



Research Article

Available online at www.journal-advances-developmental-research.com

Journal of Advances in Developmental Research

ISSN: 0976-4704 (Print), e-ISSN: 0976-4844 (Online)

J.Adv.Dev.Res. Volume 2, No.2, December 2011

The Constraints Experienced in Adoption of the Recommended Groundnut Based Cropping System

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Abstract

A study was carried out in Junagadh district from Gujarat State to know the constraints faced by groundnut (*Arachis hypogaea*) growers in adoption of recommended technologies of groundnut based inter/relay cropping system and to obtain their suggestions for overcoming the constraints. Most important constraints as perceived by the majority of the groundnut based inter/relay crop growers were, yield of the groundnut based inter/relay crops are less as compared to the sole groundnut, high price of improved seeds, fungicides, pesticides, weedicides are not effective as hand weeding. Most important suggestions to overcome the constraints were remunerative price of the product should be made available, farmers should be protected by crop insurance, if the crop fails and inputs should be supplied in required quantity in time.

Key words: Knowledge, crop growers, inter/relay cropping, *Arachis hypogaea*.

Introduction

Groundnut based inter/relay cropping is a common practice in Junagadh District. Directorate of Groundnut Research (ICAR), Main oil seeds Research Station of the Junagadh Agriculture University, Krishi Vigyan Kendra and other extension agencies like Training and Visit System (T&V), Extension wing of Government etc. have extended their facilities to the farmers. However, most of the groundnut based inter/relay crop growers have not adopted the entire improved groundnut based inter/relay crop production technology. The objectives of present study were to find out the constraints if any, experienced by the groundnut based inter/relay crop growers in adoption of the recommended groundnut based inter/relay crop production technology; and to seek the suggestions from the groundnut based inter/relay crop growers to overcome these constraints.

Experimental

Samples of 120 groundnut growers were selected by proportionate random sampling technique from eight villages of Vanthali, Junagadh, Visavadar and Mendarda talukas of Junagadh district (Gujarat). Out of them 35, 43 and 42 were sole groundnut growers, groundnut based intercrop growers and groundnut based relay crop growers, respectively. The data were collected with the help of structured schedule by personal interview method. The constraints and suggestions were studied. The details of identified constraints and suggestions as well as most important constraints perceived by the respondents are presented below.

The enlisted constraints and suggestions under the various area required to be rated on the

most important constraints and suggestions are discussed. The data collected were processed, tabulated, tabulated, classified and analyzed.

Results and Discussion

Constraints

The constraints were grouped into two categories- important (above 56.89 %) and Less important (up to 56.89 %), on the basis of mean of average percentage. The results are presented in Table 1.

The perusal of the data presented in Table 1 revealed that most important constraints faced by the groundnut based inter/relay crop growers were yield of the groundnut based inter/relay crops are less as compared to the sole groundnut (98.82 %), high price of improved seeds (96.97 %), high price of chemical fertilizers (91.12 %), Labour requirement is more in groundnut based inter/relay cropping system (91.76 %), extension workers are

not available in the villages (98.41 %), high price of weedicides (77.90 %), weedicides are not as effective as hand weeding (76.41 %), due to the adoption of recommended sowing distance, there is a difficulty in interculturing (63.53 %), unawareness about the recommendations of fungicides/pesticides (60.%) and non-availability of chemical fertilizers in required quantity in time (58.82 %). The results are in line with previous findings¹ which revealed that lack of knowledge about various recommended cultivation practices, non-availability of inputs in time and at reasonable prices, non-availability of improved implements, inadequacy of laborers and high rates of wages were the major constraints in adoption of recommended technologies of groundnut cultivation. Another study² revealed that the major constraint faced by farmers was lack of knowledge about improved varieties, seed rate and sowing time, which is in conformity with the above study.

Table 1: Constraints faced by the groundnut based inter/relay crop growers in adoption of improved groundnut based inter/relay crop production technology

Constraints	No. of respondents	Percentage	Rank
High price of improved seeds	82	96.47	III
Non-availability of improved seeds in required quantity	43	50.59	XII
There is no difference in yield to adopt the recommended seed rate	41	48.23	XIII
Due to the adoption of recommended sowing distance, there is difficulty in interculturing	54	63.53	VIII
High price of chemical for seed treatment	24	28.23	XVI
No benefit of seed treatment	10	11.76	XVIII
Scarcity of FYM/compost fertilizers	33	38.82	XV
Non-availability of chemical fertilizers in required quantity	50	58.82	X
High price of chemical fertilizers	80	91.12	III
Fear of heavy losses of chemical fertilizers	44	51.76	XI
Lack of knowledge about weedicides	09	10.59	XIX
High price of weedicides	67	77.90	VI
Weedicides are not effective as hand weeding	65	76.47	VII
Unawareness about the recommendation of pesticide/fungicides	09	10.59	XIX
High price of pesticide/fungicide	80	91.12	III
Unawareness about the recommendation of pesticide/fungicides	51	60.00	IX
Yield of the groundnut based crops is less as compared to sole groundnut	84	98.28	I
There is difficulty in cutting of crop due to sowing of groundnut based inter/relay crops	50	58.82	X
Labour requirement is more in groundnut based inter/relay cropping system	78	91.76	IV
Extension workers are not available in the villages	76	89.41	V
Extension workers are unaware about the new information	33	38.82	XV
Lack of training to the farmers about improved farm practices	20	25.53	XVII
Improved technologies are not demonstrated in the villages	35	41.12	XIV

Table 2: Suggestions by the groundnut based inter/relay crop growers to overcome the constraints in adoption of improved groundnut based inter/relay crop production technology

Constraints	No. of respondents	Percentage	Rank
Input should be supplied in required quantity	45	52.94	III
Input should be supplied at subsidized rate	30	35.29	VI
Remunerative price of the product should be made available	54	63.52	I
Training should be given to the farmers in relation to interculturing	33	38.82	V
Demonstration of new farm technologies should be laid out on farmers field	28	32.94	VII
Technical guidance regarding new farm technology should be given to the farmer at their door steps	25	29.41	VIII
Village level workers should frequently contact the farmers to make them aware about new farm technology	35	41.18	IV
Farmers should be protected by crop insurance, if the crop fails	50	58.82	II

$\bar{X} = 44.20$

Suggestions

The suggestions were grouped into two categories - Most important (above 44.20 %) and less important (up to 44.20 %), on the basis of mean of average percentage. The suggestions along with their percentage and ranks are presented in Table 2.

The most important suggestions offered by the groundnut based inter/relay crop growers to overcome the constraints in adoption of groundnut based inter/relay cropping system were, remunerative price of the product should be made available (63.52 %), farmers should be protected by crop insurance, if the crop fails (58.82 %) and inputs should be supplied in required quantity in time (52.94 %). These findings were in line with previous studies³⁻⁵.

By and large it could be suggested that the analysis of these constraints, emphasis to have concerted efforts of extension agencies working in locality to overcome the constraints reported by the groundnut growers to have wider adoption of groundnut production technology. There is a need to give more emphasis by extension agencies through mass media, training and organizing method and result demonstrations for educating the farmers about non adopted practices. Efforts need to be taken regarding supply of inputs at subsidized rates through cooperative societies and Agro service centers. It is also necessary to make administrative and cooperative machinery more effective and encourage the research system to evolve simple power operated implements to overcome the constraints.

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