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Research Article

Farmers' Brand Preference and Loyalty towards Chilli Seeds in Guntur Districtof Andhra Pradesh

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ABSTRACT

Brands are highly valuable chattels. Brand preference reflects customer allegiance, successful marketing campaign and Brand strength. Different seed brands are realised by public and private companies in the market which is becomes a challenge for the farmer to choose best quality seed brand for cultivation purpose. The study was conducted to analyze the farmer brand Preference and loyalty of chilli farmers while purchasing chilli seeds in Guntur district of Andhra Pradesh. For the study, 120 chilli farmers were selected randomly from two mandals i.e Sattenapalli and Vatticherukuru of Guntur district. Top eight brands of chilli seed were taken for study and ranking was done through simple weighted average method. It was found that majority of the farmers prefer 355-byadgi and BSS-355 because of its biotic and abiotic resistance and high yield potential. From the study it was also observed that, when a specific brand gives good crop yields the tendency of farmers increased to repetitive purchase of that brand and farmers will shift irrespective of considering the cost of seed.

Keywords: *Brand preference, Brand loyalty and Brand switching.*

INTRODUCTION

In India, total area under vegetables and horticulture crops is showing increasing trend when compared to commercial crops because of its short duration which it takes three to four months for production and provides immediate returns to the farmers once after sale in the market. Chilli is considered as one of the most important commercial spice crops and Guntur district of Andhra Pradesh is the largest chilli producing region, contributing 30 per cent to the total production of AP and the crop is cultivated in the area of 69,259 ha. For a good crop, farmer always prefer good seed variety and brand. Majority of the farmers used to prefer traditional, local varieties and the seeds of previous crops rather than hybrid seeds for cultivation. But due to drastic climate change and low soil fertility, traditional seed varieties yield potential has decreased than expected which made farmers unable to meet their cost of cultivation.

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This Uncertainty In Yields From Traditional Varieties Made Farmers To Shift To Hybrid Seeds Which Have Certainty In Its Yield Potential and Resistance To Pest And Diseases. So, Public And Many Private Seed Companies Came Into Role In Releasing Many Numbers Of Seed Varieties With Different Brands Into The Market To Meet The Demand Of Farmers. When Using Hybrids, New Seeds Should Be Purchased Each Season. This May Increase The Cost Of Cultivation, But The Disease Resistance Nature Of Hybrids Will Reduce The Usage Of Other Farm Inputs Like Pesticides And Insecticides Which Will Reduce The Farmers Expenditure.

Farmers facing a tough challenge while choosing a particular seed brand from a large number of existing seed brands of same crop. They gather information and take suggestions from different sources like dealers, fellow farmers, agricultural institutions which help them to pick a right brand according to their purchasing power and soil suitability. Due to increased awareness among the farmers regarding yield and quality of produce from hybrid seeds they are switching to hybrids from traditional seeds even though the cost of hybrid seeds is high. Hybrid seed of particular brand can be valued with regard to their potential and actual performance. A strong and good quality brand attains trust, confidence, comfort and reliability in farmer's mind. Farmer loyalty towards certain brand depends on the repeated purchase over time period. Farmers' brand loyalty depends on switching to the different brands based on price, quality, yield potential etc. This study analyses sample farmers brand preference and loyalty which makes them to choose the specific brand for their cultivation purpose. Since there are variety of different chilli seed brands like VNR-577, US-341, BSS-355, VIKRANTH, GAYATRI-155, 355-Byadgi, JINI-2626, ROMY-21etc. available in the Guntur district, so efforts are made to what kind of brands are preferred by the farmers in various income groups. Therefore, the main objective of the study is farmers' brand preference and loyalty towards chilli seeds in Guntur district of Andhra Pradesh and also study the numerous reasons of farmers made them to choose a particular brand.

MATERIALS AND METHODS

The present study focused on the chilli seed brand preference of sample respondents in Guntur district. Two blocks from guntur district were Purposively selected for the study *i.e.* Sattenapalli and Vatticherukuru. From each block, 60 farmers were selected constituting a total sample size of 120 farmers. The primary data was collected from farmers through personal interview method by using a structured questionnaire. The primary data pertained to the year 2019-2020.

