Research Article

Constraints perceived by the soybean growers in Damoh district of Madhya Pradesh

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SUMMARY : Study was conducted on constraints faced by the soybean growers and suggestions for their betterment through trainings in Patera block of Damoh district M.P. Data were collected from 120 soybean growers through pretested interview schedule. The data indicate that majority of soybean growers were having (80%) medium to high training needs on soybean production technology. Training only can bridge the enormous gap between remarkable yield achieved by the scientists and obtained by the farmers. It is imperative that the farmers trained in cultivation of crop to keep them abreast of the latest innovation available so as to maintain its quality and stability in production. Training plays a vital role in making the farmers more perceptive and equipping them with new soybean technology.

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BACKGROUND AND OBJECTIVES

It is the most potential among grain legume crops for combating acute mal nutrition. Further its significance is also visualized with its capability to fix the atmosphere nitrogen, at the rate of 85-115 kg/ha (Alexander, 1997) besides high yield potential (30 to 35 q/ha). It also provides high quality protein (40% to 42%), 20 per cent cholesterol free oil and 30 per cent carbohydrate. The main objective of the study was to assess constraints faced by the soybean growers.

RESOURCES AND METHODS

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The study was conducted in Patera block of Damoh district of Madhya Pradesh. The Damoh district comprises of 07 blocks, out of which only one *i.e.* Patera block was selected purposively because having maximum area under soybean crop than other blocks and low productivity (1012 kg/ha) than potential yield and has more transfer of technology centers and marketing facilities.

Patera block comprises of 159 villages. A list of soybean growing villages was prepared with the help of RAEOs, out of which 10 villages were selected randomly on the basis of maximum area covered under soybean crop, namely Kunwarpur, Padri, Bilakhurd, Hardua ghat, Simri shukl, Jamata, Muda, Muari, Simri devisingh and Bamuria. For the study purpose, 12 soybean growers were selected on the basis of random sampling method from each selected village. Thus, the total 120 soybean growers constituted the sample size for the study purposes.

OBSERVATIONS AND ANALYSIS

The results of the present study as well as relevant discussions have been presented under following sub heads:

Constraints related to field preparation:
Analyzed data in Table 1 indicated the constraints in preparation of field as perceived by the grower. It is clear from the data that the majority of the growers (51.66%) felt

unavailability of implement at the time of field preparation and lack of appropriate knowledge about land preparation (32.50%).

Constraints faced in selection of seed:

The data of Table 2 indicated the rank order of constraints in selection of seed as perceived by the growers. It is clear from the data that majority of grower (88.33%) lacked the knowledge about improved seeds, followed by high cost of improved seeds (69.17%) and easy availability of improved seeds (63.33%).

Therefore, it is necessary for the development to make extension strategy in such a way so that the grower of remote areas can take the advantage of it and aware of location–specific improved seed with timely availability.

Table 1: Distribution of the respondents according to the constraints related to field preparation (n = 120)

Sr. No.	Constraints	Frequency	Percentage	Rank
1.	Unavailability of ploughing implement at the time of field preparation	62	51.66	I
2.	Lack of appropriate knowledge about land preparation	39	32.50	II

Table 2: Distribution of the respondents according to the constraints related to selection of seed (n = 120)

Sr. No.	Constraints	Frequency	Percentage	Rank
1.	Lack of knowledge about improved seed	106	88.33	I
2.	High cost of improved seed	83	69.17	II
3.	Lack of easy availability of improved seeds	76	63.33	III

Table 3: Distribution of the respondents according to the constraints in seed treatment (n = 120)

Sr. No.	Constraints	Frequency	Percentage	Rank
1.	Lack of knowledge about seed treatment	97	80.83	I
2.	Lack of knowledge about recommended doses of fungicides and its application or method of seed treatment	68	56.66	II
3.	Lack of availability of fungicides	36	30.00	IV
4.	Lack of money to purchase fungicides	47	39.16	III

Table 4: Distribution of the respondents according to the constraints about disease control (n = 120)

Sr. No.	Constraints	Frequency	Percentage	Rank
1.	Lack of knowledge about fungicides	103	85.83	II
2.	Lack of knowledge about disease control measure	106	88.33	I
3.	Unavailability of fungicides	56	46.66	V
4.	Lack of money to purchase fungicides	84	70.00	III
5.	Lack of knowledge about recommended doses of fungicides and its method of application	81	67.50	IV

Table 5: Distribution of the respondents according to the constraints about insect control (n = 120)

Sr. No.	Constraints	Frequency	Percentage	Rank
1.	Lack of knowledge about insecticides	104	86.66	I
2.	Unavailability of insecticides	82	68.33	III
3.	Lack of money to purchase of insecticides	74	61.66	IV
4.	Lack of knowledge about doses of insecticides and its method of application	96	80.00	II

Table 6: Distribution of the respondents according to the constraints in weed control (n = 120)

Sr. No.	Constraints	Frequency	Percentage	Rank
1.	Lack of knowledge about weedicides	103	85.83	I
2.	Lack of skill to identify weed	49	40.83	V
3.	Unavailability of weedicides	63	52.50	IV
4.	Lack of money to purchase weedicides	78	65.00	III
5.	Lack of knowledge about recommended doses of chemical and its method of application	94	78.33	II

Constraints faced in seed treatment:

It is clear from the data that majority of growers (80.83%) were lacking the knowledge about seed treatment followed by knowledge about recommended doses of fungicides and its application or method of seed treatment (56.66%), money to purchase fungicides (39.16%) and availability of fungicides (30.00%).

