

Analysis of knowledge level of organic farming practices of pigeonpea growers*

India has golden history of ancient agriculture and has the credit of having contributed ancient agriculture practices to other parts of the world over the years. This has lead to a number of changes at various production levels of agriculture from sowing to harvest. "Krishito naasti dhurbhikhsam" (famine vanishes through farming) thus said the Vedas. Since ages agriculture has been the life of the Indian people, meeting the main basic need of food, clothing and shelter

In modern agriculture indiscriminate application of pesticides has resulted in pesticide resistance in insects that compelled to use different molecules and higher dosages. These practices not only increase the cost of production but also quality of food is being affected and environment is polluted. A range of alternative ecofriendly methods of pest management practices and for substituting the chemical fertilizers various forms of organic manures and biofertilizers are used. Efforts are also made to evolve organic farming practices for field and horticulture crops and also farmers are following their own methods of organic farming practices. However, the empirical evidences on knowledge possessed on organic farming and also on the forward linkage activities followed by farmers on organic farming are much limited. Hence, the present study is designed to analyze the organic cultivation practices in pigeonpea with the specific objectives, to analyse the knowledge organic practices by farmers in organic pigeonpea cultivation, and to analyse the forward linkage activities followed by organic pigeonpea growers.

Gulbarga district consists of ten taluks and pigeonpea is being grown in all ten taluks. The area under organic pigeonpea crop for the year 2006-07 was obtained from JDA office, Gulbarga. Gulbarga and Jevargi taluks that occupied the first and second places respectively were selected for the study. From each taluk, five villages were selected. Thus total 10 villages were selected for the study. Twelve farmers were selected by simple random sampling procedure from each village thus the total sample for the study constituted 120 farmers. Data were collected by personal interview method using structured interview schedule. The teacher made knowledge test was developed to measure

the knowledge level of farmers about organic pigeonpea farming practices.

It is evident from the data in table 1 that 63.33 per cent of the respondents had medium knowledge on organic farming practices of pigeonpea. The reason might be that, the practices which are simple were generally known and regularly being practiced in the area are known to most of the farmers. The findings of the study are in conformity with the findings of Clothe and Borkar (2000), Kalaskar *et al.* (2001), Sophia (2001) and Rathod (2005). An appraisal of table 2 indicates that majority of respondents had knowledge about the practices like, recommended varieties (Maruti, 93.33%, BSMR 82.50%, Asha 56.67% and BRG 46.67%), recommended seed rate (81.66%), recommended sowing time i.e. within 15th July (98.33%), recommended spacing (71.67%) and seed treatment with rhizobium (90.83%), trichoderma (78.33%) and PSB (77.50%). Since these practices are important aspects of cultivation of any crop. It is necessary for farmers to know about these basic practices perfectly which might have motivated the farmers to have better knowledge.

In regard to pest management practices, in cultural practices majority of the respondents 100, 96.67, 95.63 and 57.50 per cent, had knowledge about summer ploughing, sowing with in 15th July, crop rotation and mixed cropping, respectively. About mechanical practices majority of farmers had knowledge about pheromone traps (98.83%) and bird perches (81.67%), while only 26.67 per cent of farmers had knowledge about light traps.

In concern to biological practices, majority of respondents had knowledge about panchagavya (90.83%), biodigester (80.83%) and trichoderma (68.33%), while cent per cent of respondents had knowledge about NPV and NSKE.

The possible reason for the respondents to be better aware about nutrient and pest management practices is due to the fault that pigeonpea crop suffers from many pests and diseases. So control of these pests and diseases becomes important for successive cultivation and as it is organic farming

Table 1. Overall knowledge level of respondents about organic pigeonpea farming practices

n=120

Sl.No.	Category	Frequency	Percentage	Mean score	Mean yield (qtls/acre)
1	Low (Mean $\pm$ 0.425*SD)	16	13.33	36.72	2.85
2	Medium (Mean $\pm$ 0.425*SD)	76	63.33	42.43	3.94
3	High (Mean $\pm$ 0.425*SD)	28	23.33	45.76	4.49
	Mean		41.52		
	SD		3.69		

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Table 2. Knowledge level of the respondents about individual organic pigeonpea farming practices n=120

Varieties	Frequency	Percentage
Maruti	112	93.33
BRG	56	46.67
BSMR	99	82.50
Asha	68	56.67
Seed rate		
Recommended seed rate(3-4kg/acre)	98	81.6
Seed Treatments		
Rhizobium	109	90.83
Trichoderma	94	78.33
PSB	93	77.50
Sowing time		
Within 15 th July (recommended)	118	98.33
Spacing		
60*30 (recommended for short duration variety)	112	93.33
90*30 (recommended for medium duration variety)	86	71.67
Nutrient management practices		
FYM	120	100.00
Green manure	62	51.67
Sheep manure	90	75.00
Poultry manure	73	60.83
Jeevamruth	118	98.33
Vermicompost	120	100.00
Pest management practices		
Cultural practices		
Crop rotation	116	96.67
Summer ploughing	120	100.00
Sowing within 15 July	115	95.83
Mixed cropping	69	57.50
Mechanical practices		
Light traps	32	26.67
Bird perches	98	81.67
Pheromone trap	118	98.33
Biological practices		0.00
NPV	120	100.00
NSKE	120	100.00
Pachagvya	109	90.83
Biodigester	97	80.83
Trichoderma	82	68.33

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Table 3. Post harvest operations carried out by the respondents n=120

Post harvest operations	Frequency	Percentage
Grading of the produce		
Manually	120	100
By using Scientific sieve	0	0.00
Bags used to store the produce		
Jute bags	120	100
Polythene bags	0	0.00
Cloth bags	0	0
Storage of the produce		
On the ground	120	100
Under ground	0	0.00
Certification for produce		
Certified the produce	0	0
Not certified the produce	120	100

no chemical fertilizer is applied, nutrient requirement of crop is full filled with organic materials. So, these things might have motivated the farmers to know more about pest and nutrient management practices.

It is revealed from the table 3 that cent per cent of the respondents adopted manual grading procedure, jute bags to store produce and produce stored on the ground, no farmer certified their organic pigeonpea produce. The possible reason for manual grading might be, it is simple and easy to carryout, non-availability of scientific grading sieves. With regard to jute bags used to store produce might be, jute bags are cheaper than others like cloth bags, polythene bags, etc. and jute bags are more durable than others. The reason for non-certification of organic produce might be that, there is no scope and platform at present to sell the organic produce.

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