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EXTENT OF KNOWLEDGE AND ADOPTION SELECTED CASHEW PRODUCTION
TECHNOLOGY AMONG CASHEW GROWERS IN SRIKAKULAM DISTRICT OF
ANDHRA PRADESH

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ABSTRACT

The study was conducted in Vanjrapukotthuru block of Srikakulam district, Andhra Pradesh. Both purposive and random sampling procedure was followed for selection of the district, blocks, villages and the respondents. The total sample size of the study was 120. The response was obtained from each individual respondent in a structured interview. The study revealed that the majority (54.16%) Cashew growers were the medium knowledge level. Regarding adoption, the majority (50.83%) Cashew growers were below the medium adoption level. The independent variables namely Age, Education, Farm holding, Farm experience, Annual income, Scientific orientation, Mass media exposure, Market orientation, Risk orientation, extension contact was positive and significant relationship with knowledge and adoption level obtained from correlation study, Whereas Family size showed positive and non-significant with knowledge and adoption level of cashew growers at 1 percent level of significance.

KEYWORDS: Knowledge, Adoption

Article History

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INTRODUCTION

Cashew (*Anacardium occidentale* L.) a native of Eastern Brazil, was introduced to India just as other commercial crops like Rubber, Coffee, Tea etc. by the Portuguese nearly five centuries back. Cashew became one of the important plantation crops with its significant contribution to the country's foreign exchange through export of processed cashew kernels and Cashew Nut Shell Liquid (CNSL). India is the largest area holder of this crop. Among the Agri-Horticultural commodities getting exported from India, cashew ranks the 2nd position. (**Balarubini** *et al.*, **2014**)

Maharashtra tops first in terms of production among the other major cashew growing states of India followed by Andhra Pradesh and Odisha. Tamil Nadu stands sixth in cashew production in the country. In India cashew was cultivated in about 1062.04 million ha. Commercial cultivation of cashew is taken up in eight states of our country mainly in west and eastern coast viz., Andhra Pradesh, Goa, Karnataka, Kerala, Maharashtra, Orissa, Tamil Nadu and West Bengal. In addition, cashew is also grown in few pockets of Assam, Chhattisgarh, Gujarat, Meghalaya, Nagaland and Tripura. The Western coastal States, i.e., Goa, Kerala, Karnataka and Maharashtra in the west coast and Andhra Pradesh, Tamil Nadu, Orissa and West Bengal in the eastern coast of India, are the main producer of cashew nut in the country. (Anusuya et al., 2020)

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RESEARCH METHODOLOGY

The research design opted for the study is descriptive research design. This type of design is opted generally when the researcher wants to study the current situation in a descriptive manner. The present study was conducted in Srikakulam district of Andhra Pradesh, from Srikakulam district Vajrapukotthuru Mandal was selected purposively based on considerable number of respondents. From Vajrapukotthuru Mandal a total of Eight villages i.e., Pollada, Suryamani Puram, Pathatekkali, Ramakrishnapuram, Peddamuraharipuram, Pudijagannadhapuram, Vajrapukotthuru, and legally were selected randomly for the selected present study.

OBJECTIVES OF THE STUDY

- To ascertain the Knowledge level of Cashew growers in selected cashew production technology
- To ascertain the Extent of Adoption of Cashew growers in selected cashew production technology

RESULTS AND DISCUSSION

Table 1: Knowledge Level of Cashew Growers in Selected Cashew Production Technology

