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KNOWLEDGE AND ADOPTION OF MUSTARD'S RECOMMENDED TECHNOLOGIES UNDER SOUTH WEST HARYANA CONDITIONS

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ABSTRACT

Haryana is a primarily an agriculture state. About 70 percent residences are engaged in agriculture. There are two main types of crops in Haryana: *Rabi* and *Kharif*. The major *Kharif* crops of Haryana are paddy, jawar, bajra, maize, cotton, sugarcane, and groundnut etc. The major *Rabi* crops are wheat, pulses, and mustard. Further, priority to the natural resource management would accelerate and sustain agricultural growth in Haryana. Scientific land use through adoption of conservation agriculture practices in the state, could be promoted. Focus on easy availability of credit facilities to small and marginal farmersto invest in advanced farm techniques would also enhance agricultural growth in the state. The Study was conducted in Hisar and Charkhi Dadri district of Haryana state. Two blocks namely Hisar-2 and Badhra selected randomly. Total four villages i.e. two from each block namely Kharia and Dobhi from Hisar -2 block and Nandha and Kadma from Badhra were selected randomly. Total 240 respondents *i.e.* 60 respondents were selected from each village by covering 30 male and 30 female respondents from each village, thus comprising a sample of 240 respondents were selected randomly. In total pre-production to post harvesting technologies found that majority of the respondent's knowledge and adoption about seed rate, thining, interculture mechanical weed management, plant protection measures and appropriate harvesting technologies whereas less knowledge and adoption about varieties, seed treatment, direction of sowing, SSP fertilizers, weedicies, chemical doze and zinc nutrient deficiency. In Hisar District respondents had more knowledge and adoption of recommended technologies as compared to Charkhi Dadri district. And also found that majority of the male respondents had more knowledge and adoption as compared to female respondents.

***Key words*: -** Crop, knowledge, adoption, technologies, agriculture

Introduction

"Agriculture is the basis of all over development work. If we fail in agriculture, it does not matter what else we achieve how many plans we put up, overall economic development will not be complete". (Jawahar Lal Nehru). In India, there are distinct male and female roles in the rural economy. Haryana is predominantly an agrarian state with nearly 80 percent of the state's total geographical area under cultivation. The state is the second largest food grains producer in the country. The state has favorable weather conditions for both Rabi and Kharif crops. It has achieved self-sustainability status in food production and milk products. Major crops grown in the state include rice, wheat, pulses, cotton, sugarcane, pearl millet and rapeseed and mustard. One of the the major *Rabi* crop in Haryana is mustard. Mustard *(Brassica nigra*) belongs to Brassicaceae family. Oilseeds are the second most important determinant of agricultural economy, next only to cereals. The per capita availability of oil is very low in India and the requirement of oilseed in the country is rapidly increasing because of increase in population and the living standard of the people.The oilseed sector has come out as a net foreign exchange earner thus oilseed have great potentiality in foreign trade. Hence, increasing oil production has been included as an important component of agricultural

Table 1: Knowledge and Adoption of recommended varieties of mustard crop.

S. no	Varieties	Knowledge				Adoption			
		Hisar		Charkhi Dadri		Hisar		Charkhi Dadri	
		Yes f (%)	No f (%)	Yes f (%)	No f (%)	Yes f (%)	No f (%)	Yes f (%)	No f (%)
1.	RH-30	47(39.2)	73(60.8)	34(28.3)	86(71.7)	7(5.8)	113(94.2)	4(3.3)	116(96.7)
2.	RH-725	60(50.0)	60(50.0)	35(29.2)	85(70.8)	38(31.7)	82(68.3)	23(19.2)	97(80.8)
3.	RH-749	57(47.5)	63(52.5)	32(26.7)	88(73.3)	4(3.3)	116(96.7)	3(2.5)	117(97.5)
4.	RH-406	51(42.5)	69(57.5)	30(25.0)	90(75.0)	3(2.5)	117(97.5)	1(0.8)	119(99.2)
5.	Other varieties (RH - 8812 (Laxmi), RB-50, RB-9901	49(40.8)	71(59.2)	33(27.5)	87(72.5)	1(0.8)	119(99.2)	2(1.7)	118(98.3)

production. State agriculture department revealed a considerable increase in the area under mustard cultivation in Haryana. It has increased to around 6.10 lakh hectare in 2020-2021 from 5.62 lakh hectare in 2019-2020. In 2019, the Haryana government had procured around 5.19 lakh tone mustard from farmers who had registered themselves on the 'Meri fasal, Mera Byora' portal. In 2020 the government had procured only 4.53 lakh tone mustard seed on market selling price (MSP).
(Hindustan Times)

