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ORIGINAL ARTICLE



Constraints encountered by oats growers in adoption of improved production teachnology

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ABSTRACT

Study was conducted in Nyoma block of Leh district to know the constraints faced by the growers in adoption of Oats production technology. 130 respondents were selected from 10 randomly selected villages of Nyoma block and data were collected through interview schedule. Results indicates that, lack of knowledge in the practices namely recommended dose of fertilizers, control measures of pests and diseases, identification of pests and diseases , recommendation of chemical weed control measures in oats, high cost of fertilizers and pesticides and harvesting, labour shortage at the time of harvesting and poor contacts of extension workers with growers were major constraints faced by oats growers. Facility of crop insurance scheme in case of failure of season, minimum support price of oats should be declared well in advance were important suggestion to overcome/minimize the constraints in adoption of new technology in oats cultivation

Keywords: constraints, oats production technology, Suggestions

INTRODUCTION

Oats (Avena sativa L.) are a whole grain cereal recognised for their health benefits and which are cultivated largely in temperate regions providing both a source of food for humans and animals, as well as being used in cosmetics and as a potential treatment for a number of diseases. Oats are known as being a cereal source high in dietary fibre (e.g. β -glucans), as well as being high in antioxidants, minerals and vitamins. Recently, oats have been gaining increased global attention due to their large number of beneficial health effects. Consumption of oats has been proven to lower blood LDL cholesterol levels and blood pressure, thus reducing the risk of heart disease, as well as reducing blood-sugar and insulin levels.

Oats is one of the most important crops of the Nyoma block of Leh District. Most of the villages in Nyoma block are cultivating the oats for animal consumption to meet the scarcity of food for the animals of Nyoma block especially the Pashmina goats. Majority of the farmers in the area has undertaken the cultivation of Oats since a very long time. However it is observed that recommended Oats production technology is not adopted by the farmers up to the extent for higher production due to some technological, economical and marketing constraints. Therefore, study was conducted to identify the constraints faced by the farmers in adoption of recommended Oats production technology and to seek their suggestions to over- come these constraints.

METHODOLGY

Nyoma block of Leh district was purposively selected for the present study because of maximum area under oats cultivation in this area. A sample of 130 respondents was selected from 10 randomly selected villages of Nyoma block. An interview schedule based on objective of the study was developed and respondents were personally interviewed for collection of information. The respondents were asked to tell the constraints faced by them in adoption of oats production technology. The constraints expressed by them were noted and it was categorized in five groups namely; technological constraints, economical constraints, service and supply constraints, marketing constraints and communication constraints. Based on the frequencies and intensity each particular constraint was converted in percentage. At the same time suggestions of the farmers were also collected to minimize the constraints. Frequency and percentage were used to analyze the data draw the meaningful conclusion.

OBJECTIVES

- (i) To know the constraints faced by the farmers in adoption of recommended oats production technology
- (ii) To seek their suggestions to overcame the constraints.

RESULTS AND DISCUSSION

Constraint in technology utilization

Table:1.

Constraints of respondents in technology utilization of oat cultivation
N=130

S.No.	Constraints	No.	Per			
			cent			
I	Technological constraint					
1	Lack of knowledge about recommended dose of fertilizers	111	85.38			
2	Lack of knowledge about control measures of pests and diseases	121	93.07			
3	Lack of knowledge about identification of pests and diseases	125	96.15			
II	Economical constraints					
1	High cost of fertilizers and pesticides	55	42.30			
2	High cost of labour charges at the time of sowing and harvesting	60	46.15			
3	Lack of finance for purchasing farm inputs	45	34.61			
III	Service and supply related constraints	•	•			
1	Labour shortage at the time of sowing and harvesting.	110	84.61			
2	Shortage of fertilizers at required time	121	93.07			
IV	Marketing constraints					
1	Low market price of oat at harvesting time	75	57.70			
2	Lack of marketing facilities in rural area	123	94.62			
V	Communication constraints					
1	Poor contacts of extension workers with farmers	122	93.85			
2	Non availability of farm information in time	125	96.15			
3	Irregularity of extension workers in rural area	128	98.46			

It is observed from Table.1 that, lack of knowledge about recommended dose of fertilizers (85.38 per cent), lack of knowledge about control measures of pests and diseases (93.03 per cent), lack of knowledge about identification of pest and diseases (96.15 per cent), were their major technological constraints. High cost of fertilizers and pesticides (42.30 per cent), high labour charges at the time of harvesting (46.15 per cent), lack of finance for purchasing farm inputs (34.61 per cent), were major economic problems.

Labour shortage at the time of sowing and harvesting (84.61 per cent) and sort supply of fertilizers at required time (93.07 per cent) were major constraints related to service and supply. low market price of oat (57.70 per cent) followed by, lack of marketing facility in rural area (94.62 per cent) were major marketing problems for oat growers in study area. Poor contacts of extension workers with farmers (93.85 per cent), non-availability of farm

information in time (96.15 per cent) and irregularity of extension workers in rural area (98.46

per cent) were major information transfer constraints for oat growers.

