

## KNOWLEDGE AND ATTITUDE OF FARMERS TOWARDS SOIL TESTING PRACTICES

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### ABSTRACT

*Judicious application of chemical fertilizers by the farmers in crops is very much essential to achieve maximum production and to earn maximum profit. Soil testing is a comprehensive soil fertility evaluation programme, which helps the farmer's injudicious application of chemical fertilizers. The farmers will be able to know how much nutrients are already available in the soil and how much will have to be provided additionally for a particular crop. The majority of farmers had knowledge about soil testing practices. Majority of respondents were using the knowledge gained from scientists working in Krishi Vigyan Kendra in the operational area and the personnel of State Deptt. of Agriculture. Most of the respondents were in disagreement with the statements and mostly adaptors possessed unfavourable attitude towards soil testing practices. Majority of farmers agreed with the statement "Soil testing is necessary for better crop production". The efforts should be made by KVK and Deptt. of Ag. to encourage the farmers in adoption of soil testing practices by organising training programmes and campaigns specially on soil testing process.*

**Key words:** Attitude, knowledge, soil testing practices

### INTRODUCTION

Judicious application of chemical fertilizers by the farmers in crops is very much essential to achieve maximum production and to earn maximum profit. The research studies revealed that most of the farmers are using continuously larger quantities of chemical fertilizers to increase production without knowing the fertility status of the soils of their fields (Srivastava and Pandey, 1999). Soil testing is a comprehensive soil fertility evaluation programme which helps the farmers injudicious application of chemical fertilizers to the crops. The soil testing of a particular field gives reliable information about the deficiency of major nutrient in the soil as well as hazards such as soil acidity, alkalinity and salinity etc. After testing the soil, farmers can know the exact amount of nutrients to be applied for a particular crop. The farmers will be able to know how much nutrients are already available in the soil and how much will have to be provided additionally for a particular crop. Therefore, soil testing will definitely be advantageous to the farmers in achieving maximum production and in earning maximum profit. So it is essential to create maximum awareness among farmers about judicious use of chemical fertilizers. Keeping in view the importance of soil testing towards optimum production of crop and maximum net profit of farmers, this study was carried out in the district of Faridabad of Haryana with the following objectives

- (1) To find out the knowledge of farmers toward soil testing practice.
- (2) To study the attitude of farmers towards soil testing practices.)

### METHODOLOGY

The study was conducted in purposively selected district Faridabad in 1999-2000. Five villages from the district were selected purposively. Twenty farmers randomly selected from

each village who have availed soil-testing technique formed the sample. Thus, total numbers of farmers from five villages were 200. The data was collected by personal interview method with the pre-tested schedule designed for the purpose.

### RESULTS AND DISCUSSION

Table 1. Knowledge of farmers about soil testing practices

Response	No. of Respondents	Percentage
Positive	164	82.00
Negative	36	18.00

The data in Table 1 indicated the knowledge of the respondents about soils testing practices. Majority of the farmers (82 per cent) had knowledge about soil testing practices. Only (18%) respondents had no knowledge of soil testing practices. The knowledge about soil testing practices had been found satisfactory. Most of the farmers did not know the locations of soil testing laboratories.

Table 2. Distribution of respondents according to utilization of source of knowledge

S.No.	Source of knowledge	Frequency	%
1.	Personnel of State Deptt. of Ag.	54	27
2.	Fellow Farmers	10	5
3.	KVK Scientists	72	36
4.	Farm Magzines/Ag. Ext. Literature	24	12
5.	Radio	4	2
6.	T.V.	6	3
7.	Kisan Gosthis	16	8
8.	Kisan Mela	18	9
9.	No Knowledge	16	8
<b>Total</b>		<b>200</b>	<b>100</b>

The data in Table 2 indicated that majority of respondents (36 and 27 %) were using the knowledge gained from scientists

working in Krishi Vigyan Kendra in the operational area and the personnel of State Deptt. of Agriculture. Nine per cent respondents depended upon the Kisan Mela and eight per cent on Kisan Gosthi for knowledge about soil testing practices. Five per cent respondents collected knowledge from fellow

farmers while three per cent respondents gained knowledge through television. Only two per cent respondents collected knowledge from radio and farm magazines, extension literature about soil testing practices and eight per cent farmers had no knowledge of soil testing practice.

Table 3. Distribution of respondents according to their attitude towards soil testing practices

S. No.	Statements	Response			
		Agree	Undecided	Disagreed	Total
1	Result is given timely	48(24%)	24(12%)	128(64%)	200
2	Result of soil testing is reliable	68 (34%)	8(4%)	124(62%)	200
3	Beharviour of soil testing staff is good	38 (38%)	20(10%)	104(52%)	200
4	Number of crops increased in one year after soil testing	60 (30%)	16(8%)	124(62%)	200
5	Soil testing is necessary for better crop production	152 (76%)	4(2%)	44(22%)	200
6	It is very long process	124 (62%)	8(4%)	68(34%)	200
7	Soil testing is wastage of time and money	24 (12%)	4(2%)	172(86%)	200
8	Expenditure of crop production decreases after soil testing	84 (42%)	8(4%)	108(54%)	200

The results in Table 3 indicated that the majority of respondents were in disagreement with the statements and mostly adaptors possessed unfavourable attitude towards soil testing practices but it could also be pointed that sometimes they had showed positive attitude because most of adaptors (86 per cent) did not agree with the statement that “soil testing is wastage” of time and money.

When the respondents were asked that “Result of soil testing is reliable” only 34 per cent adopters agreed with the statement whereas 62 per cent adopters disagreed with it. Sixty two per cent adopters said that “soil testing is very long process”. This means the soil testing agencies are not working properly in the area and the farmers did not show much faith on the result of soil testing and they felt that it is very long process. It was also observed that majority of farmers agreed (76%) with the statement “Soil testing is necessary for better crop production”. It means the farmers attitude was generally conservative.

### CONCLUSION

The study indicated that the soil testing process was well known to the farmers and they also knew its importance. But the attitude of farmers towards soil testing practices was unfavourable. The efforts should be made by KVK and Department of Agriculture to encourage the farmers in adoption of soil testing practices by organising training programmes and campaigns especially on soil testing process. If possible, mobile soil testing laboratories should visit the villages sometime to test the soil samples at their doorsteps in the villages itself. By doing this, the reliability of results of soil samples could be increased among the farmers widely in future for better farming. By adopting the soil testing practices the farmers also reduced the large unnecessary chemical fertilizer consumption and the judicious use of chemical fertilizers could be popularised.

### REFERENCES

Srivastava, Y.C. and Pandey, A.P. (1999). Knowledge and attitude of small and marginal farmers towards soil testing. *Agril. Extn. Review*. 11(6): 3-6.