Constraints about diseases control:

The data in Table 4 indicated constraints about disease control as perceived by growers. Majority of growers were lacking the knowledge about fungicides (85.83%), followed by knowledge about disease control measures (88.33%), knowledge about recommended doses of fungicides and its method of application (67.50%) and un availability of fungicides (46.66%) etc.

Constraints about insect control:

Data depicted in Table 5 indicated constraints about insect control as perceived by growers. Majority of growers were lacking of knowledge about insecticides (86.66%), knowledge about recommended doses of insecticides and its method of application (80.00%), unavailability of insecticides (68.33%) and money to purchase insecticides (61.66%) etc.

Constraints in weed control

Analyzed data in Table 6 indicated the constraints of weed control as perceived by growers. Majority of the soybean grower (85.83%) were lacking knowledge about weedicides, followed by knowledge about recommended doses of chemicals and its method of application (78.33%), money to purchase weedicides (65.00%), unavailability of weedicides (52.50%) and skill to identify weeds (40.83%).

From the above tables related to constraints of various components of the production technology of soybean, it can be concluded that majority of the growers perceived the most important constraints like lack of knowledge about improved seed (88.83%), lack of knowledge about disease control measures (88.33%), irregular supply of electricity (87.50%), lack of knowledge about insecticides (86.66%), lack of knowledge about weedicides (84.83%), lack of knowledge about fungicides (85.83%), lack of knowledge about seed treatment (80.83%), lack of knowledge about doses of insecticides and its method of application (80.00%), lack of knowledge about recommended doses of chemicals and its method of application (78.33%), lack of money to purchase fungicides (70.00%), high cost of improved seed (69.17%), unavailability of insecticides (68.33%), lack of knowledge about recommended doses of fungicides and its method of application (67.50%), lack of money to purchase weedicides (65.00%), lack of easy availability of improved seeds (63.33%), lack of money to purchase insecticides (61.66%), lack of knowledge about recommended

doses of fungicides and its application or method of seed treatment (56.66%), unavailability of weedicides (52.50%), unavailability of ploughing implement at the time of field preparation (51.66%), unavailability of fungicides (46.66%), lack of skill to identify weeds (40.835), lack of appropriate knowledge about land preparation (32.50%) and lack of availability of fungicides (30.00%). Similar results were reported by several workes (Krishnamurthy, 1984; Pandey, 1998; Singh *et al.,* 2002).Therefore, it is necessary for the development department to make extension strategy in such a way so that the grower of remote area can take the advantage of it and aware of location-specific improved seeds with timely availability.

Conclusion:

Majority of the soybean growers perceived the most important constraints like lack of knowledge about improved seed, lack of knowledge about diseases control, lack of knowledge about insecticides, fungicides and weedicides, doses of insecticides and its method of application, recommended doses of chemicals and its method of application, lack of money for purchasing fungicides, unavailability of insecticides, high cost of improved seeds, lack of knowledge about recommended doses of fungicides and its method of application, lack of money to purchase fungicides, unavailability of ploughing implements at the time of field preparation, lack of easy availability of improved seeds, lack of knowledge about recommended doses of fungicides and its application or method of seed treatment and unavailability of weedicides.

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REFERENCES

Borban, S. (2007). A study on training needs as perceived by the farmers of Krishi Vigyan Kendra, Betul district of M.P. M.Sc. (Ag.) Thesis, Jawaharlal Nehru Krishi Vishwa Vidyalaya, Jabalpur, M.P. (INDIA).

Lokhande, R.K. (2007). A study on adoption of integrated pest management practices by soybean growers in Indore district of M.P. M.Sc. (Ag.) Thesis, Jawaharlal Nehru Krishi Vishwa Vidyalaya, Jabalpur, M.P. (INDIA).

Namdev, R. (2010). A study on training needs of vegetable growers with refrences to integrated pest management (IPM) in jabalpur block of Jabalpur district (M.P.). M.Sc. (Ag.) Thesis, Jawaharlal Nehru Krishi Vishwa Vidyalaya, Jabalpur, M.P. (INDIA).

Patel, A.K. (2007). A study on analysis of training needs of gram growers for plant protection measures in Naighadi block of Rewa district (M.P.). M.Sc. (Ag.) Thesis, Jawaharlal Nehru Krishi Vishwa Vidyalaya, Jabalpur, M.P. (INDIA).

Prakash, Khaterkar (2004). A study of the technological knowledge and its adoption by the soybean growers of betal Block of betal district (M.P.) M.Sc. (Ag.) Thesis, R.A.K. College of Agriculture Sehore, M.P. (INDIA) .

Sharma, P. (2009). A study on training needs of gram growers in Jabalpur bkock of Jabalpur district (M.P.) M.Sc. (Ag.), Jawaharlal Nehru Krishi Vishwa Vidyalaya, Jabalpur, M.P. (INDIA).

Sharma, S.K. (2000). A study on training needs of mustard growers in Morar block of Gwalior district (M.P.). M.Sc. (Ag.) Thesis, Jawaharlal Nehru Krishi Vishwa Vidyalaya, Jabalpur, M.P. (INDIA).

Uikey, S. (2010). A study on training needs of chickpea growers in Jabalpur block of Jabalpur district. (M.P.) M.Sc. (Ag.) Thesis, Jawaharlal Nehru Krishi Vishwa Vidyalaya, Jabalpur, M.P. (INDIA).

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