The data was presented in tabular form to facilitate easy comparison. Statistical techniques like simple percentage analysis and weighted averages score method were used to analyse the data.

Weighted average score $= \frac{\sum wx}{\sum w}$

W = Weighted factor for seed brand

X = No of factors

RESULTS AND DISCUSSION

Table 1: Socio-Economic profile of respondents

Particulars	No. of farmers	%
***Age* (years)**		
Below 30	12	10
30-39	34	25.33
40-49	55	45.83
Above 50	19	15.83
Total	**120**	**100**
Education		
Have not attended	88	73.33
Primary education	20	16.66

Secondary education	11	9.16
University education	1	0.83
Total	**120**	**100**
Land holding(acres)		
Small	59	49.16
Medium	40	33.33
Large	21	17.50
Total	**120**	**100**
***Annual income* (Rs.)**		
Below 50,000	2	1.66
Above 50,000 to 1 lakh	19	15.83
1 lakh to 3 lakhs	76	63.33
More than 3 lakhs	23	19.16
Total	**120**	**100**

Source: primary data

1.1. Socio-Economic profile of respondents

As depicted in table 1, majority of the farmers 45.83 per cent belong to the age group of 40-49 years. 25.33 per cent and 15.83 per cent of the farmers belong to the age group of 30-39 and above 50 years respectively. Among the respondents 73.33 per cent of them have not attended any education level,16.66 per cent had primary education and 9.16 per cent had secondary education. In terms of land holding, majority of the farmers 49.16 per cent are small farmers. Medium and large farmers account for 33.33 per cent and 17.50 per cent respectively. 63.33 per cent of the farmers had an annual income of 1 lakh to 3 lakhs. Farmers having income of above 3 lakhs were 19.16 per cent, Rs. 50000 to 1 lakh were 15.83 per cent and only 1.66 per cent had an annual income less than Rs.50000.

1.2. Awareness among the samplefarmers about chilli seed brands

From the table 2, it can be interpreted that around 88.33 per cent of chilli farmers were aware about the brands of chilli seed. Only 11.67 per cent of chilli farmers were not aware about the brands of chilli seed because of lack of knowledge, lack of purchasing power and they depend upon dealer recommendation blindly without cross checking with officials of agriculture department.

Table 2: Awareness of sample farmers about Brands of Chilli seed (n=120)

S.no	Particularts	Frequency	Percentage
1	Aware of brands	106	88.33
2	Not aware of brands	14	11.67
	Total	**120**	**100**

1.3. Sample farmers preferring specific brand of chilli seed brands

The table-3 and table-4 present the classification about the consumers' brand preferences for chilli seed brands. Eight chilli seed brands were considered for the study, namely BSS-355, ROMY 21, 355 byadgi, VNR 577, GAYATRI-155, JINI 2626, VIKRANTH and US-341. The sample respondents were asked to rank the selected brands in order of importance. The table showed the ranking preference of selected brands by using weighted average score method. The table ranking preference of different were shown in the table 4. The results from the table revealed that among all the brands, the 355-byadgi occupied first position with 18.03 score. BSS-355 occupied second position with 17.31 score and ROMY 21 occupied with the score 16.42. The other brands were in the order of importance were VNR-577, GAYATRI-155, JINI 2626, US-

341, VIKRANTH with 15.03, 14.19, 13.97, 12.72, 12.33 scores respectively. Thus it can be concluded that majority of the framers preferred 355-byadgi while the least preferred brand is VIKRANTH.

Table 3: Sample Farmers' Preference for different brands of chilli seed

S.no	Brand name(variety)	1	2	3	4	5	6	7	8	Total
1	VNR – 577	17	12	16	14	20	17	0	24	**120**
2	US 341	8	10	15	15	10	13	31	18	**120**
3	VIKRANTH	6	10	12	18	7	20	29	18	**120**
4	BSS – 355	20	18	16	15	21	22	8	0	**120**
5	GAYATRI - 155	16	13	14	16	15	0	22	24	**120**
6	JINI 2626	12	18	12	11	13	15	18	21	**120**
7	ROMY 21	17	19	18	14	18	19	0	15	**120**
8	355 byadgi	24	20	17	17	16	14	12	0	**120**
	Total	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	

