



*Research Article*

## **Knowledge of the potato grower's pertaining to recommended potato production technology**

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**Abstract :** The present study was conducted in 3 villages each from four Talukas of Anand district having more potato growing area. The total 120 respondents from these 12 villages were selected by using proporsnate random sampling technique and data were collected by means of personal interview. The study revealed that overwhelming majority (95.84 per cent) of potato grower's had medium to high level of knowledge of potato production technology. As far as practice wise knowledge is concerned majority of the potato grower's had adequate knowledge except that of chemical control of weed and disease control.

**Key Words :** Knowledge, Potato, Potato production technology, Potato growers

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### **INTRODUCTION**

Potato (*Solanum tuberosum* L.) is native of the High Andes in South America and it was first introduced in India at the end of the sixteenth or the beginning of the seventeenth century. Potato is one of the important tuber crops in India. Importance of potato as vegetable in human diet has been well recognized. It has viewed in general a common man's food. Potato produces more food per unit area than wheat, paddy and many other cereals and that in much shorter time. It is also excellent in nutritive value and palatability. The current advances in potato production technology have demonstrated that improved practices have great potential for increasing the potato production. Therefore, raising the efficiency among the growers

is essential element for getting desired profit from the potato cultivation. Understanding that, very few studies on this aspect have been conducted in this area and therefore, it was felt necessary to take study on knowledge regarding recommended production technology of potato by potato grower's. Keeping in view, the present investigation was undertaken with following specific objective: To study the knowledge of potato growers about recommended production technology of potato.

### **EXPERIMENTAL METHODS**

Anand district was chosen by researcher for the study. Anand, Borsad, Anklav and Umreth talukas of Anand district were purposively selected because these talukas have more potato growing area as compared to other talukas of the district. Twelve potato growing villages were randomly selected from those four talukas. For this study 120 potato growers were selected with proportionate random sampling technique and all 120 potato growers considered as a sample and as respondents. Measurement of knowledge about recommended production technology of potato crop was done by using 'Teacher Made Test'. The data were collected with the help of

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well structured, pre-tested, Gujarati version interview scheduled through personal contact and data were compiled, tabulated and analyzed to draw valid conclusion. The statistical tools used were percentage, mean score and standard deviation.

## EXPERIMENTAL RESULTS AND ANALYSIS

In the present study knowledge refers to know-how about different potato cultivation technology possessed by the potato growers. Adequate knowledge is essential to farmers for the success and profitable cultivation. It was therefore, thought necessary to obtain information from the potato growers about their knowledge regarding potato cultivation practices. The data regarding level of knowledge is given in Table 1.

It is observed from the Table 1 that more than three-fourth (78.34 per cent) of the potato growers had medium level of knowledge regarding the potato cultivation practices, while 17.50 and 04.16 per cent of them had high level and low level of knowledge regarding potato production technology, respectively.

Thus it can be concluded that vast majority (95.84 per cent) of the potato growers in study area possessed medium to high level of knowledge regarding potato production technology, respectively. This finding is in the line with the findings reported by Mate (2005) and Rabari (2006).

The probable reason might be due to fact that majority of the potato growers had vast experienced (5-10 years) of potato cultivation and more participation in extension activities and economic motivation.

### Practice wise knowledge level of potato growers about recommended potato production technology:

It is observed from Table 2 that cent per cent of the potato growers had high level of knowledge regarding land preparation, time of planting, sowing method, manual weed control and harvesting and post-harvest criteria, followed by selection of tubers for planting (95.00 per cent), improved varieties as well as earthing up (91.66 per cent), manure and FYM (89.16 per cent), irrigation management (84.16 per cent), chemical fertilizers (80.00 per cent), recommended spacing (78.33 per cent) and insect pest control (68.33 per cent), seed treatment (66.66 per cent) and disease control (58.33 per cent). It was interesting to note that only one-fourth of the potato growers had knowledge regarding chemical weed control in potato

**Table 2 : Practice wise knowledge level of potato growers about recommended potato production technology (n = 120)**

Sr. No.	Recommended practices	Number	Per cent
1.	Land preparation	120	100
2.	Time of planting	120	100
3.	Sowing method	120	100
4.	Improved variety	110	91.66
5.	Selection of tubers for planting	114	95.00
6.	Seed rate	101	84.16
7.	Seed treatment	80	66.66
8.	Spacing	94	78.33
9.	Manures / FYM	107	89.16
10.	Chemical fertilizers	96	80.00
11.	Irrigation management	101	84.16
12.	Earthing up	110	91.66
13.	Weeding		
	– Manual weed control	120	100
	– Chemical weed control	30	25.00
14.	Insect pest control	82	68.33
15.	Disease control	70	58.33
16.	Harvesting and post-harvest operations	120	100

cultivation.

The probable reason for higher knowledge might be due to good farming experience, high literacy level, good mass media exposure and extension contact and poor knowledge due to lack of recommendation, low literacy level and poor contact with extension agency.

### Conclusion:

It can be concluded that vast majority (95.84 per cent) of the potato growers in study area possessed medium to high level of knowledge regarding potato production technology. As far as practice wise knowledge is concern, potato growers had inadequate knowledge about chemical means of weed control and disease control.

### Implications:

Co-coordinated and concentrated efforts by extension machinery required to bridge the knowledge gap with respect to chemical means of weed control and disease control, so that

**Table 1 : Distribution of potato growers according to their knowledge level (n = 120)**

Sr. No.	Categories	Number	Per cent
1.	Low (less than 50.65 score)	05	04.16
2.	Medium (between 50.65 to 70.89 score)	94	78.34
3.	High (above 70.89 score)	21	17.50
Total		10	100.00

detrimental loss occurred by weed and disease can be minimize and it will certainly help to increase production and productivity and there by income level of the potato growers.

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