

Knowledge level of Betelvine growers on recommended betel vine technologies

G.Tamilselvi*, T.Balakrishnan** and M.Vetriselvan*

*Professors, ** Assistant Professor, Department of Agricultural Extension, Faculty of Agriculture, Annamalai University,Chidambaram,Tamilnadu,India

Abstract

The study was conducted in namakkal district of Tamilnadu to assess the knowledge level of betelvine growers on recommended technologies. Majority of the farmers (71.67 per cent) had medium to high level knowledge on recommended betelvine technologies .Most of the farmers were found to possess knowledge on most of the technologies. All the respondents were found to possess knowledge on the practices viz.,varieties, banana as intercrop , selection of setts and planting of betel vine. About ninety five per cent of the farmers had knowledge on support plant and spacing (94.44 per cent) and time of harvest (95.83 per cent). Eighty per cent of them had knowledge on ‘after cultivation practices’ and fifty per cent had knowledge on manuring. Poor knowledge was observed for the technologies viz., sett treatment (18.61 per cent), pest management(13.90 per cent) and disease management (10.42 per cent).

Key words; Betelvine growers, knowledge level, technologies

INTRODUCTION

Betelvine (*piper betel* L.) is an important horticultural cum commercial crop grown in an area of 40000 hectares. It occupies about 3001 ha in Tamilnadu. In recent years ,betelvine growers have been facing many technical problems and not getting yields up to potential level, this is due to the fact that betelvine is being mostly grown in a traditionally way by majority of the farmers, but success of betelvine cultivation depends on the knowledge and adoption of recommended package of practices. On the other hand a large part of gains from new farming technologies are still remaining unrealized due to many constraints. These constraints in turn handicap the farmers to exploit the potential of advocated technology in the field to increase yields. Hence it was felt necessary to study the knowledge level of betel vine growers on recommended technologies

METHODOLOGY

The study was conducted in namakkal district of Tamilnadu as it has the maximum area under betelvine crop. Two blocks namely Mohannur and Kabilarmalai were selected for the study. Six villages three each from Mohanur and Kabilarmalai blocks were selected. A sample size of 120 betel vine growers was selected from six villages by proportionate random sampling. To study the knowledge level of respondents 11 betel vine technologies were selected in consultation with horticultural scientist and extension personnel of state Department of Horticulture. A teacher made knowledge test was formulated including 31 items on selected betelvine technologies. The responses of the respondents were dichotomized into correct and incorrect. The correct responses received a score of two whereas; the incorrect responses received a score of one. The scores obtained by the respondents against all the items were summed up to arrive the respondent’s knowledge score. The practice wise knowledge level of respondents was also assessed. Cumulative frequency method and percentage analysis were the statistical tools used for the study

RESULTS AND DISCUSSION

Knowledge Level of Betel vine growers

Knowledge is pre-requisite for adoption of any technology. Lack of knowledge about any idea prevents an individual to avail of its benefits. Perfect knowledge about an idea or practice helps an individual related to his needs in terms of profitability and productivity. Hence, as a prior step to assess the extent of adoption of

recommended practices by the betel vine growers, the knowledge level of the respondents was studied and the salient findings are presented. The results on distribution of respondents according to their knowledge level of the recommended betelvine cultivation practices are given in table1

Table 1 .Distribution of respondents according of their knowledge level

(n=120)

Sl.no	Category	Number of respondents	Per cent
1	Low	34	28.33
2	Medium	50	41.67
3	High	36	30.00
	Total	120	100.00

It could be observed from the table1 that nearly two-fifths of the respondents (41.67 per cent) had medium level of knowledge followed by high (30.00 per cent) and low (28.33 per cent) knowledge levels on the recommended betelvine cultivation practices. This might be due to the fact that most of the respondents possessed medium level of extension agency contact, scientific orientation, innovativeness and social participation. The findings is online with the findings of Veerasam(2009)

Practicewise knowledge Level of respondents on Betel vine cultivation

In order to have an in depth idea about the knowledge level of the respondents, practicewise knowledge level of the respondents was also worked out and the results are given in table 2

Table 2.Practicewise knowledge Level of respondents on Betel vine cultivation

(n=120)

S.no	Knowledge items	Number	Per cent
I	Varieties	120	100.00
II	Support plant and spacing		
1	Agathi as support plant	115	95.83
2	Number of seeds per pit	110	91.66
3	Recommended spacing	115	95.83
	Mean Percentage score		94.44
III	Banana as intercrop or edge plant	120	100.00
IV	Selection of betelvine setts		
1	Selection of disease free setts	120	100.00
2	Recommended sett rate	120	100.00
	Mean Percentage score		100.00
V	Sett treatment		
1	Recommended fungicide	27	22.50
2	Quantity of fungicide	20	16.67
3	Quantity of water	20	16.67
	Mean Percentage score		18.61
VI	Planting of betelvine		
1	Number of setts per pit	120	100.00
2	Period of planting setts	120	100.00