Indian mustard (*Brassica nigra*) is cultivated throughout the country in rabi season. The major rapeseed and mustard growing states are Rajasthan, Haryana, Uttar Paradesh., Madhaya Pardesh and Gujrat etc. The oilseed sector has been an important area of concern and interventions for Indian policy makers in the post-reforms period when India became one of the largest importers of edible oils in the world, importing about half of domestic requirement in the 1990s (Sharma, 2014). The pre-requisites for agricultural development are the successful transfer of appropriate technology from the scientists to the farmers. It has been realized that there is wide gap between what is achieved at the research stations and what farmers know and apply in the field. Asiwal, B.L., Singh, S. and Sharma, N.K. (2013). Chandawat, M.S., Sharma, P.K. and Parmat, A.B. (2012) and Chaudhary, R., Bhadu, K. and Poonia, T. (2018) indicated that low knowledge and wide adoption gap due to different types of constraints.

Objectives of the study

1. To explore the knowledge of recommended technologies in the mustard crop.
2. To assess the adoption in recommended technologies.

Materials and Methods

The Study was conducted in Hisar and Charkhi Dadri district of Haryana state. Two blocks namely Hisar-2 and Badhra selected randomly. Total four villages *i.e.* two from each block namely Kharia and Dobhi from Hisar -2 block and Nandha and Kadma from Badhra were selected randomly. Total 240 respondents *i.e.* 60 respondents were selected from each village by covering 30 male and 30 female respondents from each village, thus comprising a sample of 240 respondents were selected randomly.

Results and Discussion

Data in Table 1 indicated that from, Hisar district, majority of the respondents (50.0%) had knowledge about RH-725 variety followed by RH-749 (47.5%), RH-406 (42.5%), Other varieties (40.8%) and RH-30 (39.2%) respectively. Data regarding adoption shows that less than half of the respondents (31.7%) adopted RH-725 followed by RH-30 (5.8%), RH-749 (3.3%), RH-406 (2.5%) and Other varieties (0.8%). Adoption gap was observed in

Table 2: Knowledge and Adoption of recommended seed rate and seed treatment of mustard crop.

S. no	Activities	Knowledge				Adoption			
		Hisar		Charkhi Dadri		Hisar		Charkhi Dadri	
		Yes f (%)	No f (%)	Yes f (%)	No f (%)	Yes f (%)	No f (%)	Yes f (%)	No f (%)
Seed rate									
1.	Irrigated	103(85.8	17(14.2)	99(82.5)	21(17.5)	101(84.2)	19(15.8)	70(58.3)	50(41.7)
2.	Rainfed	64(53.3)	56(46.7)	82(68.3)	38(31.7)	47(39.2)	73(60.8)	79(65.8)	41(34.2)
Seed treatment									
3.	Azotobactor	13(10.8)	107(89.2)	4(3.3)	116(96.7)	7(5.8)	113(94.2)	0(0.0)	120(100.0)
4.	Carbendazium	13(10.8)	107(89.2)	4(3.3)	116(96.7)	4(3.3)	116(96.7)	4(3.3)	116(96.7)

Table 3: Knowledge and Adoption of recommended method of sowing and thining of mustard crop.

S. no	Activities	Knowledge				Adoption			
		Hisar		Charkhi Dadri		Hisar		Charkhi Dadri	
		Yes f (%)	No f (%)	Yes f (%)	No f (%)	Yes f (%)	No f (%)	Yes f (%)	No f (%)
Method of sowing									
1.	Depth of seed	106(88.3)	14(11.7)	100(83.3)	20(16.7)	97(80.8)	23(19.2)	93(77.5)	27(22.5)
2.	Distance between row to row	70(58.3)	50(41.7)	23(19.2)	97(80.8)	52(43.3)	68(56.7)	16(13.3)	104(86.7)
3.	Distance between plant to plant	9(7.5)	111(92.5)	0(0.0)	120(100.0)	3(2.5)	117(97.5)	0(0.0)	120(100.0)
4.	Direction of sowing	0(0.0)	120(100.0)	0(0.0)	120(100.0)	0(0.0)	120(100.0)	0(0.0)	120(100.0)
Thining									
1.	Row to row	120(100.0)	0(0.0)	120(100.0)	0(0.0)	87(72.5)	33(27.5)	84(70.0)	36(30.0)