Table 4: Farmers' Preference For chilli seed Brands

S.no	Brand name(variety)	8	7	6	5	4	3	2	1	∑wx	∑wx/wx	Rank
1	VNR – 577	136	84	96	70	80	51	0	24	541	15.03	4
2	US 341	64	70	90	75	40	39	62	18	458	12.72	7
3	VIKRANTH	48	70	72	90	28	60	58	18	444	12.33	8
4	BSS – 355	160	126	96	75	84	66	16	0	623	17.31	2
5	GAYATRI – 155	128	91	84	80	60	0	44	24	511	14.19	5
6	JINI 2626	96	126	72	55	52	45	36	21	503	13.97	6
7	ROMY 21	136	133	108	70	72	57	0	15	591	16.42	3
8	355 byadgi	192	140	102	85	64	42	24	0	649	18.03	1

1.4. Sources of information utilized by the farmers in buying chilli seeds brand

Table 5: Sources of information utilized by the farmers in buying chilli seeds brand (N=120)

Source of information	Frequency (No. of farmers)	Per cent (%)
News paper	8	6.67
Television	6	5.00
Agri fairs	9	7.50
Dealers	26	21.67
Demonstration	5	4.17
Booklets	4	3.33
Relatives and fellow farmer friends	62	51.67
Total	**120**	**100**

A perusal of table 5 showed that majority 51.67 per cent of the farmers depend upon relatives and fellow farmer friends for source of information regarding chilli seed brands followed by dealers with 21.67 per cent. Farmers depend on other sources like agri fairs, newspaper, television, demonstrations, booklets with 7.50 per cent, 6.67 per cent, 5per cent, 4.17per cent and 3.33 per cent respectively.

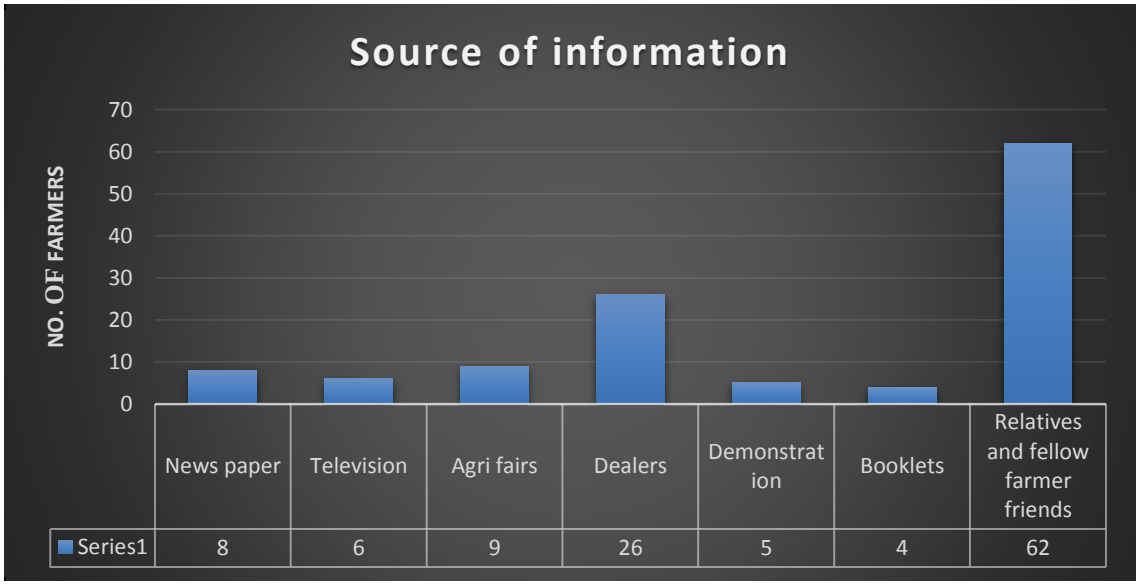

Fig. 1: Source of information utilized by the farmers

1.5. Cost of seed in the market

The cost of 355-Byadgi brand for 10gm is Rs. 580 which is higher than other seed brands. Despite of its higher cost, farmers preferred 355-Byadgi because of its resistance over pest and disesase.

