www.ThePharmaJournal.com

The Pharma Innovation

ISSN (E): 2277-7695
ISSN (P): 2349-8242
NAAS Rating: 5.03
TPI 2018; 7(6): 697-702

www.thepharmajournal.com
Received: 15-04-2018
Accepted: 04-05-2018

Manoj Kumar
Department of Agricultural Extension, College of Agriculture SVPUAT, Modipouram Meerut, Uttar Pradesh, India

RN Yadav
Department of Agricultural Extension, College of Agriculture SVPUAT, Modipouram Meerut, Uttar Pradesh, India

SK Lodhi
Department of Horticulture, Sardar Vallabhbhai Patel University of Agriculture & Technology, Meerut, Uttar Pradesh, India

Satendra Kumar
Department of Horticulture, Sardar Vallabhbhai Patel University of Agriculture & Technology, Meerut, Uttar Pradesh, India

Pramod Kumar
Department of Agriculture Chemistry, CSSS PG College, Machhra, Meerut, Uttar Pradesh, India

Corresponding Author:
SK Lodhi
Department of Horticulture, Sardar Vallabhbhai Patel University of Agriculture & Technology, Meerut, Uttar Pradesh, India

Adoption level of mango orchardist regarding mango production technology in Western Uttar Pradesh

Manoj Kumar, RN Yadav, SK Lodhi, Satendra Kumar and Pramod Kumar

Abstract
This study was an attempt to study the Adoption level of mango orchardist regarding mango production technology in Western Uttar Pradesh. Most of the mango orchardists 81.87 per cent were having high level of adoption about the improved variety, nursery management 68.12 per cent, size of pit digging 80.00 per cent, time of mango transplanting 65.00 per cent, irrigation management 75.00 per cent, pre harvest to judge the ripen mango fruits 71.25 per cent, timely proper harvesting 67.50 per cent, material used during packing 81.67 per cent, transportation of mango fruits 85.62 per cent and marketing procedure 80.00 per cent

Keywords: Adoption level, orchardists

Introduction
Mango (*Mangifera indica* L.) is the national fruit of India known as the "King of fruits". It belongs to the family Anacardiaceae genus *Mangifera* and *species indica*. It is indigenous to Indo-Burma region. It is known as Aami in India. Which reflects that it is easily available to common man. India is bestowed with almighty which grows this fruit for more than 4000 years and hence conspicuous bonds have been between the fruit and cultural history of the Indians.

Mango is well adapted to tropical and sub-tropical climates. It thrives well in almost all the regions of the country but cannot be grown commercially in areas above 600 meter above sea level, but may be grown in valley areas of the temperate region. It cannot withstand severe frost, especially when the tree is young, high temperature itself is not so injurious to mango, but in combination with low humidity and high winds, it affects the tree adversely. Mango varieties usually thrive well in places with rainfall in the range of 75-375 cm/annum and dry season. The distribution of rainfall is more important than its amount. Dry weather before blossoming is conducive to profuse flowering. Rain during flowering is detrimental to the crop as it interferes with pollination. However, rain during fruit development is good but heavy rain cause damage to ripening fruits. Strong winds and cyclones during fruiting season may play havoc as they cause excessive fruit drop resulting poor yield.

Mango trees can be propagated both by sexual and asexual means. Sexual reproduction involves the union of male and female sex cells during flowering stage. In angiosperm plants like mango trees the seed and fruit formations initiate during the flowering process when pollen is transferred from the anther of a male plant to the stigma of a mother plant (pollination) where it germinates. Subsequently, the pollen tube descends through the style into the ovary until it reaches the embryo sac within the ovule; two male gametes from the pollen tube are then discharged into the embryo sac, one uniting with the female gamete to form the diploid zygote (fertilization), while the other merges with the two polar nuclei to form the triploid endosperm; both the zygote and the endosperm enclosed within the nucleus of the ovule (HARTMAN *et al*., 1990). The resulting seedling population might have similar or differing genotypes since meiosis (chromosome reduction) is the main cell division characteristic of this type of reproduction.