Other varieties (99.2%) followed by RH-406 (99.2%), RH-749 (97.5%), RH-30 (96.7%) and RH-725 (68.3%). Data regarding Charkhi Dadri district, more than one fourth of the respondents (29.2%) had knowledge about variety RH-725 followed by RH-30 (28.3%), Other varieties (27.5%), RH-749 (26.7%) and RH-406 (25.0%) respectively whereas less than one fourth of the respondents (19.2%) adopted RH-725 followed by RH-30 (3.3%), RH-749 (2.5%), Other varieties (1.7%) and RH-406 (0.8%). Adoption gap was perceived in RH-406 (99.2%) followed by Other varieties (98.3), RH-749 (97.5), RH-30 (96.7%) and RH-725 (80.8%) respectively.

Date presented in (Table 2) revealed that from, Hisar district majority of the respondents (85.8%) had knowledge about the recommended irrigated seed rate and 84.2 percent of the respondents adopted the recommended practice. In rainfed seed rate more than half of the respondents (53.3%) had knowledge about seed rate and more than one third of the respondents (39.2%) had adopted the recommended practice. Data regarding Charkhi Dadri district majority of the respondents (82.5%) had knowledge about irrigated seed rate whereas more than half of the respondents (58.3%) adopted. In Rainfed seed rate more than half of the respondents (68.3%) had knowledge about seed rate and 65.8 percent of the respondents had adoption.

Data highlights about the seed treatment only 10.8 percent of the respondent's knowledge about azotobactor and carbendazium in both districts and 5.8 percent adoption of the azotobactor and 3.3 percent adoption of the carbendazium in Hisar district. In Charkhi Dadri district no adoption of azotobactor and 3.3 percent adoption of carbendazium.

Data states (Table 3) that from, Hisar district, majority of the respondents (88.3%) had knowledge about depth of seed followed by distance between row to row (58.3%), and distance between plant to plant (7.5%). Whereas 80.8 percent adopted the recommended depth of seed followed by distance between row to row (43.3%), and distance between plant to plant (2.5%). In Charkhi Dadri district data reveals that majority of the respondents (83.3%) had knowledge about depth of seed and distance between row to row (19.2%). Whereas adoption of recommended practice was 77.5 percent about depth of seed and distance between row to row (13.3%). Depicts that in Hisar district, 100 percent

Table 4: Knowledge and Adoption of recommended nutrients requirement of mustard crop.

S. no	Recommended Nutrients	Knowledge				Adoption			
		Hisar		Charkhi Dadri		Hisar		Charkhi Dadri	
		Yes f (%)	No f (%)	Yes f (%)	No f (%)	Yes f (%)	No f (%)	Yes f (%)	No f (%)
Irrigated									
1.	Nitrogen	110(91.7)	10(8.3)	77(64.2)	43(35.8)	97(80.8)	23(19.2)	68(56.7)	52 (43.3)
2.	Phosphorus	110(91.7)	10(8.3)	77(64.2)	43(35.8)	97(80.8)	23(19.2)	68(56.7)	52 (43.3)
3.	Potassium	0(0.0)	120(100.0)	0(0.0)	120(100.0)	0(0.0)	120(100.0)	0(0.0)	120(100.0)
Rainfed									
1.	Nitrogen	7(5.8)	113(94.2)	0(0.0)	120(100.0)	7(5.8)	113(94.2)	0(0.0)	120(100.0)
2.	Phosphorus	0(0.0)	120(100.0)	0(0.0)	120(100.0)	0(0.0)	120(100.0)	0(0.0)	120(100.0)
3.	Potassium	0(0.0)	120(100.0)	0(0.0)	120(100.0)	0(0.0)	120(100.0)	0(0.0)	120(100.0)

Table 5: Knowledge and Adoption of recommended fertilizers of mustard crop.