		Response			
S. No	Particulars Particulars	Fully	Partially	Not	
		Correct	Correct	Correct	
1	Suitable soils for cashew cultivation	30	77	13	
1	Suitable soils for cashew cultivation	(25.00%)	(64.16%)	(10.83%)	
2	Sources of planting material	45	65	10	
2	Sources of planting material	(37.5%)	(54.16%)	(8.33%)	
3	Appropriate age of cashew grafts selected for planting	37	69	14	
3	Appropriate age of easilew grants selected for planting	(30.83%)	(57.50%)	(11.66%)	
4	Recommended pit size for planting cashew grafts	39	68	13	
7	Recommended pit size for planting easilew graits	(32.50%)	(56.66%)	(10.83%)	
5	Recommended spacing for cashew planting	49	54	17	
		(40.83%)	(45.00%)	(14.16%)	
6	Recommended quantity of FYM to be applied in	49	51	20	
U	pit before planting	(40.83%)	(42.50%)	(16.66%)	
7	Recommended quantity of SSP to be applied per	38	54	28	
,	pit before planting	(31.66%)	(45.00%)	(23.33%)	
8	Recommended quantity of Neem cake to be applied	23	65	32	
	per pit before planting	(19.16%)	(54.16%)	(26.66%)	
9	Recommended quantity of Urea to be applied per	41	59	20	
,	tree per year	(34.16%)	(49.16%)	(16.66%)	
10	Recommended quantity of Single Super Phosphate to	35	65	20	
10	be applied per tree per year	(21.16%)	(54.16%)	(16.66%)	
11	Recommended radial distance from the tree	25	57	38	
11	trunk for fertilizer application	(20.83%)	(47.50%)	(31.66%)	
12	Stem and Root Borer is more prevalent in trees of above 7 years	40	55	25	
12	Stem and Root Boter is more prevalent in trees of above 7 years	(33.33%)	(45.83%)	(20.83%)	
13	Average yield of above ten years old cashew nut tree	37	53	30	
13	Average yield of above ten years old casnew nut tree	(30.83%)	(44.16%)	(25.00%)	
14	Time of first split application of recommended fertilizer	45	55	20	
14	Time of first split application of recommended fertilizer	(37.50%)	(45.83%)	(16.66%)	
15	Covering materials of the tree trenches in	24	75	28	
	summer to control evaporation	(20.00%)	(62.50%)	(23.33%)	
16	Critical stages of irrigation	13	74	27	
10	Critical stages of irrigation	(10.83%)	(61.66%)	(22.50%)	
17	Pest that causes dropping of fruits	32	69	19	
	r est that causes dropping of fruits	(26.66%)	(57.50%)	(15.83%)	

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Table 1: Contd.,

	Table 1. Contu.,			1
18	Time of application of organic manures	29	81	10
10	Time of application of organic manufes	(24.16%)	(67.50%)	(8.33%)
19	Height and time of training and pruning.	23	67	30
		(19.16%)	(55.83%)	(25.00%)
20	Control of Leaf and Blossom Webber can be	41	69	10
20	controlled by spraying spinosad	(34.16%)	(57.50%)	(8.33%)
21	Importance removal of root suckers in first year	15	78	27
21	of cashew plantation	(12.50%)	(65.00%)	(22.50%)
22	Propagation of Stem and Root Borer	50	55	15
22	Propagation of Stelli and Root Dorer	(41.66%)	(45.83%)	(12.50%)
23	Removal of flowers in the first two years	25	50	45
23	of cashew plantation	(20.83%)	(41.66%)	(37.50%)
24	Control of Cashew Stem and Root Borer (CSRB)	20	85	15
24	through Carbaryl solution over the bark of the trunk	(16.66%)	(70.83%)	(12.50%)
25	•	15	65	40
25	Fog is the causative factor for flower dropping	(12.50%)	(54.16%)	(33.33%)
0.5	Irrigation interval during fruit formation	21	85	14
26		(17.50%)	(70.83%)	(11.66%)
	Time of flowering and fruit bearing of BPP-6 variety	27	75	18
27		(22.50%)	(62.50%)	(15.00%)
		20	, ,	
28	Requirement of TADI fencing on all sides up to	(16.66%)	45	55
	2-3 years of planting	(233377)	(37.50%)	(45.83%)
	Preventing T-Mosquito Bug through removal	25	55	40
29	of Neem trees.	(20.83%)	(45.83%)	(33.33%)
	Appropriate time of application of second split dose	20	57	43
30	of fertilizers	(16.66%)	(47.50%)	(35.83%)
	Gummosis is the symptom of Stem and Root Borer	40	65	15
31		(33.33%)	(54.16%)	(12.50%)
	Effect of Thrips damage.	41	59	20
32		(34.16%)	(49.16%)	(16.66%)
	Effective time of control T-Mosquito Bug	32	78	10
33		(26.66%)	(65.00%)	(8.33%)
		30	70	20
34	Identification symptoms of Stem Borer.	(25.00%)	(58.33%)	(16.66%)
		33	67	20
35	Affected parts of T-Mosquito Bug	(27.50%)	(55.83%)	(16.66%)
		(27.30%)	(33.83%)	(10.00%)

From Table 1 results revealed the item wise knowledge of cashew growers over the selected production technology of cashew in majority of respondents percentages are: Control of Cashew Stem and Root Borer (CSRB) through Carbaryl solution over the bark of the trunk and Fog is the causative factor for flower dropping, Irrigation interval during fruit formation (70.83%), Importance removal of root suckers in first year of cashew plantation (65.00%) Time of application of organic manures (67.50%), Covering materials of the tree trenches in summer to control evaporation (62.50%), Effective time of control T-Mosquito Bug (65.00%), Identification symptoms of Stem Borer (58.33%), Affected parts of T-Mosquito Bug (55.83%).