A seedling grown from a single sexual embryo from a mono-embryonic cultivar does not ensure a true-to-type mango tree, although this type of propagation was extensively used before vegetative methods of propagation were known (RAM; LITZ, 2009). Asexual or vegetative propagation results instead from the mitosis type of nuclear cell division, which accomplishes chromosome replication with an identical individual or clone obtained

India is the second largest producer of fruits after China, with a production of 92846 thousands metric tonnes of fruits from an area of 6480 thousands hectares and productivity 14.33 MT/hectares in 2016-17 (Horticulture Statistics at a glance 2017). Mango, banana, citrus, guava, grape, pineapple and apple are the major fruits grown in India. Apart from these, fruits like papaya, sapota, annona, phalsa, jackfruit, ber, pomegranate in tropical and sub-tropical group and peach, pear, almond, walnut, apricot and strawberry in the temperate group are also grown in a sizeable area. Although fruit is grown throughout the country, the major fruit growing states are Andhra Pradesh, Maharashtra, Uttar Pradesh, Gujarat Karnataka, Tamil Nadu, Madhya Pradesh and Bihar. In Uttar Pradesh a production of fruits is 10353.49 thousands metric tonnes with an area of 470.91 thousands hectares and productivity of 21.98 MT/hectares in 2016-17(Horticulture Statistics at a glance 2017.) India dominates the world mango production and with a total production of 19686.90 thousand million tonnes from an area of 2262.80 thousand hectares and productivity 8.7 MT/hectares in 2016-17(Horticulture Statistics at a glance 2017.) Mango is grown almost all the states, where as Uttar Pradesh is leading in production with 4540.23 thousand Million tonnes from an area of 264.93 thousand ha. (Horticulture Statistics at a glance2017.)

Uttar Pradesh is the largest mango growing state in the country and accounts for 23 per cent of the total production of mango in the country. The commercial mango varieties grown in the state are Bombay Green, Dashahari and Langra, Chausa, and Fazri. The major mango producing belts in the state are Lucknow, Saharanpur, Unnao, Bulandshahar, Amroha, Sitapur, Faizabad, Sultanpur, Meerut, Bijnor, Muzaffarnagar, Hardoi, Kasgan, Ambedkar Nagar, Aligarh and and Kheri. Mango cultivation in Uttar Pradesh is concentrated in two belts, as follows: North UP: Saharanpur, Muzaffarnagar, Bijnor, Bagpat, Meerut, Jyotiba Phule Nagar and Bulandshahar districts Central UP: Hardoi, Sitapur, Barabanki, Lucknow, Unnao, Pratapgarh, Varanasi and Faizabad districts Accordingly, the government of U.P. has taken the initiative to establish two Agri Export Zones (AEZ) for integrated development of export quality mango production and processing for exports. These AEZs include the contiguous districts of Saharanpur, Muzaffarnagar, Bijnor, Bagpat, Meerut and Bulandshahr in North UP and Hardoi, Sitapur, Barabanki, Lucknow and Unnao in central UP. Most common mango varieties grown in Uttar Pradesh are Dashehari, Langra and Chausa of excellent quality. There is limited competition of these economic varieties within different mango producing states of India and Pakistan is the only other supplier in the world market.

Adoption of improved production practices is the key to higher production of mango fruits and higher income of orchardists. The technical knowledge of orchardists appears to be the key link to higher level of adoption. The scientific research being done at the Fruit Research Stations has to be transferred to orchardists through extension education processes including on-farm training, distributing extension literature and regular field visits and demonstrations. Once orchardists acquire knowledge, they begin to use and apply new techniques and improved practices in their orchards. Even among orchardists, there is a great variation in their levels of knowledge, as well as their readiness to accept, try new methods and adopt improved production practices.