S. no	Recommended Fertilizers	Knowledge				Adoption			
		Hisar		Charkhi Dadri		Hisar		Charkhi Dadri	
		Yes f (%)	No f (%)	Yes f (%)	No f (%)	Yes f (%)	No f (%)	Yes f (%)	No f (%)
Irrigated									
1.	Urea	110(91.7)	10(8.3)	77(64.2)	43(35.8)	97(80.8)	23(19.2)	68(56.7)	52 (43.3)
2.	SSP	7(5.8)	113(94.2)	2(1.7)	118(98.3)	6(5.0)	114(95.0)	2(1.7)	118(98.3)
Rainfed									
1.	Urea	7(5.8)	113(94.2)	0(0.0)	120(100.0)	7(5.8)	113(94.2)	0(0.0)	120(100.0)
2.	SSP	2(1.7)	118(98.3)	0(0.0)	120(100.0)	0(0.0)	120(100.0)	0(0.0)	120(100.0)

knowledge about thining in both districts. Whereas 72.5 percent adopted in hisar district and 70.0 percent adopted in Charkhi Dadri district.

Data indicate (Table 4) that from, Hisar district, recommended nutrients requirement in irrigated land majority of the respondents (91.7%) had knowledge and 80.8 percent adopted nitrogen and phosphorus requirement. Whereas no knowledge and adoption about potassium in both districts. In Charkhi Dadri district more than half of the respondents (64.2%) knowledge and 56.7 percent adopted nitrogen and phosphorus.

Further data revealed in rainfed land, In Hisar district only 5.8 percent knowledge and adopted nitrogen. And no knowledge and adoption about recommended phosphorus and potassium in both districts.

Data revealed in (Table 5) found that recommended fertilizers of irrigated land in Hisar district, majority of the respondents (91.7%) had knowledge about recommended urea and SSP (5.8%). Whereas urea (80.8%) and SSP (5.0%) adopted.

Further data regardingabout rainfed land in Hisar district that urea (5.8%) and SSP (1.7%) had knowledge about recommended fertilizers and (5.8%) adopted recommended urea. In Charkhi Dadri district no knowledge and adoption of urea and SSP.

Data shows in (Table 6) that Interculture & weed

Table 6: Knowledge and Adoption of recommended Interculture & weed management practicesof mustard crop.

S. no	Interculture & weed management	Knowledge				Adoption			
		Hisar		Charkhi Dadri		Hisar		Charkhi Dadri	
		Yes f (%)	No f (%)	Yes f (%)	No f (%)	Yes f (%)	No f (%)	Yes f (%)	No f (%)
Mechanical									
1.	Kasola	120(100.0)	0(0.0)	120(100.0)	0(0.0)	120(100.0)	0(0.0)	120(100.0)	0(0.0)
2.	Wheel hand hoe	116(96.7)	4(3.3)	109(90.8)	11(9.2)	64(53.3)	56(46.7)	22(18.3)	98(81.7)
Chemical (Weedicides)									
1.	Pendimethalin	104(86.7)	16(13.3)	43(35.8)	77(64.2)	85(70.8)	35(29.2)	21(17.5)	99(82.5)
2.	Glyphosate	42(35.0)	78(65.0)	0(0.0)	120(100.0)	18(15.0)	102(85.)	0(0.0)	120(100.0)

Table 7: Knowledge and Adoption of recommended plant protection measure of mustard crop.

S. no	Plant protection measure	Knowledge				Adoption			
		Hisar		Charkhi Dadri		Hisar		Charkhi Dadri	
		Yes f (%)	No f (%)	Yes f (%)	No f (%)	Yes f (%)	No f (%)	Yes f (%)	No f (%)
Insects									
1.	Hairy caterpillar	15(12.5)	105(87.5)	10(8.3)	110(91.7)	5(4.2)	115(95.8)	3(2.5)	117(97.5)
2.	Aphid	118(98.3)	2(1.7)	117(97.5)	3(2.5)	104(86.7)	16(13.3)	110(91.7)	10(8.3)
3.	Jassid	110(91.7)	10(8.3)	108(90.0)	12(10.0)	60(50.0)	60(50.0)	50(41.7)	70(58.3)
4.	Saw fly	10(8.3)	110(91.7)	5(4.2)	115(95.8)	2(1.7)	118(98.3)	0(0.0)	120
5.	Painted Bug	50(41.7)	70(58.3)	60(50.0)	60(50.0)	10(8.3)	110(91.7)	7(5.8)	113(94.2)
Diseases									
1.	White rust	110(91.7)	10(8.3)	108(90)	12(10)	105(87.5)	15(12.5)	105(87.5)	15(12.5)
2.	Downy mildew	105(87.5)	15(12.5)	104(86.7)	16(13.3)	80(66.7)	40(33.3)	90(75.0)	30(25.0)
3.	Stem rot	100(83.3)	20(16.7)	80(66.7)	40(33.3)	90(75.0)	30(25.0)	70(58.3)	50(41.7)

Table 8: Knowledge and Adoption of recommended chemicals doze mustard crop.