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S. No	Over-all Knowledge Level	Frequency	Percentage
1	Low (37-59)	23	19.18
2	Medium (60-82)	65	54.16
3	High (83-105)	32	26.66
	Total	120	100.00

Table 2: Overall Knowledge Level of Respondents on Selected Cashew Production Technology

From Table 2, it can be seen that majority of the respondents (54.16%) had medium level of knowledge regarding the cashew production technology, followed by 26.66 per cent of the respondents have high levels and 19.18 per cent of the respondents have low levels of knowledge regarding the cashew production technology. These findings were found similar to the findings in **Dinesh and Jeya (2021).**



Figure 1: Overall Knowledge Level of Respondents on Selected Cashew Production Technology.

Table 3: Relationship Between the Knowledge Level and Socio-Economic Profile of the Cashew Growers on Selected Production Technology

S. No	Independent Variable	Co-efficient Correlation (r)
1	Age	0.9210**
2	Education	0.8407**
3	Farm holding	0.9793**
4	Farm experience	0.8701**
5	Family Size	0.0270 (N.S)
6	Annual income	0.8275**
7	Scientific orientation	0.8412**
8	Mass media exposure	0.9994**
9	Market orientation	0.8745**
10	Risk orientation	0.8701**
11	Extension contacts	0.9793**

^{* =} Significant at 0.05 level of probability

The co-efficient of co-relation between the age (0.9210), education (0.8407), Farm holding (0.9793), Farm experience (0.8701), Annual income (0.8275), scientific orientation (0.8412) and mass media exposure (0.9994), Market orientation (0.8745), Risk orientation (0.8701), Extension contacts (0.9793) and the knowledge level as more than the table value "r" at 1 per cent level of significance. While the co-efficient of co-relation between Family size (0.0270) was more than the table value "r" at 1 per cent non- significant. It can be inferred that there is a positive and significant relationship between age, education, Farm holding, Farm experience, annual income, scientific orientation. Mass media exposure,

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^{** =} Significant at 0.01 level of probability

N. S= non-Significant

Market orientation, Risk orientation, extension contacts and knowledge level of the cashew growers on selected production technology. It can be inferred that there is a positive and non- significant relationship between Family size and knowledge level of the cashew growers on selected production technology.

Table 4: Extent of Adoption of Cashew Growers in Selected Cashew Production Technology