Importance of post-harvest management is an indispensable part of the handling product after harvest to prolong storage life, freshness and an attractive appearance. In order to deliver a quality product to the market and ultimately to the consumer to command buyer attention and gives the grower a competitive edge, Nearly, 20-25 per cent of fruits are wasted due to faulty post-harvest practices during harvesting, grading, packaging and storage, etc. Post-harvest management operations are quite diversified, consisting of collection, curing, pre-treatment, grading, packaging, pre-cooling, low temperature storage, pallet loading and transporting which varied according to fruit crop. Like post-harvest management, the pre-harvest and subsequent harvesting of the fruits also plays an important role in enhancing the shelf life and quality of the fruits. Okorley *et al.* (2014) found that the market price of the fresh fruit, pests and diseases, especially the mango fruit-flies, mango hopper, mango mealibag and inadequate funds were found to be the major constraints to most of the mango orchardists. Nonetheless, the mango business is perceived to have good prospects because the fruit has high demand local as well as distant market that can improve and, thus, with support from stakeholders, including government, NGOs and industry, the crop can become a big export produce of Ghana.

Material and Methods

This study was an attempt to study the Adoption level mango orchardist along with the extent of knowledge & adoption of improved mango cultivation practices among of orchardists of Western Uttar Pradesh. The variable and procedures were described accurately and completely So that the study could be replicated by the researchers and extension workers. Data were collected with the help of pre structured interview schedule covering all aspect of the present study. To make the procedure and information reliable and accurate, the investigator himself collected data with every individual mango orchardist either at his farm or his home. Scheduled developed was used for collecting information comprehensively. Before collecting information the purpose of the interview and study as a whole were explained to the mango orchardist.

Following statistical methods and analytical tools used for collected of data, their measurements and analysing the data in the study The variables selected for Level of extent of adoption of orchardists were measured in related to management all practices about improved mango production technologies and about each practice a definite question was set. The answers of each question given by the mango orchardist were measured by the three point scale i.e. high adoption, medium adoption and time low adoption. And given score high (3), medium (2), low (1).

1. Tabular analysis

For comparison and interpretation of various aspects, knowledge, adoption, and constraints responsible, tabular analysis was used.

2. Percentage

Simple calculation has been made on the basis of percentage. For obtaining percent, the frequency of a particular cell was multiplied by 100 and divided by the total number of mango growers in that particular category to which all of them belonged. The formula used to calculate the percentage is given below-

$$\text{Percentage} = \frac{\text{Frequency}}{\text{Total Number of respondent}} \times 100$$

3. Mean (Average) ($\overline{X}$)

The mean ($\overline{X}$) was calculated by adding the total scores obtained by the respondents and divided it by the total number of respondents using the following formula.

$$(\overline{X}) = \frac{\sum X}{N}$$

Where,

($\overline{X}$) = Average or mean
$\sum$ x = Total number of scores obtained by respondents
N = Total number of respondent

4. Rank order

The various ranks were given on the basis of highest to the lowest frequency/ mean.

5. Standard deviation

S.D. is the square root of mean of the squares of all deviations, the directions being measured from the arithmetic mean of the distribution. It is commonly developed by symbol sigma (σ).

$$S.D.(\sigma) = \sum \frac{d^2}{n}$$

Where,

σ = Standard deviation
d = Deviation of variables mean
n = Total number items

6. Correlation coefficient (r)

The coefficient of simple correlation (r) in a measure of the mutual relationship between two variables that in i.e. x and y, where relationship is measured and commonly termed as product movement correlation coefficient and is computed by the following formula:

$$r = \frac{\sum (xi - \overline{X})(yi - \overline{Y})}{\sum (xi - \overline{X})(yi - \overline{Y})}$$

Where,

r = correlation coefficient
xi =ith value of x variables
$\overline{X}$ = mean of x
Yi = ith value of y variables
$\overline{Y}$ = mean of y

Result and Discussion

Mango plays an important role in fruits cultivation scenario of Western Uttar Pradesh. It is known as the “king of fruits”. Many research are going on to increase the productivity and total production of the fruits. As of result of them various new and improved technologies regarding mango cultivation are been evolved. In spite of this, there has not been much increase in production as well as in its productivity. It is due to low adoption of technology by mango orchardists.