S. no	Chemicals doze	Knowledge				Adoption			
		Hisar		Charkhi Dadri		Hisar		Charkhi Dadri	
		Yes f (%)	No f (%)	Yes f (%)	No f (%)	Yes f (%)	No f (%)	Yes f (%)	No f (%)
Insects									
1.	Quinalphos/mono /dimethoate,	66(55.0)	54(45.0)	0(0.0)	120(100.0)	55(45.8)	65(54.2)	0(0.0)	120(10.0)
Disease									
1.	Melathione/ Dimethoate	26(21.7)	94(78.3)	0(0.0)	120(100.0)	10(8.3)	110(91.7)	0(0.0)	120(100.0)
2.	Mencozeb	79(65.8)	41(34.2)	3(2.5)	117(97.5)	11(9.2)	109(90.8)	3(2.5)	117(97.5)

Table 9: Knowledge and Adoption of recommended measures to combat the nutrients deficiency and appropriate harvesting time of mustard crop.

S. no	Activities	Knowledge				Adoption			
		Hisar		Charkhi Dadri		Hisar		Charkhi Dadri	
		Yes f (%)	No f (%)	Yes f (%)	No f (%)	Yes f (%)	No f (%)	Yes f (%)	No f (%)
Nutrients deficiency									
1.	Nitrogen	100(83.3)	20(16.7)	90(75.0)	30(25.0)	100(83.3)	20(16.7)	90(75.0)	30(25.0)
2.	Phosphorus	70(58.3)	50(41.7)	66(55.0)	54(45.0)	70(58.3)	50(41.7)	66(55.0)	54(45.0)
3.	Zinc	6(5.0)	114(95.0)	3(2.5)	117(97.5)	6(5.0)	114(95.0)	3(2.5)	117(97.5)
Appropriate harvesting time									
1.	Harvesting	120(100.0)	0(0.0)	120(100.0)	0(0.0)	120(100.0)	0(0.0)	120(100.0)	0(0.0)

management in Hisar district, 100.0 percent knowledge and adoption about kasola in both district. Whereas 96.7% knowledge about wheel hand hoe and 53.3 percent adopted in Hisar district. In Charkhi Dadri district 90.8 percent had knowledge about wheel hand hoe and 18.3 percent adopted.

Further data depicts in (Table 6) in Hisar district, majority of the respondents (86.7%) had knowledge about weedicides pendimethalin and 35.0 percent knowledge about glyphosate. Pendimethalin (70.8%) and glyphosate 15.0%) adopted. In Charkhi Dadri district 35.8 percent knowledge, 17.5 percent adopted and 82.5 percent adoption gap about pendimethalin. Whereas about glyphosate no knowledge and adoption.

Data presented in (Table 7) in Hisar district, Data elucidate about plant protection measure insect, majority of the respondents (98.3%) knowledge about aphid followed by jassid (91.7%), painted bug (41.7%), Hairy caterpillar (12.5%) and Saw fly (8.3%). Data regarding adoption shows that majority of the respondents (86.7%) adopted aphid insect followed by jassid (50.0%), painted bug (8.3%), hairy caterpillar (4.2%) and saw fly (1.7%). Data regarding adoption found that majority of the respondents (91.7%) adopted aphid followed by jassid (41.7%), painted bug (5.8%) and hairy caterpillar (2.5%). Adoption gap was observed in hairy caterpillar, saw fly and painted bug.

Data presented in Hisar district, majority of the respondents (91.7%) had knowledge about white rust disease followed by downy mildew (87.5%) and stem rot (83.3%). Data regarding adoption perceived that

Table 10: Relationship between knowledge and adoption variables in mustard crop.

