RESEARCH NOTE

Factors associated with Knowledge and Adoption of Soybean Technology

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INTRODUCTION

Indian agriculture is still in the clutch of vicious circle of low productivity, which reflects in low production, low short term & long term increment in agriculture and hence lower adoption of improved crop production technology. One of the most supporting inputs to break this circle is technical knowledge arising out of research. This also initiated the transformation of traditional agriculture and thereby created a large potential for increasing agricultural production in the country. The soybean crop being a newly introduced crop in the cropping pattern of the state of Madhya Pradesh is no exception to this. Since the acreage of this crop during the last one decade increased manyfold but the productivity of this crop has registered a significant level of about 8 q/ha. Therefore it is necessary to investigate the influence of various socio-techno-economic & psychological factors on knowledge and adoption of soybean production technology, which may be consider a major constraints for low production of this crop in the state.

METHODOLOGY

The present study was confined to 10 randomly selected RAEO circles of Sehore block of Sehore district of Madhya Pradesh. The ten soybean growers from each RAEO circle were also selected randomly of the purpose of indepth study. Thus, ultimate sample unit is comprised of 100 sample soybean growers. The data from the selected respondents were collected by survey method using prelisted and tested interview schedule. The data were analysed keeping the objectives of the study in mind using the method of correlation of co-efficient.

RESULTS AND DISCUSSION

The various factors assumed to be associated with the knowledge and adoption of soybean production technology were correlated and the result of the same is boxed in Table.

The correlation coefficient for the age of the soybean growers showed that the age was not associated with knowledge and adoption of soybean production technology revealing that the age is not a decisive factor for extent of knowledge and adoption, while

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caste of soybean producer was only correlated with adoption of technology. The other factors listed in Table were significantly associated with the knowledge as well as adoption of soybean production technology revealing that many socio-economic technological & psychological factors were associated with knowledge & adoption of soybean production technology.

However, extent of knowledge was showed close association with risk orientation (r = 0.63) and socio-economic status (0.49) of the soybean growers, which shows that farmers with higher courage to face problems arising in soybean production seeks more knowledge about its production

technology. Similarly, soybean growers with effective income & higher social status and active participation in group activities of the community also seeks to gain more knowledge about soybean production technology.

The extent of adoption of soybean production technology was depicting close association with management orientation (0.67), socio-economic status (0.57), risk orientation (0.53) and extension participation (0.52).

CONCLUSION

This study revealing that soybean growers with scientific farm-management

Table : Correlation of technological knowledge and adoption in soybean production

N=100

Independent Variables		Correlation Coefficients(r)	
		Knowledge	Adoption
X_1	: Age	-0.1010^{NS}	-0.1817^{NS}
X_2	: Caste	0.1548^{NS}	0.2970**
X_3	: Education	0.3608**	0.4233**
X_4	: Land holding	0.2701**	0.2264*
X_5	: Social participation	0.4128**	0.2507**
X_6	: Socio-economic status	0.4986**	0.5721**
X_7	: Extension participation	0.3319**	0.5271**
X_8	: Information seeking behaviour	0.3947**	0.3720**
X_9	: Risk orientation	0.6378**	0.5386**
X_{10}	: Cosmopoliteness	0.4171**	0.4827**
X_{11}	: Attitude towards improved farm practices	0.3064**	0.3685**
X_{12}	: Management orientation	0.2192*	0.6705**
X_{13}	: Innovative proneness	0.3970**	0.4645**

** Significant at 1% level of probability   * Significant at 5% level of probability

NS Non significant

decisions, strong resources base, courage to face the problems in production of crop and higher participation in different extension activities have more adoption rate of soybean production technology.

IMPLICATION

(i)   The results of the study suggested that the knowledge and adoption of the soybean production technology can be improved through better extension participation and effective training programme specialy planned for soybean growers. This may also be helpful in improving risk orientation of the soybean growers.

(ii)   The sound credit system for meeting the needs of soybean growers in adoption of economically viable and technically feasible soybean production technology will yield a higher production from this crop in the area.

DAUGHTER

D	:	Duty Oriented
A	:	Active
U	:	Unorthodox
G	:	Good Cook
H	:	Home Management
T	:	Tolerant
E	:	Educated
R	:	Responsible