Particulars		Table 4: Extent of Adoption of Cashew Growers in Selected Cash						
Recommended spacing between cashew plants as 7m X 7m 30 25.00 80 66.66 10 8.33 10 Confining number of plants per care as 80-90. Application of Rertilizers: Application of Fertilizers at the rate of 1100g Urea + 750g SSP + 225g MOP in two splits in the plantation of above five years old Application of Fertilizers in 15 cm deep furrows by Ring method Application of Fertilizers in 15 cm deep furrows by Ring method Application of Fertilizers in 15 cm deep furrows by Ring method Application of Fertilizers in 15 cm deep furrows by Ring method Spraying of Neem oil solution once in four months to prevent Cashew Stem and Root Borer. Aprived first two months after flowering during March Spraying of Recommended spacing matter like dry leaves of this proving the musts for 2 - 4 days in the Sur Priving Remarks for first two subrise the months of priving the musts for 2 - 4 days in the Sur Priving Remarks for first two subrise the trace of 110 priving the priving the priving first per closure of the first two subrises of the first per closure of the first per subres of the first per closure of the first per subres of the first per closure of fir	C No	Doutionland	Level of Adoption by Respondents					
A Planting Growing of cashew in Light soil 1 Growing of cashew in Light soil 2 Digging pits of Im× Im x Im size. 38 31.66 67 55.83 15 12.50 3 Procuring the cashew grafts from the nurseries raised by Hortculture Department 4 Selection of BPP-8 or BPP-9 variety. 29 24.16 38 31.66 53 44.16 5 Selecting the grafts of more than 3 30.83 66 55.00 17 14.16 5 Selecting the grafts of more than 4 Selecting the grafts of more than 5 Growing from than 5 Growing from than 6 months age with 7-15 leaves. 37 30.83 36 55.00 17 14.16 5 Selecting the grafts in the months of June – July. 38 31.66 77 64.16 5 4.16 5 6 Maintaining sufficient distance between the soil and grafting joint. 38 31.66 77 64.16 5 4.16 6 6 6 6 10 8.33 8 Planting the grafts after removing the polyethylene bags. 98 81.66 22 18.34 - - 9 Recommended spacing between cashew plants as 7m X 7m 30 25.00 80 66.66 10 8.33 10 Confining number of plants per acre as 80-90. 37 30.83 79 55.83 4 3.33 10 Removing roots tuckers in first year 22 18.33 81 67.50 17 14.16 8 Manures and fertilizers: 12 Application of forecommended dosage of manures in the pits at the time of planting (10kg FYM + 2 kg Neem cake + 200g SSP) 23 19.16 61 50.83 36 30.00	5. No	Particulars						
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Digging pits of Im × Im × Im size. 38 31.66 67 55.83 15 12.50		C	16	38 34	7/	61.66	_	_
Procuring the cashew grafts from the nurseries raised by Horticulture Department							15	12.50
Horticulture Department			50	31.00	07	33.63	13	12.30
Selection of BPP-8 or BPP-9 variety. 29 24.16 38 31.66 53 44.16 5 6 6 6 6 10	3		17	14.16	32	26.66	71	59.16
Selecting the grafts of more than 6 months age with 7-15 leaves.	1		29	24.16	38	31.66	53	11 16
6 months age with 7-15 leaves. 6 Planting the cashew grafts in the months of June – July. 7 Maintaining sufficient distance between the soil and grafting joint. 8 Planting the grafts after removing the polyethylene bags. 9 Recommended spacing between cashew plants as 7m X 7m 9 Recommended spacing between cashew plants as 7m X 7m 10 Confining number of plants per acre as 80-90. 11 Removing root suckers in first year 12 Land Manures and fertilizers: 12 Application of Recommended dosage of manures in the pits at the time of planting (10kg FYM+2 Kg Neem cake + 200g SSP) 13 Application of only organic manures in the first year of planting. 14 11.66 74 61.66 32 26.66 Application of rettilizers at the rate of 1100g Urea + 750g SSP + 225g MOP in two splits in the plantation of above five years old 15 Application of fertilizers in 15 cm deep furrows by Ring method 24 20.00 81 67.50 15 12.50 Application of fertilizers in 15 cm deep furrows by Ring method 24 20.00 81 67.50 15 12.50 Application of fertilizers in 15 cm deep furrows by Ring method 24 20.00 81 67.50 15 12.50 Application of fertilizers in 15 cm deep furrows by Ring method 24 20.00 81 67.50 15 12.50 Application of fertilizers in 15 cm deep furrows by Ring method 24 20.00 81 67.50 15 12.50 Application of fertilizers in 15 cm deep furrows by Ring method 24 20.00 81 67.50 15 12.50 Application of fertilizers in 15 cm deep furrows by Ring method 24 20.00 81 67.50 15 12.50 Application of fertilizers in 15 cm deep furrows by Ring method 24 20.00 81 67.50 15 12.50 Application of fertilizers in 15 cm deep furrows by Ring method 24 20.00 81 67.50 15 12.50 Application of fertilizers in 15 cm deep furrows by Ring method 24 20.00 81 67.50 15 12.50 Application of fertilizers in 15 cm deep furrows by Ring method 24 20.00 81 67.50 15 12.50 Application of fertilizers in 15 cm deep furrows by Ring method 25 20.00 81 67.50 15 12.50 40 40 40 40 40 40 40 40 40 40 40 40 40		·	23		36		33	
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Maintaining sufficient distance between the soil and grafting joint. 30 25.00 80 66.66 10 8.33	6		38	31.66	77	64 16	5	4 16