Independent variable	Hisar		Charkhi Dadri	
	K.	A.	K.	A.
Age	0.137*	0.125*	0.126*	0.121*
Caste	0.152*	0.126*	0.142*	0.131*
Education	0.180*	0.166*	0.149*	0.122*
Occupation	0.189*	0.176*	0.165*	0.157*
Land holding	0.056	0.117	0.086	0.050
Type of land	0.065	0.058	0.052	0.048
Irrigation source availability	0.076	0.064	0.099	0.043
Annual Income	0.182*	0.140*	0.148*	0.138*
Type of family	0.069	0.070	0.041	0.024
Size of family	0.023	0.028	0.106	0.106
Material possession	0.182*	0.169*	0.138*	0.126*
Crops grown	0.179*	0.165*	0.162*	0.121*
Credit acquisition	0.088	0.086	0.070	0.062
Communication source	0.198*	0.190*	0.150*	0.167*
Psychological variable	0.175*	0.142*	0.160*	0.148*
Mechanization	0.172*	0.162*	0.165*	0.152*
Labour use pattern	0.182*	0.176*	0.169*	0.153*

K: Knowledge; **A:** Adoption

majority of the respondents (87.5%) adopted white rust followed by stem rot (75.0%) and downy mildew (66.7%). Adoption gap was found in downy mildew (33.3%) followed by stem rot (25.0%) and white rust (12.5%). In Charkhi Dadri presented that 90.0 percent knowledge about white rust followed by downy mildew (86.7%) and stem rot (66.7%). Data regarding adoption observed that majority of the respondents (87.5%) adopted white rust followed by downy mildew (75.0%) and stem rot (58.3%).

Table 8 shows thatin Hisar district, found majority of the respondents (65.8%) knowledge about mencozeb followed by quinalphos/mono/dimethoate (55.0%) and melathione/ dimethoate (21.7%). Data regarding adoption shows that majority of the respondents (45.8%) adopted quinalphos/mono/dimethoate. Data reveals in Charkhi Dadri district only 2.5 percent of respondents knowledge about mencozeb, 2.5 percent adopted. Whereas no knowledge and adoption about quinalphos/mono/ dimethoate and melathione/ dimethoate.

Data revealed in (Table 9) found that nutrient deficiency symptoms in Hisar district, majority of the respondents (83.3%) had knowledge and adopted nitrogen followed by phosphorus (58.3%) and zinc (5.0%). In Charkhi Dadri district, data shows that majority of the respondents (75.0%) knowledge about nitrogen followed by phosphorus (55.0%) and zinc (2.5%). Data indicated in both district 100.0 percent knowledge and adoption of appropriate harvesting time.

It is evident from Table 34 that age (r = 0.137) , (r = 0.126), caste (r = 0.152) (r = 0.142) , education (r = 0.180) (r = 0.149), occupation (r = 0.189 (r = 0.165), annual income (r = 0.182), (r = 0.148), material possession (r = 0.182) (r = 0.138), crops grown (r = 0.179) (r = 0.162), communication source (r = 0.198) , (r = 0.150), psychological variable (r = 0.175), (r = 0.160), mechanization (r = 0.172), (r = 0.165) and labour use pattern (r = 0.182), (r = 0.169) had positive & significant correlation with knowledge of Hisar and Charkhi Dadri respondents at 5% level of significance. Deshmukh *et al*., (2014), Jadhav and Aski (2014), Yadav *et al*., (2014) supported the findings.

Further, it is evident from Table 55 that age (r = 0.125) , (r = 0.121), caste (r = 0.126) (r = 0.131), education (r = 0.166) (r = 0.122), occupation (r = 0.176) (r = 0.157), annual income (r = 0.140), (r = 0.138), material possession(r = 0.169) (r = 0.126), crops grown (r = 0.165) (r = 0.121), communication source (r = 0.190), (r = 0.167), psychological variable (r = 0.142), (r = 0.148), mechanization (r = 0.162), (r = 0.152) and labour use pattern (r = 0.176), (r = 0.153) were found to be positively significant and correlated with adoption of Hisar and Charkhi Dadri respondents at 0.05% level of significance. Shriram and Chauhan (2000), Chandawat *et al*., (2012), Dudi and Meena (2012) and Slathia *et al*., (2016) supported the findings.

Conclusion

Priority of the natural resource management would accelerate and sustain agricultural growth in Haryana. Scientific land use through adoption of conservation agriculture practices in the state, could be promoted. Focus on easy availability of credit facilities to small and marginal farmers to invest in advanced farm techniques would also enhance agricultural growth in the state. Majority of the male respondents were found more knowledge and adoption as compared to female respondents.

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