SUGGESTIONS TO OVERCOME THE CONSTRAINTS

Table 2 indicated that great majority of the farmers suggested that proper technical guidance should be given to the farmers as and when they needs (100.00 per cent), farmers should be protected by crop insurance scheme in case of failure of season (99.23 per cent), training on new cultivation technology should be imparted to the farmer (97.69 per cent), extension system should be streamlined to disseminate farm technology (96.15 per cent), required farm inputs should be made available at village level (95.38 per cent) and farm consultancy services should be made available to the farmers at village level (93.84percent

Table: 2 Suggestions offered by oat growers to overcome the constraints in technology utilization of oat production technology.

N=130

S.No.	Suggestions	No.	Per cent	Rank
1.	Farmers should be protected by crop insurance scheme in case of failure of season	129	99.23	II
2.	Extension system should be streamlined to disseminate farm technology.	125	96.15	IV
3.	Proper technical guidance should be given to the farmers as and when they needs.	130	100.0	1
4.	Training on new cultivation technology should be imparted to the farmer.	127	97.69	11
5.	Farm consultancy services should be made available to the farmers at village level.	122	93.84	VI
6.	Required farm inputs should be made available at village level.	124	95.38	V

CONCLUSION

It can be concluded that major constraints experienced by the farmers in oat cultivation were Lack of knowledge about recommended dose of fertilizers, High cost of fertilizers and pesticides, Labour shortage at the time of sowing and harvesting, Low market price of oat at harvesting time, Poor contacts of extension workers with farmers. Facility of crop insurance scheme in case of failure of season, minimum support price of oat should be declared well in advance, extension system should be streamlined, proper technical guidance and, organization of training to the farmers were important suggestions to overcome/minimize the constraints in adoption of oat production technology.

REFERENCES

FAO. 2002. Production Yearbook Vol. 55 - 2001. FAO Statistics Series.

FAOSTAT (2017). Oats production in 2016, Crops/World Regions/Production Quantity from pick lists. Food and Agriculture Organization, Statistics Division, FAOSTAT 2017.

FSANZ (Food Standards Australia New Zealand). Australia New Zealand Food Standards Code. Schedule 4. Nutrition, Health and Related Claims. (2016) (accessed March 1, 2016).

Malaysia. *Ministry of Health. Guide to Nutrition Labeling and Claims.* (2010). Available online at: https://extranet.who.int/nutrition/gina/sites/default/files/MYS%202010%20Guide%20to%20Nutrition%20Labelling%20and%20Claims.pdf (accessed January 3, 2018).

Nakamura, Y. (2017). Plant phospholipid diversity: Emerging functions in metabolism and protein–lipid interactions. *Trends in Plant Science*, 22, 1027–1040

Tiwari U, Cummins E. Meta-analysis of the effect of beta-glucan intake on blood cholesterol and glucose levels. *Nutrition*. (2011) 27:1008–16. doi: 10.1016/j.nut.2010.11.006

Whitehead A, Beck EJ, Tosh S, Wolever TM. Cholesterol-lowering effects of oat beta-glucan: a meta-analysis of randomized controlled trials. *Am J Clin Nutr.* (2014) 100:1413–21. doi: 10.3945/ajcn.114.086108

Yan, W., Fregeau-Reid, J., Ma, B., Pageau, D., & Vera, C. (2017). Nitrogen fertilizer complements breeding in improving yield and quality of milling oat. *Crop Science*, 57, 3291–3302.

Watkins, J.E. & Lane, L.C. (2004). Barley yellow dwarf disease of barley, oats, and wheat. In *NebGuide, University of Nebraska*. USA. Accessed on 12 July 2004 at http://ianrpubs.unl.edu/plantdisease/g906.htm.

Wilkins, R. & Kirilov, A. (2003). Role of forage crops in animal production systems. In A. Kirilov, N. Todorov and I. Katerov (eds). Optimal forage systems for animal production and the environment, pp. 203 - 291. [Grassland Science in Europe, Vol. 8].

Xue, Y., Xu, C. Liu, S. & He, L. (2000). Evaluate the quality of green oats storing by package techniques. *Qinghai Prataculture*, 9(1): 8 - 10.

Zhang, G., Li, X., Ma, Z., Yan, L., He, C. & Yang, L. (2002). Study on effect of sowing date and density to "Quan Wozi" oats yield. *Pratacultural Science*, 19(8): 21 - 24.

Zhao, Y., Liu, J. & Yang, C. (2001). Fertilization and embryo development in hybridization between Avena magna and Avena sativa. Chinese Bulletin of Botany, 18(3): 371 - 374.