Planting the grafts after removing the polyethylene bags. 98 81.66 22 18.34 - - 9 Recommended spacing between cashew plants as 7m X 7m 30 25.00 80 66.66 10 8.33 10 Confining number of plants per acre as 80-90. 37 30.83 79 65.83 4 3.33 11 Removing root suckers in first year 22 18.33 81 67.50 17 14.16 12 Removing root suckers in first year 22 18.33 81 67.50 17 14.16 13 Application of Recommended dosage of manures in the pits at the time of planting (10kg FYM + 2 Kg Neem cake + 200g SSP) 23 19.16 61 50.83 36 30.00 13 Application of Recommended dosage of manures in the pits at the time of planting (10kg FYM + 2 Kg Neem cake + 200g SSP) 23 19.16 61 50.83 36 30.00 13 Application of longly organic manures in the first year of planting. 14 11.66 74 61.66 32 26.66 14 Application of fertilizers at the rate of 1100g Urea + 750g SSP + 225g MOP in two splits in the plantation of above five years old 24 20.00 81 67.50 15 12.50 15 Application of fertilizers 115 cm deep furrows by Ring method 24 20.00 81 67.50 15 12.50 16 Application of fertilizers 1-1.5 meters away from the tree trunk. 34 28.34 86 71.66 - 17 Giving irrigation immediately after planting 33 27.50 87 72.50 - - 18 Irrigating each plant with 200 Litre of water at an interval of 15 days from January to March. 11 9.16 58 48.33 51 42.50 19 Giving irrigation at the time of critical stages of fruit formation and Nut development 11 9.16 58 48.33 51 42.50 20 Plough the tree trenches between rows to remove weeds. 17 14.16 37 30.83 66 55.00 21 Mulching with organic matter like dry leaves or straw at the tree base to control evaporation. 25 25 25 25 25 25 25 2								
Recommended spacing between cashew plants as 7m X 7m 30 25.00 80 66.66 10 8.33							10	0.55
10 Confining number of plants per acre as 80-90. 37 30.83 79 65.83 4 3.33 11 Removing root suckers in first year 22 18.33 81 67.50 17 14.16	8	Planting the grafts after removing the polyethylene bags.	98	81.66	22	18.34	-	-
Removing root suckers in first year 22 18.33 81 67.50 17 14.16	9	Recommended spacing between cashew plants as 7m X 7m	30	25.00	80	66.66	10	8.33
B. Manures and fertilizers: Application of Recommended dosage of manures in the pits at the time of planting (10kg FYM + 2 Kg Neem cake + 200g SSP) 23 19.16 61 50.83 36 30.00 30 30 30 30.00 30 3	10	Confining number of plants per acre as 80-90.	37	30.83	79	65.83	4	3.33
Application of Recommended dosage of manures in the pits at the time of planting (10kg FYM + 2 kg Neem cake + 200g SSP) 13 19.16 61 50.83 36 30.00 13 Application of only organic manures in the first year of planting. 14 11.66 74 61.66 32 26.66 14 Application of Fertilizers at the rate of 1100g Urea + 750g SSP + 225g MOP in two splits in the plantation of above five years old 39 32.50 72 60.00 10 8.33 15 Application of fertilizers in 15 cm deep furrows by Ring method 24 20.00 81 67.50 15 12.50 16 Application of fertilizers 1-1.5 meters away from the tree trunk. 34 28.34 86 71.66 - - C. Irrigation:	11	Removing root suckers in first year	22	18.33	81	67.50	17	14.16
time of planting (10kg FYM + 2 Kg Neem cake + 200g SSP) Application of only organic manures in the first year of planting. Application of fertilizers at the rate of 1100g Urea + 750g SSP + 225g MOP in two splits in the plantation of above five years old Application of fertilizers in 15 cm deep furrows by Ring method Application of fertilizers in 15 cm deep furrows by Ring method Application of fertilizers in 15 cm deep furrows by Ring method Application of fertilizers in 15 cm deep furrows by Ring method Application of fertilizers in 15 cm deep furrows by Ring method Application of fertilizers in 15 cm deep furrows by Ring method Application of fertilizers in 15 cm deep furrows by Ring method Application of fertilizers in 15 cm deep furrows by Ring method Application of fertilizers in 15 cm deep furrows by Ring method Application of fertilizers in 15 cm deep furrows by Ring method Application of fertilizers in 15 cm deep furrows by Ring method Application of fertilizers in 15 cm deep furrows by Ring method Application of fertilizers in 15 cm deep furrows by Ring method Application of fertilizers in 15 cm deep furrows by Ring method Application of fertilizers in 15 cm deep furrows by Ring method Application of fertilizers in 15 cm deep furrows by Ring method Application of fertilizers in 15 cm deep furrows by Ring method Application of fertilizers in 15 cm deep furrows by Ring method Application of fertilizers in 15 cm deep furrows by Ring method Application of fertilizers in 15 cm deep furrows by Ring method Application of fertilizers in 15 cm deep furrows by Ring method Application of fertilizers in 15 cm deep furrows by Ring method Application of fertilizers in 15 cm deep furrows by Ring method Application of fertilizers in 15 cm deep furrows by Ring method Application of fertilizers in 15 cm deep furrows by Ring method Application of fertilizers in 15 cm deep furrows by Ring method Application of fertilizers in 15 cm deep furrows by Ring method Application of fertilizers in 15 c	В.	Manures and fertilizers:				,		