Table 6: cost of seed for different brands

Brand /variety	Company	Cost of the seed in Rs/10gm gm packet
VNR - 577	VNR seeds Pvt Ltd	510
US 341	Nunhems (BASF)	430
VIKRANTH	KALASH SEEDS Pvt Ltd.	530
BSS - 355	KALASH SEEDS Pvt Ltd.	550
GAYATRI - 155	kartikeya seeds Pvt Ltd.	450
JINI 2626	STAR FIELD CROP SCIENCE	480
ROMY 21	STAR FIELD CROP SCIENCE	450
355 Byadgi	SYNGENTA	580

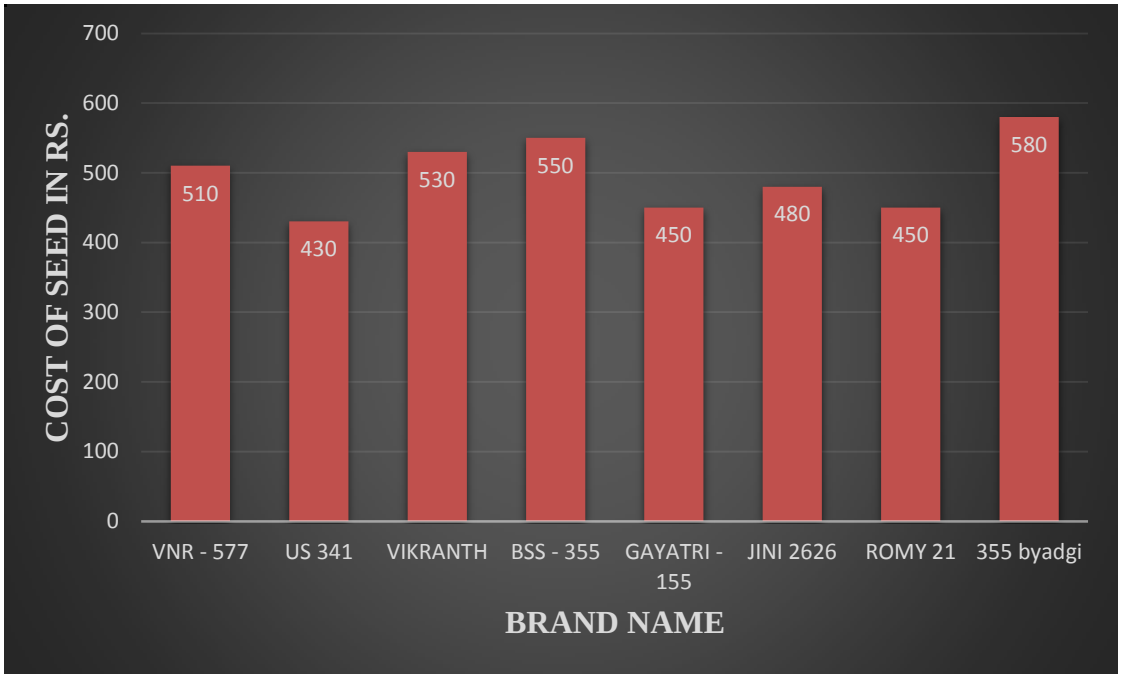

Fig. 2: cost of seed for different brands

1.6.Sample Farmer loyalty towards different brands of chilli seed.

Table 7: Repeated Purchase behavior of farmer towards brand over the time period

S.No	Brands	2017		2019	
		Before 3 years		One year before	
		frequency	% Yes	Frequency	% Yes
1	VNR – 577	14	11.67	17	14.17
2	US 341	19	15.83	8	6.67
3	VIKRANTH	17	14.17	6	5.00
4	BSS – 355	10	8.33	20	16.67
5	GAYATRI – 155	18	15.00	16	13.33
6	JINI 2626	14	11.67	12	10.00
7	ROMY 21	16	13.33	17	14.17
8	355 byadgi	12	10.00	24	20.00
	Total	**120**	**100**	**120**	**100**

The purchase of chilli brands such as VNR-577, BSS-355, ROMY 21, 355 byadgi was improved from 11.67 per cent, 8.33 per cent, 13.33 per cent, 10 per cent in the year 2017 to 14.17 per cent, 16.67 per cent, 14.17 per cent and 20 per cent in the year 2019 respectively. Whereas chilli seed brands like US 341,VIKRANTH, GAYATRI-155, JINI 2626 declined from 15.83 per cent, 14.17per cent, 15 per cent, 11.67 per cent in the year 2017 to 6.67 per cent, 5 per cent, 13.33 per cent, 10 per cent in the year 2019 respectively (table 7).

