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A STUDY ON ADOPTION BEHAVIOUR OF COLEUS PLANT GROWERS

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ABSTRACT

The present investigation was conducted in Thiruvannamalai district of Tamil Nadu state to study the adoption behavior of coleus plant growers.120 respondents were selected randomly by proportionate random sampling method from selected villages and they were interviewed personally to collect the data with the help of structured interview schedule. The collected data were processed and statistically analyzed. The study revealed that majority of the respondents had medium level of adoption (55.00 per cent). The independent variables namely experience in medicinal plant cultivation,extension agency contact,scientific orientation and risk orientation,educational status, and credit orientation were positively significance with the level of adoption of medicinal plant growers.

KEY WORDS: *Adoption; Profile; Relationship, Coleus plant Growers, Cultivation practices.*

INTRODUCTION

Humans have relied on nature for their basic needs, for production of food, shelter, clothing, transportation, fertilizers, flavours, fragrances and medicines (Cragg and New man 2005).Coleus *forskholii* belonging to the family Lamiaceae is a well known plant throughout the country and is known as Pashanbhedi, pathatchur in Hindi and Makkadi beru or Mangana beru in Kannada. It is one of the most potential medicinal crops of the future, as its pharmacopieal properties have been discovered only recently. Its tuberous roots are found to be rich source of forskolin which is being developed as a drug for hypertension, glaucoma, asthma, congestive heart failures and certain types of cancers. In addition, forskolin is reported to have been used in the preparation of medicines preventing hair greying and restoring grey hairs to its normal colour. While its foliage is employed in treating intestinal disorders and used as a condiment since a long time, It is under cultivation in parts of Rajasthan, Maharashtra , Karnataka and Tamil Nadu. Hence this study was taken up with the following objectives.

1. To study the adoption behavior of Coleus plant growers.
2. To study the relationship of characteristics of respondents with their extent of adoption.

METHODOLOGY

In Thiruvannamalai district, Chengam taluk was selected for the study, as it has the maximum area under Coleus cultivation compared to other taluks. In this taluk, three blocks namely Chengam, Thandarampattu and Pudupalayam were selected based on maximum area criteria.120 respondents were selected by proportionate random sampling method from selected villages and they were interviewed personally to collect the data with the help of structured interview schedule. The collected data were processed and statistically analyzed.

RESULT AND DISCUSSION

Table-1 . Distribution of respondents according to their overall adoption on Coleus cultivation practices

(n=120)

S.No	Category	Number of respondents	Per cent
1.	Low	18	15.00
2.	Medium	66	55.00
3.	High	36	30.00
	Total	**120**	**100.00**

It could be understood from Table-1 that 55.00 per cent of the respondents had medium level of adoption followed by one third of the respondents (30.00 per cent) had high level of adoption and 15.00 per cent had low level of adoption. This might be due to most of the farmers are literate and having adequate knowledge in cultivation of coleus. These may be the probable reason for medium to high level of adoption. This finding is in agreement with the findings of Kalimuthu (2006) and Mary (2004) .

Table 2. Practice wise adoption of recommended technologies in Coleus cultivation

(n=120)

S.No	Technologies	Number of respondents	Per cent
1	Planting season	87	72.50
2	Varieties	64	53.33
3	Propagation method	72	60.00
4	Method of planting	74	61.67
5	Spacing	87	72.50
6	Irrigation	43	35.83
7	Weeding	61	50.83
8	Farm yard manure application	74	61.66
9	Fertilizer application	91	75.83
10	Plant protection measures	54	45.00
11	Harvesting	79	65.83

It could be observed from the table-2 that majority (75.83 per cent) of the respondents adopted fertilizer application followed by planting season (72.50 per cent), spacing (72.50 per cent), harvesting at appropriate time (65.83 per cent),planting method (61.67 per cent), FYM application (61.66 per cent), method of planting (61.67 per cent), varieties (53.33 per cent), weeding (50.83 per cent), plant protection measures (45.00 per cent) and irrigation (35.83 per cent). This finding is in agreement with the findings of Jeyaseelan (2005) and Bharathideepa (2003) .

Less proportion of farmers only adopted irrigation which may be due to irregular water supply and low water table. Majority of them did not adopt the practices for control of Coleus diseases and insect pests. This might be due to the less incidence of

nematodes, insects damage and diseases in the study area.

Table 3. Relationship of characteristics of respondents with their extent of adoption of medicinal plant cultivation practices.

(n=120)

S.No.	Variables	'r' value	Regression Co-efficient	Standard error	't' value
X1	Age	0.131NS	0.448	0.398	1.125NS
X2	Educational status	0.271**	2.216	0.846	2.619**
X3	Occupational status	-0.095NS	0.378	0.305	1.239NS
X4	Annual income	0.142NS	0.668	0.545	1.225NS
X5	Farm size	0.105NS	1.498	1.125	1.331NS
X6	Area under medicinal plant cultivation	0.065NS	0.236	0.195	1.210NS
X7	Experience in medicinal plant cultivation	0.224*	1.768	1.100	1.677*
X8	Social participation	0.137NS	0.047	0.158	0.297NS
X9	Extension agency contact	0.209*	0.375	0.206	1.820*
X10	Scientific orientation	0.213*	0.598	0.342	1.748*
X11	Risk orientation	0.198*	0.745	0.400	1.862*
X12	Credit orientation	0.267**	2.656	0.900	2.951**
X13	Post-harvest facilities	0.144NS	0.498	0.395	1.260NS
X14	Market perception	0.057NS	0.798	0.665	1.200NS

R^2= 0.519 a=12.929 F= 6.078**

*- Significant at 5% level **- Significant at 1% level NS- Non-significant

Relationship of characteristics of respondents with their adoption level of medicinal plant cultivation practices.

It could be observed from Table 3 that out of fourteen variables studied, experience in medicinal plant cultivation , extension agency contact, scientific orientation, and risk orientation had positive and significant relationship at five per cent level of probability and two variables namely., educational status and credit orientation had positive significant relationship at one per cent level of probability with the adoption level of medicinal plant growers. All other variables were found be non-significant.

CONCLUSION

Most of the respondents (75.83 per cent) adopted fertilizer application, planting season (75.50 per cent), spacing (72.50 per cent), harvesting at appropriate time (65.83 per cent), planting method (61.67 per cent), FYM application (61.66 per cent), method of planting (61.67 per cent), weeding (50.83 per cent), varieties (53.33 per cent), plant protection measures (45.00 per cent) and irrigation (35.83 per cent).Out of fourteen variables studied, experience in medicinal plant cultivation , extension agency contact, scientific orientation, and risk orientation had positive and significant relationship at five per cent level of probability and two variables namely., educational status and credit orientation had positive significant relationship at one per cent level of probability with the adoption level of medicinal plant growers. All other variables were found to be non-significant.

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