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Impact assessment of weedicide in chickpea crop for better production

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Abstract
An experiment was conducted by Krishi Vigyan Kendra, Auraiya, during winter (Rabi) season of 2019-20 and 2020-21 to study the response of On Farm Trial on Performance of weedicides for higher production of chickpea namely T_1 Farmers Practice (hand weeding after 35 days of sowing) T_2- pendimethalin stamp extra 750 gram, 38.7 ai /ha + Clodinafop 400 gm/ha T_3 - Targa super 400ml /ha T 2 performed higher yield 2.24 t/ha as compared with T_1 and T_3 at various 5 Trail of crop growth during the years. The growth of the crop is very less. The growth of weeds becomes much more than that of the crop. Due to lack of control, the farmer's cost increases significantly. Due to low growth of gram crop, there is huge loss to the crop. For this, five farmers were selected in Ata and Muri villages of Auraiya who were already cultivating gram. Earlier the cost of gram was very high. Farmers used to remove weeds by hand to control weeds. Once weeds are removed by hand, the gram crop becomes weed again. For this, farmers remove weeds in the gram field at least twice. So that its cost is reduced.

Keywords: Pendimethalin, clodinafop, weedicides etc

Introduction
In India, the production of pulse crops is higher in the states of Madhya Pradesh, Uttar Pradesh, Bihar and Rajasthan. Especially in Uttar Pradesh and Madhya Pradesh, pulse crops are produced on a large scale. Production of pulse crops like Jalaun, Auraiya, Banda, Mahoba, Lalitpur, Chitrakoot, Jhansi, Kanpur, Etawah, etc. districts produce a large amount of gram. The production of gram is mainly based on varieties developed by the Indian Council of Agricultural Research, Indian Pulses Research Institute, Kanpur, such as RVG 202. DCP 92- 3 and other species are used. Farmers face a lot of weed problems in the initial stage of gram crop. Farmer brothers, due to ignorance, do not use chemical fertilizers immediately after sowing the crop for weed control in gram crop. Or in other legume crops, due to improper management of weeds, the amount of weeds becomes very high. The growth of weeds is much higher as compared to pulse crops. Due to which, there are so many weeds in pulses of gram as well as in grain crops. It often happens that the pulse crop gets suppressed due to weeds and it is not able to grow again and again, it does not get proper nutrition due to which the crop becomes weak. After that, due to lack of nutrition in the crop, many types of diseases and insect infestation occurs in it. Due to excessive amount of weeds in the field, the medicines applied for pest control and disease management are also not used properly on the crop, due to which farmers are facing problems. If weed control is used properly at the time of planting the crop, the yield will be very good, otherwise it becomes difficult to cover the cost. There are two types of weeds in pulse crops, one is narrow leaf and one is broad leaf. Different chemical herbicides are used to control both the weeds. There are two types of weeds in pulse crops, one is narrow leaf and one is broad leaf. Different chemical herbicides are used to control both the weeds. Farmer brothers, within 36 hours of planting the pulse crop, spray pendinethiline weedicide at the rate of 3.3 liters per hectare. Farmer brothers, within 36 hours of planting the pulse crop, spray pendinethiline weedicide at the rate of 3.3 liters per hectare. Farmer brothers do not use chemical fertilizers to control weeds in the crop. Instead, they remove weeds by hand 30 to 35 days after sowing the crop, due to which the farmer suffers huge financial loss. And due to the high costs incurred on crops, farmers are not able to get good profits from pulse crops.

Materials and Methods

Conducted On Farm Trail on Chickpea crop in randomly selected Village Murhi Block-Bhagyanagar District – Auraiya, Uttar Pradesh by Krishi Vigyan Kendra Auraiya Uttar Pradesh during year 2019-20 and 2020-21 05 farmers were selected for Performance of weedicides for higher production of chickpeafrom district Auraiya UP India Cultivation of Chickpea crop main problem faced by the farmers weed infestation. Farmer are faced in chickpea crops 20-25% yield loss in Chickpea production. Technology Assessed: Assessment of weedicide for higher production. Package and practices and cost of cultivation of recorded of Chickpea crops for data analysis for calculation of yield gap analysis.

Results and Discussion

Conducted On Farm Trail on Chickpea crop in randomly selected Village Murhi Block -Bhagyanagar District – Auraiya, Uttar Pradesh by Krishi Vigyan Kendra Auraiya Uttar Pradesh during year 2019-20 and 2020-21 05 farmers were selected for Performance of weedicides for higher production of chickpea district Auraiya UP, India

The results obtained from the present investigation as well as relevant discussion have been summarized below:

