

RESEARCH ARTICLE :

Assessment of the knowledge level of potato growers in Madhya Pradesh

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SUMMARY : The study was conducted to assess the knowledge level of potato growers in Gwalior district of Madhya Pradesh. The productivity level of potato is observed to be low in Madhya Pradesh due to various reasons among these are climate and adoptability of technologies. Potato production has played a vital role in increasing vegetable production of the country with 25.6 per cent share in total vegetable production during 2002-03. The contribution of the country in world potato pool has increased from 6.4 per cent to 7.8 per cent during last decade. Potato utilization has become more diverse with processed products commanding a large share of the potato market. Majority of the potato growers had complete knowledge about improve varieties. The data also indicated that majority of the potato growers were aware about recommended spacing (59.17%), disease management (56.67%) and selection of field (52.5%).

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KEY WORDS :

Assessment,
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BACKGROUND AND OBJECTIVES

Potato is a multipurpose food, consumed by more than one billion people in all over the world. It is a staple food in Europe and vegetable in the developing countries. In the world scenario there are one hundred fifty seven countries engaged in potato production. India is the second largest producer of potato in the world after China and both the countries put together contribute nearly one third of the global potato production (Scott and Suarez, 2012). Potato is unique crop, which can supplement the food necessities of the world

predominantly in the area of high human population density like Asia. As a crop it can yield up 40-50 tones/hectare. India in particular and Asia in general are showing rapid growth in potato production. Potato popularly known as 'king of vegetables', has emerged as fourth most important food crop in India after rice, wheat and maize. In world scenario, India produced 42.34 million tonnes from 1.86 million ha with an average yield of 22.72 tonnes / ha of potato during 2010-11 (Agricultural statistics at a glance, 2012). Though, during the recent past the productivity of potato in India has registered perceptible

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increase, but can this level be sustained or enhanced in future, is a matter of concern today. Knowledge of the past trends in area, production and productivity will aid the planners in deciding the growth rates to be achieved in accordance with the planned targets. Besides these, trends in area, production and productivity provide basis for forecasting the future supply.

RESOURCES AND METHODS

The present study was conducted in Morar Block of Gwalior district. It is situated in gird region. The total geographical area of this block is 85794 hectare. Out of which 60643 hectare is under cultivation. Morar block comprises of 169 villages. Out of which 31 villages are potato growing villages. A list of these villages was prepared. Out of which 10 villages namely Bhadroli, Kuvarpur, Syawari, Sausha, Ekahra, Raura, Methana, Bastari, Akbarpur and Dangiyapura were selected randomly by using the simple random sampling method. After the selection of the villages, a village wise list of potato growers was prepared and 12 potato growers from each village were selected randomly. Thus, the total sample was consisted of 120 potato growers. The data were collected through personal interview method with the help of pre-tested interview schedule, which was prepared on the basis of objectives of investigation and variables. The collected data were classified, tabulated and analyzed with the help of statistical tools like-percentage, mean.

OBSERVATIONS AND ANALYSIS

The results obtained from the present study as well

as discussions have been summarized under following heads:

Knowledge of potato growers with regards to improve potato production technology :

A perusal of data indicated in Table 1 portrays the practice wise knowledge of potato growers with regards to improve potato production technology.

In relation to selection of field, majority (52.5%) of the respondents were aware about selection of field, while one fourth (25%) of them possessed no knowledge about selection of field, however, 22.5 per cent of the respondents possessed complete knowledge about selection of field. Regarding improved varieties, majority (70%) of the respondents possessed complete knowledge about improved varieties, though, 30 per cent of them were aware about improved variety. As regards recommended seed rate, majority (65%) of the respondents had no knowledge about recommended seed rate, whereas 25 per cent possessed complete knowledge and only 10 per cent of them were aware about recommended seed rate. Concerning recommended spacing, majority (59.17%) the respondents were aware about recommended spacing, as 34.17 per cent of them possessed complete knowledge about recommended spacing. Very few (6.66%) of them possessed no knowledge about recommended spacing. As regards nutrient management, maximum number (36.67%) of potato growers were aware about nutrient management. 34.16 per cent of the potato growers had no knowledge about nutrient management, whereas, 29.17 per cent of the respondents had complete knowledge about nutrient management.

Table 1 : Knowledge of potato growers about potato production technology

(n=120)

Sr. No.	Practices	Knowledge about potato production technology					
		Complete knowledge		Awareness		No knowledge	
		f	%	f	%	f	%
1.	Selection of field	27	22.5	63	52.5	30	25
2.	Improved varieties	84	70	36	30	0	0.00
3.	Recommended seed rate	30	25	12	10	58	65
4.	Recommended spacing	41	34.17	71	59.17	8	6.66
5.	Nutrient management	35	29.17	44	36.67	41	34.16
6.	Irrigation methods	19	15.83	47	39.16	54	44.00
7.	Weed management	14	11.67	34	28.32	72	60
8.	Seed treatment	47	39.17	33	27.5	40	33.33
9.	Disease management	49	40.33	68	56.67	3	2.5
10.	Pest management	8	6.67	32	26.66	80	66.67

Regarding weed management, majority (60%) of the respondents had no knowledge about weed management practice, while 28.32 per cent of them were aware and 11.67 per cent possessed complete knowledge about weed management practice. In case of seed treatment maximum number of the respondents (39.17%) had complete knowledge about seed treatment, while 30.33 per cent had no knowledge about seed treatment, thus 27.5 per cent of the respondents were aware about seed treatment.

In relation to disease management, majority (56.67%) of the respondents were aware about disease management, while 40.33 per cent of them possessed complete knowledge of disease management, thus very few (2.5%) of them had no knowledge about disease management. With reference to pest management, majority (66.67%) of the respondents had no knowledge about pest management, while 26.66 per cent of the respondent were aware about pest management, thus very few of them (6.67%) had complete knowledge about pest management. Thus, it can be concluded that majority of the potato growers had complete knowledge about improve varieties. The data also indicated that majority of the potato growers were aware about recommended spacing (59.17%) disease management (56.67%) and selection of field (52.5%). Further the data indicated that majority of the potato growers had no knowledge about pest management (66.67%), recommended seed rate (65%) and weed management (60%). The result is in line with the findings of Govindagowda *et al.* (2000); Kubde *et al.* (2000); Chowdhary (1995); Jain (2008) and Piparde (2012).

Conclusion :

Madhya Pradesh is the sixth largest potato producing State accounting for 2 per cent of total production of potato in the country. State produces 0.74 million tones of potato from an area of 0.06 million

hectares with the productivity of 12.0 tones/ha. Majority of the potato growers had complete knowledge about improved varieties. The data also indicated that majority of the potato growers were aware about recommended spacing (59.17%) disease management (56.67%) and selection of field (52.5%). Further the data indicated that majority of the potato growers had no knowledge about pest management (66.67%), recommended seed rate (65%) and weed management (60%).

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