1.7. Response to price change in preferred chili brands by sample farmers

The price of the chilli seed brands fluctuate every year so the data was collected from the sample farmers towards price change. The data revealed that 65 per cent of the farmers bought

same brand and same quantity irrespective of the price change. 20.83 per cent of the respondents bought same brand but reduced quantity due to lack of credit available and 14.16 of them switched to low price brands to have required quantity for sowing.

Table 8: Response to price change in preferred chili brands by sample farmers

S.No	Particulars	Frequency	Percentage
1	Same brand same quantity	78	65
2	Same brand reduced quantity	25	20.83
3	Switch over to low price brand	17	14.16
	Total	**120**	**100**

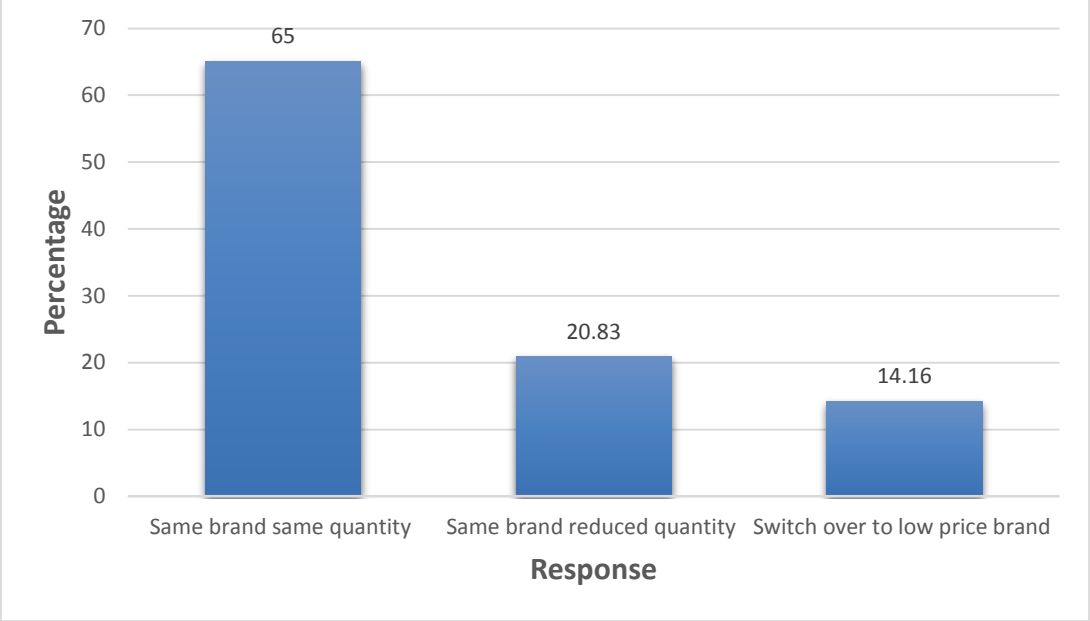

Fig. 3: Response to price change in preferred chili brands by sample farmers

1.8. Farmers decision during the non availabity of required brand seeds

Farmers were asked about their decision during the non availabity of required chilli seed brands. 68.33 per cent of the farmers were willing to wait untill they get the desired brand whereas 31.66 per cent will shift to other chilli seed brands that are available in the market.

Table 9: Farmers decision during the non availabity of required brand seeds

S.No	Particulars	Frequency	Percent
1	Shift	38	31.66
2	Wait	82	68.33
	Total	**120**	**100**

