800 and BC ratio 4.41 and farmer's field 21.84 net return Rs. 69888 and BCR 3.63. The demonstrations included improved packages of practices i.e. row spacing, fertiliser, irrigation, weed management and plant protection measures including improved varieties NRCHB 101 and Giriraj. Farmers were inspired by the results of the improved practices implemented in the OFT trials and will adopt these technologies in the coming years for the betterment of farming. It can be concluded that the improved production technology of mustard has been found to be more productive, economically viable and also suitable for local conditions as compared to existing farmer practices.

Keywords: Biological yield, benefit: cost ratio, net return, production system

## Introduction

In India, mustard is cultivated on a large scale in Rajasthan, Madhya Pradesh, Uttar Pradesh, Punjab, Haryana and Bihar. In Uttar Pradesh, mustard is cultivated in the districts of Mathura, Agra, Hathras, Kasganj, Etawah, Auraiya, Firozabad, Kannauj etc. Mustard is cultivated in Auraiya district. Mustard is cultivated in 15000 to 20000 hectares, here mustard varieties Kranti RH 725, RH749, Giriraj and other private company seeds are produced. The production of mustard in this district is at the rate of 15 to 22 quintals per hectare. But due to farmers not having information about the latest species of mustard, the old species produces revolution which reduces the yield of mustard. The cost is almost the same in all the crop species but due to lack of information about the species, farmers are unable to produce it. The old species is planted which causes great harm to it. While choosing the variety in mustard cultivation, farmers should keep in mind that they should choose the variety according to the environment because the variety has a huge contribution in the production of mustard crop. Many varieties give high yield in a particular place depending on the weather. But when the same species is planted in another place, the yield reduces due to lack of suitable environment, especially the variety which is from Punjab and Haryana, its height becomes very high when the same species is planted in the central part of Uttar Pradesh. Its length increases due to which the crop here falls when ripe and many types of diseases also occur in it due to which that species does not give good production here.

In the crop, pods appear on the plant, due to which the yield is reduced. Whereas the locally available variety gives good production, it starts giving pods at lower altitudes only. Due to the low height of the plant, the plants do not fall. The grains are bold and the yield is good. The plant starts giving fruits from the height itself and the yield is good.

# **Materials and Methods**

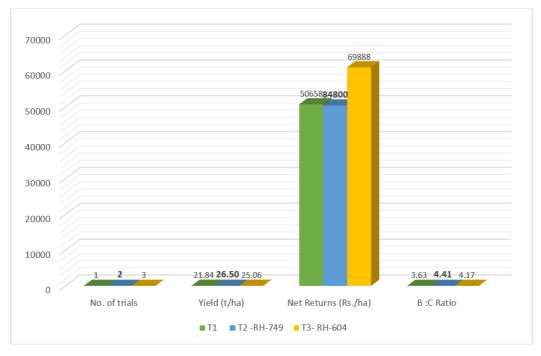
Krishi Vigyan Kendra, Auraiya was conducted to enhance Mustard productivity under On farm Trail at the farmers' field in selected village Ghasa ka Purva Block Sahar of Auraiya district during Rabi 2015-16. The study conducted trial to High yielding of mustard compared T<sub>1</sub>- Kranti, T<sub>2</sub>- RH-749 and T<sub>3</sub>-RH-406. Best result T<sub>2</sub>- Grain yield 26.50 net return Rs.

84800 & BC ratio 4.41 & Farmers field 21.84 net return Rs. 69888 & BCR 3.63.All the participating farmers were given one day training prior to demonstration on improved production technology of mustard. Production and economics data of oft demonstrations and farmer practices were collected and analysed. The selection of cultivators was done on the basis of Participator Rural Appraisal (PRA) action plan and care has been taken to layout the demonstrations on road side facilitate the demonstration of technology.

# **Results and Discussion**

Field testing on high yielding variety of mustard was conducted by Krishi Vigyan Kendra Auraiya in the year 2015-16 in Purva development block of village Ghasa,

Sahar district Auraiya, Uttar Pradesh. For this, five farmers cultivating mustard were selected. For this, it was seen which varieties were already being cultivated by the farmers here. What is its height? What is the condition of the mustard pod? What is the size of the grain. What chemical fertilizers are used by the farmers in it? What measures are taken to control weeds. Which chemical fertilizers are used in mustard cultivation. This information was obtained by holding a meeting with the farmers. After having the above information, scientists of Krishi Vigyan Kendra Auraiya conducted a trial program by selecting high yielding varieties. In which the seeds planted by the farmers were Kranti and Raya Haryana 749 in Treatment 2 and Raya Haryana 604 were selected in Treatment 3. Went. In which the yield of Raya Haryana 749 was 26.80.



Performance of chickpea variety

A projection test was conducted on the high yielding variety of mustard by the Agricultural Science Center Auraiya. For this, 5 farmers of village Ghasa village of Auraiya district, Purva development block Sahar were selected. While making the selection, it was kept in mind that such Farmers should be selected who were producing mustard on a large scale for the last many years. But he was not able to get good yield of mustard. The reason for low yield was that proper management was not done in mustard cultivation. Especially in mustard cultivation, such techniques should be told to the farmers so that its cost is reduced. To reduce the cost, the farmer has to use balanced amount of ploughing, seed selection, sowing time, use of manure and fertilizer. Most of the farmers do not use sulfur in mustard crop. So that the mustard seeds do not become bold. The percentage of oil in mustard reduces due to which the yield reduces. For this, farmers can increase the yield by balanced use of chemical fertilizers. Most importantly, excessive use of chemical fertilizers spoils the soil health. This causes harm to the farmers. The cost of the crop gradually increases. The production of the crop either remains the same or keeps decreasing. For this, the most important thing is to select good variety of seeds and use chemical fertilizers in balanced quantity.

# Conclusion

The study test of high yielding variety of mustard was conducted by Krishi Vigyan Kendra Auraiya in village Ghasa, Purva development block of Sahar district, Auraiya. The purpose of the test was to check the low yield of mustard. The reason for low yield of mustard was found to be lack of information among the farmers of the district about the high yielding variety. For this treatment, first farmer practice mustard variety Kranti was adopted. Raya Haryana 749 was selected in treatment 2 and raya haryana 604 was selected in treatment 3. In this, mustard variety raya haryana Haryana 749 variety got more yield. The RS 749 had too much branching. In farmers' practice, the variety selected had very little branching. The size of mustard seeds was found to be small in Kranti.

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