13 Application of only organic manures in the first year of planting. 14 11.66 74 61.66 32 26.66 14 Application of fertilizers at the rate of 1100g Urea + 750g SSP + 225g MOP in two splits in the plantation of above five years old 24 20.00 81 67.50 15 12.50 16 Application of fertilizers in 15 cm deep furrows by Ring method 24 20.00 81 67.50 15 12.50 16 Application of fertilizers 1-1.5 meters away from the tree trunk. 34 28.34 86 71.66 - -	10	Application of Recommended dosage of manures in the pits at the	22	10.16	<i>C</i> 1	50.02	26	20.00
Application of fertilizers at the rate of 1100g Urea + 750g SSP + 225g MOP in two splits in the plantation of above five years old 24 20.00 81 67.50 15 12.50 16 Application of fertilizers in 15 cm deep furrows by Ring method 24 20.00 81 67.50 15 12.50 16 Application of fertilizers I-1.5 meters away from the tree trunk. 34 28.34 86 71.66 - - C. Irrigation:	12		23	19.16	61	50.83	36	30.00
14 225g MOP in two splits in the plantation of above five years old 39 32.50 72 60.00 10 8.35 15 Application of fertilizers in 15 cm deep furrows by Ring method 24 20.00 81 67.50 15 12.50 16 Application of fertilizers 1-1.5 meters away from the tree trunk. 34 28.34 86 71.66 - - 17 Giving irrigation immediately after planting 33 27.50 87 72.50 - - 18 Irrigating each plant with 200 Litre of water at an interval of 15 days from January to March. 11 9.16 58 48.33 51 42.50 19 Giving irrigation at the time of critical stages of fruit formation and Nut development - 47 39.16 73 60.83 19 D. Intercultivation:	13	Application of only organic manures in the first year of planting.	14	11.66	74	61.66	32	26.66
2.25g MOP in two spins in the plantation of above five years old 2.4 20.00 81 67.50 15 12.50 16 Application of fertilizers in 15 cm deep furrows by Ring method 24 20.00 81 67.50 15 12.50 16 Application of fertilizers 1-1.5 meters away from the tree trunk. 34 28.34 86 71.66 -	1.4	Application of fertilizers at the rate of 1100g Urea + 750g SSP +	20	22.50	72	60.00	10	0 22
16	14	225g MOP in two splits in the plantation of above five years old	39	32.30	12	60.00	10	6.33
C. Irrigation: 33 27.50 87 72.50 17 Giving irrigation immediately after planting 33 27.50 87 72.50 18 Irrigating each plant with 200 Litre of water at an interval of 15 days from January to March. 11 9.16 58 48.33 51 42.50 19 Giving irrigation at the time of critical stages of fruit formation and Nut development 47 39.16 73 60.83 D. Intercultivation: 47 39.16 73 60.83 20 Plough the tree trenches between rows to remove weeds. 17 14.16 37 30.83 66 55.00 21 Mulching with organic matter like dry leaves or straw at the tree base to control evaporation. 31 25.84 89 74.16 E. Training and Pruning: 31 25.84 89 74.16 22 Training of trees to ensure better canopy shape 20 16.66 35 29.16 65 54.16 23 Pruning the old aged plantations once in two years. 29 24.16 77 47.50 14 11.66 F. Plant protection	15	Application of fertilizers in 15 cm deep furrows by Ring method	24	20.00	81	67.50	15	12.50
17 Giving irrigation immediately after planting 33 27.50 87 72.50 - - - 18 Irrigating each plant with 200 Litre of water at an interval of 15 days from January to March. 11 9.16 58 48.33 51 42.50 19 Giving irrigation at the time of critical stages of fruit formation and Nut development - 47 39.16 73 60.83 19 D. Intercultivation: 20 Intercultivation: 21 Mulching with organic matter like dry leaves or straw at the tree base to control evaporation. 21 Mulching with organic matter like dry leaves or straw at the tree base to control evaporation. 22 Training and Pruning: 23 Pruning the old aged plantations once in two years. 29 24.16 77 47.50 14 11.66 23 Pruning the old aged plantations once in two years. 29 24.16 77 47.50 14 11.66 24 Spraying of Neem oil solution once in four months to prevent Cashew Stem and Root Borer 11 9.16 47 39.16 62 51.66 25 Inserting Aluminium Phosphide tablets at the rate of 1-2 per chiselled out hole in the trunk to control Stem and Root Borer. 18 15.00 44 36.66 58 48.33 30.83 66 55.00 55.0	16	Application of fertilizers 1-1.5 meters away from the tree trunk.	34	28.34	86	71.66	-	-
Irrigating each plant with 200 Litre of water at an interval of 15 days from January to March.	С.	Irrigation:						
18 days from January to March.	17	Giving irrigation immediately after planting	33	27.50	87	72.50	-	-
19 Giving irrigation at the time of critical stages of fruit formation and Nut development - 47 39.16 73 60.83 20 Plough the tree trenches between rows to remove weeds. 17 14.16 37 30.83 66 55.00 21 Mulching with organic matter like dry leaves or straw at the tree base to control evaporation. - 31 25.84 89 74.16 22 Training and Pruning: - 31 25.84 89 74.16 23 Pruning the old aged plantations once in two years. 29 24.16 77 47.50 14 11.66 24 Plant protection - 47 39.16 62 51.66 25 Inserting Aluminium Phosphide tablets at the rate of 1-2 per chiselled out hole in the trunk to control Stem and Root Borer. 18 15.00 44 36.66 58 48.33 26 Harvesting: Harvesting of the fruits two months after flowering during March 27 22.50 79 65.83 14 11.66 27 Harvesting the mature nuts when grain colour turns Pinkish to Grey colour 41 34.16 79 65.83 - 28 Drying the nuts for 2 – 4 days in the Sun. 49 40.83 71 59.16 - -	10	Irrigating each plant with 200 Litre of water at an interval of 15	11	0.16	50	18 33	51	42.50