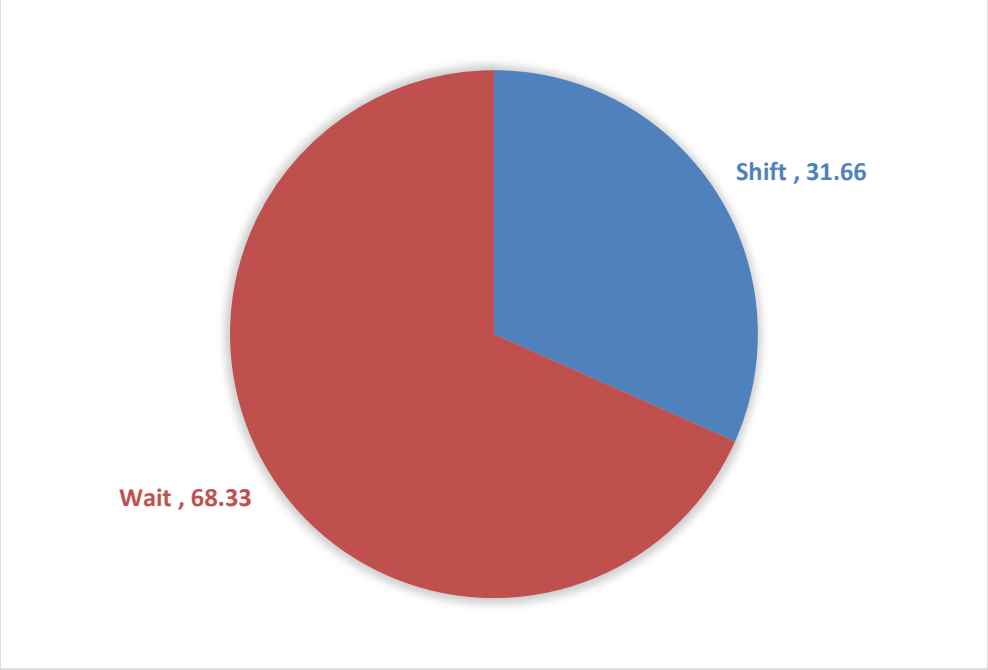

Fig. 4: Farmers decision during the non availabity of required brand seeds

1.9. Reasons for brand switching by the sample farmers

Table 10: Reasons for brand switching by the sample farmers

Reason	**Sample farmers N=120**		
	Frequency (No.of farmers)	**Percentage (%)**	**Rank**
Resistance to pest and disease	28	23.33	1
High yield potential	25	20.83	2
Certified seed with good quality	16	13.33	3
Try new brand	12	10.00	4
Availability of seed at sowing time	9	7.50	5
Low cost of seed	9	7.50	6
Seed germination	7	5.83	7
Credit availability	6	5.00	8
Perceived risk and uncertainty cost	5	4.17	9
Distance from village to shop	3	2.50	10
Total	**120**	**100.00**	

From the table 10 it can inferred that reasons like resistance to pest and disease, high yield potential and certified seed with good quality influenced majority of the farmers to switch over to other brands with 23.33 per cent, 20.83 per cent, 13.33 per cent respectively. Other reasons include try new brand, availability of seed at sowing time, low cost of seed, seed germination, credit facility, perceived risk and uncertainty cost, distance from village to shop.