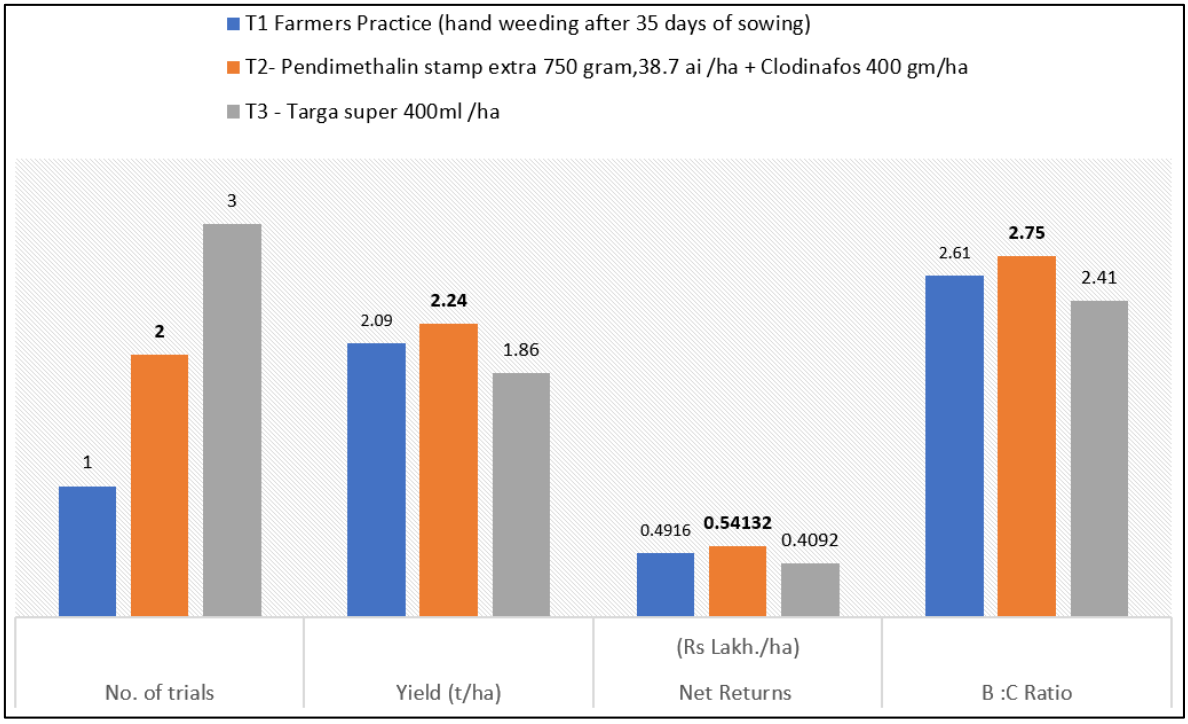

Fig 1: Performance of weedicides for higher production of chickpea

Performance of weedicides for higher production of chickpea

Field trials for weed control in gram crop were organized by Krishi Vigyan Kendra Auraiya. In which due to lack of timely weed control in gram crop, its yield decreases significantly. Due to the abundance of weeds, there is a lot of disease and insect attack. The growth of the crop is very less. The growth of weeds becomes much more than that of the crop. Due to lack of control, the farmer's cost increases significantly. Due to low growth of gram crop, there is huge loss to the crop. For this, five farmers were selected in Ata and Muri villages of Auraiya who were already cultivating gram. Earlier the cost of gram was very high. Farmers used to remove weeds by hand to control weeds. Once weeds are removed by hand, the gram crop becomes weed again. For this, farmers remove weeds in the gram field at least twice. So that its cost is reduced. It becomes too much. For this, field trials were organized in the years 2019-20 and 20-21. In which the scientists of Agricultural Science Center Auraiya provided herbicides to the farmers and management for proper development of the crop. Who was given advice by the scientists of agricultural science and who gave advice and accordingly, weeds were controlled in gram. Who applied the technique of treatment by the farmers? Pendimethiline drug within 36 hours of sowing of gram crop in one treatment and two. Was used. Weed control reduced weed concentrations by approximately 75%. Similarly, cladinof of drug was used in treatment three.

Conclusion

Various types of herbicides were used by Krishi Vigyan Kendra Auraiya for weed control in gram crop. So that weeds in gram crop can be controlled easily. For this, it was organized by the Agricultural Science Center in the year 2019-20 and 2020-21 at five selected farmers of Gram Atta and Mudi development block, Bhagyanagar district, Auraiya. Earlier, to control weeds in gram, farmers used to control weeds by hand 35 days after sowing of seedlings. But once weeds were removed, weed infestation occurred within 15 to 20 days. For this, farmers used to control weeds by hand. Technique adopted: In Treatment 1, weeds were removed by hand within 35 days and in Treatment 2, herbicide i was used. In Treatment 3, 480 grams of platinum drug was used. Krishi Vigyan Kendra, Auraiya conducted On Farm Trial on Performance of weedicides for higher production of chickpea namely T_1 Farmers Practice (hand weeding after 35 days of sowing) with the Yield (t/ha) 2.09, Net Returns (Rs Lakh./ha) 0.49160 and B :C Ratio 2.61. T_2- pendimethalin stamp extra 750 gram, 38.7 ai /ha + Clodinafop 400 gm/ha with the Yield (t/ha) 2.24, Net Returns (Rs Lakh./ha) 0.54132 and B: C Ratio 2.75. T_3 - Targa supar 400ml /ha with the Yield (t/ha) 1.86, Net

Returns (Rs Lakh./ha) 0.40920and B :C Ratio 2.41. T_2 performed higher yield 2.24 t/ha as compared with T_1 and T_3.

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