Nut development	10		11	9.10	36	40.33	31	42.30
D. Intercultivation: 20 Plough the tree trenches between rows to remove weeds. 17 14.16 37 30.83 66 55.00	10				17	30 16	73	60.83
Plough the tree trenches between rows to remove weeds.	19	*	_	_	47	39.10	13	00.83
Mulching with organic matter like dry leaves or straw at the tree base to control evaporation. E. Training and Pruning: 22 Training of trees to ensure better canopy shape 23 Pruning the old aged plantations once in two years. E. Plant protection 24 Spraying of Neem oil solution once in four months to prevent Cashew Stem and Root Borer 25 Inserting Aluminium Phosphide tablets at the rate of 1-2 per chiselled out hole in the trunk to control Stem and Root Borer. C6. Harvesting: 26 Harvesting of the fruits two months after flowering during March – May 27 Harvesting the mature nuts when grain colour turns Pinkish to Grey colour 28 Drying the nuts for 2 – 4 days in the Sun. 31 25.84 89 74.16 32 25.84 89 74.16 34 31 25.84 89 74.16 35 29.16 65 54.16 37 47.50 14 11.66 58 48.33						,		1
base to control evaporation.	20		17	14.16	37	30.83	66	55.00
E. Training and Pruning: 22 Training of trees to ensure better canopy shape 23 Pruning the old aged plantations once in two years. 24 Spraying of Neem oil solution once in four months to prevent Cashew Stem and Root Borer 25 Inserting Aluminium Phosphide tablets at the rate of 1-2 per chiselled out hole in the trunk to control Stem and Root Borer. 26 Harvesting: 27 Harvesting of the fruits two months after flowering during March – May 28 Drying the nuts for 2 – 4 days in the Sun. 29 24.16 77 47.50 14 11.66 5 54.16 5 54.16 7 47.50 14 11.66 7 39.16 62 51.66 8 48.33 1 11.66	21		_		31	25.84	89	74 16
Training of trees to ensure better canopy shape 20 16.66 35 29.16 65 54.16 21 Pruning the old aged plantations once in two years. 22 Plant protection 23 Pruning the old aged plantations once in two years. 24 Plant protection 25 Inserting Aluminium Phosphide tablets at the rate of 1-2 per chiselled out hole in the trunk to control Stem and Root Borer. 26 Harvesting: 27 Plant protection 28 Pruning the old aged plantations once in two years. 29 24.16 77 47.50 14 11.66 29 24.16 77 47.50 14 11.66 20 25 1.66 21 18 15.00 44 36.66 58 48.33 22 22.50 79 65.83 14 11.66 23 Pruning the mature nuts when grain colour turns Pinkish to Grey colour 28 Pruning the nuts for 2 – 4 days in the Sun. 29 24.16 77 47.50 14 11.66 40 39.16 62 51.66 41 34.16 79 65.83 14 11.66					31	23.01	07	7 1.10
Pruning the old aged plantations once in two years. Plant protection Spraying of Neem oil solution once in four months to prevent Cashew Stem and Root Borer Inserting Aluminium Phosphide tablets at the rate of 1-2 per chiselled out hole in the trunk to control Stem and Root Borer. Harvesting: Harvesting of the fruits two months after flowering during March – May Harvesting the mature nuts when grain colour turns Pinkish to Grey colour Pruning the old aged plantations once in two years. 29 24.16 77 47.50 14 11.66 47 39.16 62 51.66 58 48.33 48.33 49 40.83 71 59.16				1 -	I			
F. Plant protection 24 Spraying of Neem oil solution once in four months to prevent Cashew Stem and Root Borer 25 Inserting Aluminium Phosphide tablets at the rate of 1-2 per chiselled out hole in the trunk to control Stem and Root Borer. 26 Harvesting: 27 Harvesting of the fruits two months after flowering during March — May 28 Drying the nuts for 2 – 4 days in the Sun. 29 Plant protection 10 9.16 47 39.16 62 51.66 11 9.16 47 39.16 62 51.66 29 21.60 44 36.66 58 48.33 40 40.83 71 59.16		• 1, 1						
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Cashew Stem and Root Borer Inserting Aluminium Phosphide tablets at the rate of 1-2 per chiselled out hole in the trunk to control Stem and Root Borer. Harvesting: Harvesting of the fruits two months after flowering during March – May Harvesting the mature nuts when grain colour turns Pinkish to Grey colour Drying the nuts for 2 – 4 days in the Sun. 11 9.16 47 39.16 62 51.66 15 48.33 15.00 44 36.66 58 48.33 27 22.50 79 65.83 14 11.66	F.							
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G. Harvesting: 26 Harvesting of the fruits two months after flowering during March – May 27 22.50 79 65.83 14 11.66 28 Drying the nuts for 2 – 4 days in the Sun. 40 40.83 71 59.16 –	25		18	15.00	44	36.66	58	48.33
Harvesting of the fruits two months after flowering during March – 27 22.50 79 65.83 14 11.66 Harvesting the mature nuts when grain colour turns Pinkish to Grey colour Drying the nuts for 2 – 4 days in the Sun. 49 40.83 71 59.16	G.			1	I		I	1
May 27 22.30 79 63.83 14 11.66 27 Harvesting the mature nuts when grain colour turns Pinkish to Grey colour 41 34.16 79 65.83 - - 28 Drying the nuts for 2 – 4 days in the Sun. 49 40.83 71 59.16 - -			27	22.50	70	65.00	1.4	11.00
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27 colour 28 Drying the nuts for 2 – 4 days in the Sun. 49 40.83 71 59.16	27		11	24.16	70	(5.02		
	27	i i	41	34.16	/9	05.83	-	-
	28	Drying the nuts for $2-4$ days in the Sun.	49	40.83	71	59.16	-	-
	29	Storing the produce only after drying.	120	100	_	_	_	_