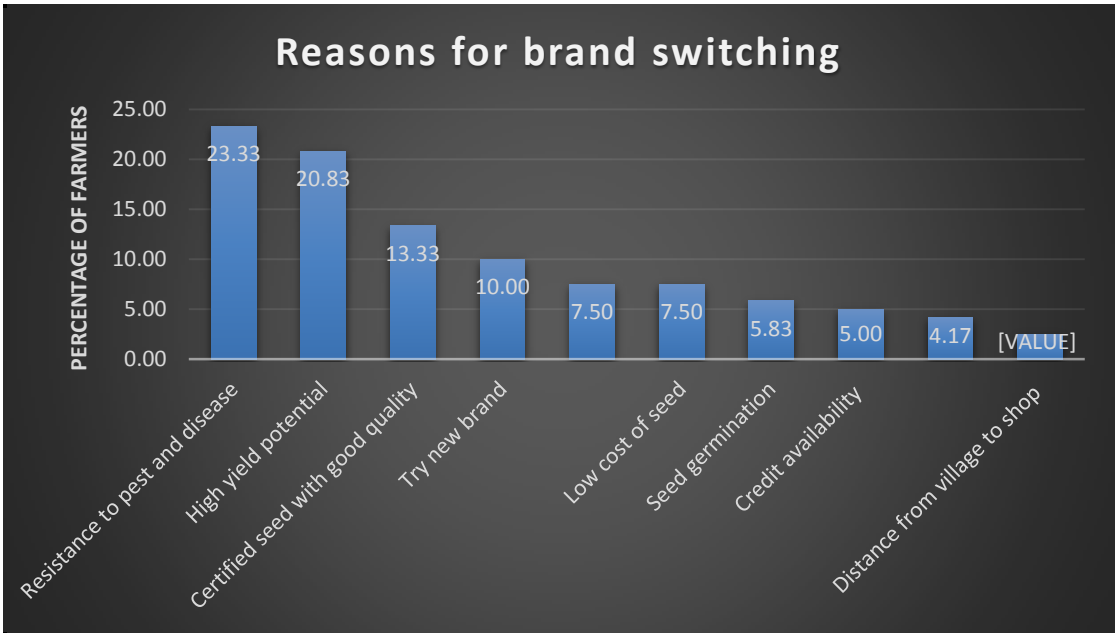

Fig. 5: Reasons for brand switching by the sample farmers

1.10. Test for significance between Seed characteristics and brand preference by sample farmers

The seed characters like price, yield, quality, resistance to pest and disease and timely availability of seed during sowing season were taken into consideration along with the information about brand preference by sample farmers towards different brands of chilli seed were collected and analyzed the reasons for choosing specific chilli brand for their cultivation purpose, Chi square analysis was used and results were presented in the table11.

Table 11: Seed characteristics and brand preference

Product characteristic	**Brand name /variety name**								Total freq.	Percentage (%)	sig. (Chi-square)	p-value
	VNR – 577	US 341	VIKRANTH	BSS – 355	GAYATRI – 155	JINI 2626	ROMY 21	355 byadgi				
	Freq.	Freq.	Freq.	Freq.	Freq.	Freq.	Freq.	Freq.				
Price	2	4	2	2	2	0	0	3	15	12.50		
Yield	1	0		1	5	4	3	4	18	15.00		
quality/purity	3	0	0	6	3	2	5	5	24	20.00		
pest and disease resistant	11	2	2	11	5	3	8	9	51	42.50	**0.05**	**0.0187**
timely availability	0	2	2	0	1	3	1	3	12	10.00		
Total	**17**	**8**	**6**	**20**	**16**	**12**	**17**	**24**	**120**	**100**		

It can be inferred from the table 11 that there is a significant relationship between seed characteristics and brand preference at 0.05 level of significance. Majority of the farmers *i.e.* 42.50 per cent preferred seed characteristic with pest and disease resistance followed by 20 per cent of the farmers prefer seed characteristic with quality of seed.

Findings

- In present study, 355-bydagi seed brand of Syngenta company was mostly preferred by the chilli farmers and ranked first through weighted average score method followed by BSS-355 because of resistance nature towards pest and disease and high yield potential when compared to other brands.

- The main reason to shift to other brands by the farmers was resistance nature of seed variety towards drought, pest and disease followed by availability and high yield characters of the seed brand.
- The main source of information about seed is relatives and fellow farmer friends, dealers with 51.67 and 21.67 percentage respectively.

CONCLUSION

From the study most of the farmers 45.83 per cent belong to the age group of 40-49 years. Even though 73.33 per cent of the farmers were illiterate but still 88.33 percent of the farmers are aware of the chilli seed brands available in the market. In terms of land holding, majority of the farmers 49.16 per cent are small farmers and 63.33 percent of the farmers had an annual income of 1 lakh to 3 lakhs. The major factors influencing the preference of brands by Farmers were biotic and abiotic resistance nature of variety, quality and yield. the price of the seed brand is Based on Performance of the seed at farmers field level. Major brands in Guntur district were 355-Bydagi, BSS-355, VNR-577 and ROMY 21. Further it was observed that artificial scarcity, lack of knowledge about new varieties and availability were the major constraints faced by the farmers in the procurement of chilli seeds.

Suggestions

- The private Companies should supply good quality seeds which may attract both dealers and farmers and which in turn may become brand loyal.
- Private companies should be aware of fraudulent dealers who supply low quality seeds under their brand name and try to defame the company.
- Government should provide subsidies to purchase quality seeds so that the overall production will rise.
- Farmers should cross check about the seed brand before they make a final purchase decision.

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