	Mean Percentage score		100.00
VII	After cultivation practices		
1	Time of training live standards	97	80.83
2	Time of training vines	96	80.00
3	Time of lowering vines	96	80.00
	Mean Percentage score		80.28
VIII	Manuring		
1	Quantity of FYM per acre	90	75.00
2	Time of application of FYM	100	83.33
3	Recommended quantity of NPK/acre	27	22.50
4	Recommended time of application	25	20.83
5	Recommended quantity of neem cake per acre	94	78.33
6	Micronutrient spray	27	22.50
IX	Pest management		
	Scale insect management		
1	Recommended pesticide	17	14.16
2	Recommended dose of pesticide	14	11.16
	Mite management		
1	Recommended pesticide	19	15.83
2	Recommended dose of pesticide	17	14.16
	Mean Percentage score		13.90
X	Disease management		
	Management of phytophthora wilt		
1	Recommended fungicide	18	15.00
2	Recommended dose of fungicide	15	12.50
3	Application of <i>Trichoderma viridi</i>	5	4.17
4	Drenching bordeaux mixture	15	12.50
	Management of Bacterial leaf spot		
1	Recommended chemical	12	10.00
2	Recommended dose of chemical	10	8.33
	Mean Percentage score		10.42
XI	Time of harvest	115	95.83

Varieties

It could be observed from the table 2 that all the respondents had knowledge on recommended varieties. As variety is very important for getting higher yield, the farmers might have interested in seeking information on new varieties which in turn would have resulted in better knowledge.

Support plant and spacing

The mean knowledge percentage of knowledge on support plant and spacing was found to be high (94.44 per cent).the knowledge level on sub items viz. , agathi as support plant (95.83 per cent),number of seeds per pit(91.66 per cent) and recommended spacing(95.83 per cent), was also found to be high. Majority of the growers had high level awareness on these practices since they are experienced in cultivating agathi plants as live standard in betel gardens.

Banana as intercrop or edge plant

All the respondents were found to have knowledge on planting banana as intercrop or edge plant. As this is a traditional practice , all the farmers were aware of this practice.

Selection of betelvine setts

It could be observed from the table that cent per cent knowledge score was observed against selection of disease free setts and recommended sett rate. As these practices are important for having healthy plants and to earn higher yields, the farmers might have gained adequate information which in turn would have enabled them to acquire knowledge.

Sett treatment

Under the practice of sett treatment, a low mean knowledge percentage of 18.61 was found. The respondents received only low scores on all the sub items viz., recommended fungicide (22.50 per cent), recommended quantity of fungicide (16.67 per cent) and recommended quantity of water (16.67 per cent). This might be due to lack of awareness about sett treatment. This finding is in line with the findings of Prakasam (2005)

Planting of betel vine

It could be noted from the table 2 that all the respondents were found to have knowledge on number of setts per pit and period of planting of setts, these are the usual practices, farmers may be aware of these practices.

After cultivation practices

Under the major heading of after cultivation practices, the mean knowledge percentage of respondents was 80.28. The knowledge level of the respondents under the sub-items of after cultivation practices namely, time of training live standards (80.83 percent) and time of lowering vines (80.00 per cent) was also found to be high. The high level experience of respondents in betel vine cultivation might have made them to possess high knowledge score on these practices.

Manuring

The mean knowledge percentage score for manuring was found to be 50.42 among the manuring practices, high knowledge was observed for the practices namely, quantity of farm yard manure per acre (75.00 per cent), time of application of FYM (83.33 per cent) and recommended quantity of FYM and neem cake per acre (78.33 percent). Adequate availability of FYM and neem cake in villages might have enabled the farmers to seek more information on this, which in turn resulted in better knowledge gain. Only lesser knowledge is observed for the practices viz., recommended quantity of NPK per acre (22.50 per cent), time of application (20.83 per cent) and micro nutrient spray (22.50 per cent). This might be due to the lack of awareness and complete information about the application of NPK fertilizers and micro nutrients. This finding is in line with the findings of Aito (2016)

Pest management

Under the major practices of pest management, a low mean knowledge percentage score of 13.95 was found. Their knowledge level on the pest management practices was found to be very low viz., recommended pesticides for scale insects (14.16 per cent), recommended dose of pesticides (11.66 per cent), recommended pesticides for mites (15.83 per cent) and recommended dose of pesticide (14.11 per cent). This may be due to the lack of awareness on pest management practices.

Disease management

Only one tenth of the respondents had knowledge on disease management. The respondents gained low knowledge score on all the sub items of disease management viz., recommended fungicide for phytophthora wilt (15.00 per cent), recommended dose of fungicide (12.50 per cent) recommended fungicide for bacterial leaf spot (10.00 per cent) and recommended dose of fungicide (8.83 per cent). Lack of complete information on disease management may be the probable reason for their low level of knowledge about disease management.

Time of harvest

The knowledge on correct time of harvesting betel leaves was possessed by majority (95.83 per cent) of the respondents. The high knowledge level might be due to their experience in betel vine cultivation for several years.

CONCLUSION

Most of the respondents were found to have medium level of knowledge about the recommended betel vine technologies, Since knowledge is the pre requisite for adoption, it is suggested that the State Department of Horticulture may make more frequent contacts for increasing the knowledge about recommended betelvine technologies. The knowledge may also be imparted to the respondents by conducting training programmes and through mass media.

REFERENCES

Aito Chopi K. 2016. A study on Knowledge and Adoption Behaviour of Rubber Growers in Dimapur district of Nagaland, Unpublished M.Sc. (Ag). Thesis, Department of Agricultural Extension, Annamalai University, Annamalai Nagar.

Prakasam T.2005. Knowledge level and extent of adoption of arecanut growers of salem district Unpublished M.Sc. (Ag). Thesis, Department of Agricultural Extension, Annamalai University, Annamalai Nagar.

Veerasami, S. 2009. An Analysis on Knowledge and Adoption Behaviour of Banana Growers. Unpublished M.Sc. (Ag.) Thesis, Annamalai University, Annamalai Nagar.