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S. No	Over-all Adoption Level	Frequency	Percentage
1	Low (31-49)	27	22.51
2	Medium (50-68)	61	50.83
3	High (69-87)	32	26.66
	Total	120	100.00

Table 5: Overall Adoption Level of Respondents on Selected Cashew Production Technology

From Table 5 It can be understood that most of the respondents (50.83 %) had medium level of adoption, followed by 26.66 per cent of the respondents have high levels and 22.51 per cent of the respondents have low levels of adoption regarding the recommended practices in tomato cultivation. These findings were found similar to the findings in **Sajeev** *et al.*, (2015).

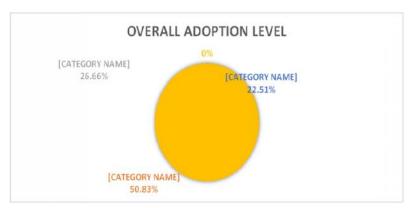


Figure 2: Overall Adoption Level of Respondents on Selected Cashew Production Technology.

Table 6: Relationship Between the Knowledge Level and Socio-Economic Profile of the Cashew Growers on Selected Production Technology

S. No	Independent Variable	Co-efficient Correlation (r)
1	Age	0.9347**
2	Education	0.8196**
3	Farm holding	0.5575**
4	Farm experience	0.8509**
5	Family Size	0.0951(N. S)
6	Annual income	0.8058**
7	Scientific orientation	0.9995**
8	Mass media exposure	0.9955**
9	Market orientation	0.8556**
10	Risk orientation	0.8509**
11	Extension contacts	0.9862**

^{* =} Significant at 0.05 level of probability,

N. S= non-Significant

The co-efficient of co-relation between the age (0.9347), education (0.8196), Farm holding (0.5575), Farm experience (0.8509), Annual income (0.8058), scientific orientation (0.9995) and mass media exposure (0.9955), Market orientation (0.8556) Risk orientation (0.8509), Extension contacts (0.9862) and the knowledge level as more than the table value "r" at 1 per cent level of significance. While the co-efficient of co-relation between Family size (0.0951) was more than the table value "r" at 1 per cent level of non- significant. It can be inferred that there is a positive and significant relationship between the age, education, Farm holding, Farm experience, annual income, scientific orientation. Mass media exposure, Market orientation, Risk orientation, extension contacts and adoption level of the cashew growers on selected

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^{** =} Significant at 0.01 level of probability

production technology. It can be inferred that there is a positive and non-significant relationship between Family size and adoption level of the cashew growers on selected production technology. These findings were found similar to the findings in Sajeev *et al.*, (2018).

CONCLUSION

It is concluded that the socio-economic profile of the sample group were medium level. It was evident that the knowledge of cashew growers on production practices was medium level. It was also found that the adoption of cashew growers on production practices were medium level. There is no association between socio economic-economic characters and knowledge, adoption. Therefore, null hypothesis is rejected. The study declared that majority of the respondents expressed their problems such as lack of knowledge about recognized source of planting material, Lack of knowledge about recommended pesticides and their dosages, high cost of manures and fertilizers, lack of proper knowledge about market price etc., Hence, the government should be conducted extension services like agricultural training programmes, Krishi mela etc., for improved in order to build the capacity of cashew growers on cashew production. Due to these programmes the knowledge will be high as well as respondents in adoption be in majority level.

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