Table 1: Showed that most of the respondents were high level of adoption about improved varieties of mango

S. No.	Particulars	High adoption (3)		Medium adoption (2)		Not adoption (1)		Total Score	Mean Value
		F	P	F	P	F	P		
1.	Improved varieties	131	81.87	11	06.87	18	11.25	425	2.656
2.	Nursery Management	109	68.12	28	17.50	23	14.38	406	2.537
3.	Size of Pit digging	128	80.00	20	12.50	12	07.50	436	2.725
4	Time of mango plant transplanting	104	65.00	34	21.25	22	13.75	402	2.512
5.	Proper Propagation methods of mango planting	89	55.63	35	21.87	36	22.50	373	2.331
6.	Planting distance	135	84.37	12	07.50	13	08.30	443	2.762
7.	Fertilizer management	34	21.25	76	47.50	50	31.25	304	1.900
8.	Irrigation Management	120	75.00	09	05.62	31	19.37	409	2.556
9.	Major insect pests and their control measures	22	13.75	121	75.62	17	10.63	303	1.893
10.	Major diseases and their control measures	25	15.63	111	69.37	24	15.00	296	1.850
11.	Pre harvest how to judge the ripen mango fruits	114	71.25	24	15.00	22	13.75	412	2.578
12.	Proper Harvesting time	108	67.50	36	22.50	16	10.00	412	2.575
13.	Correct harvesting procedure	23	14.38	119	74.37	18	11.25	308	1.887
14.	Application of plant growth regulators in mango orchards	16	10.00	21	13.12	123	76.88	213	1.331
15.	Post-harvest management care of plant	24	15.00	117	73.12	27	16.80	309	1.931
16.	Storage of fruits after harvesting	36	22.50	89	55.63	35	21.88	321	2.006
17.	Packing of mango fruits for disposal at short distance market	22	13.75	126	78.75	12	07.50	330	2.062
18.	Packing of mango fruits for disposal at long distance market	23	14.38	125	78.12	12	07.50	308	1.925
19.	Type of materials used during packaging	131	81.87	08	05.00	21	13.12	430	2.687
20.	Transportation of Mango fruits	137	85.62	06	03.75	17	10.63	440	2.750
21.	Chemical used during transportation	08	05.00	28	17.50	124	77.50	204	1.275
22.	Marketing procedure (local market/distant market)	128	80.00	12	07.50	20	12.50	428	2.675
23.	Processing of Mango fruit	20	12.50	128	80.00	12	07.50	308	1.925
24.	Chemical used during processing	11	06.87	28	17.50	121	75.63	121	1.312

F = Frequency, P = Per cent

Improved varieties - The data from the Table 1 showed that most of the respondents were high level of adoption about improved varieties of mango. Among the total sample size, 81.87 per cent respondents were high level of adoption about the improved variety of mango followed by 11.25 per cent respondents had not adopted level and remaining only 06.87 per cent respondents were reported to the medium level of adoption about the improved varieties of mango. The total score obtained by the respondents were 425 and their mean value is 2.656 about the adoption of improved varieties of mango. Nursery management:- It is highlighted from the Table 1 that most of the respondents were high level of adoption about the nursery management practices in mango orchardists. Among the total sample size, 68.12 per cent respondents were reported to high level of adoption followed by 17.50 per cent respondents were medium level of adoption and only 11.25 per cent respondents were belonging to not adopted categories about the nursery management practices in mango orchardists. The total score obtained by the respondents were 406 and their mean value is 2.537 about the adoption of nursery management in mango orchardists. Size of pit digging:- It is find out from the Table 1 that most of the respondents were high adoption level about the size of pit digging of mango planting. Among the total sample size, 80.00 per cent respondents were reported to high level of adoption followed by 12.50 per cent respondents were medium level of adoption and rest 07.50 per cent respondents were belonging to not adoption level category about the size of pit digging for mango planting. The total score obtained by the respondents were 436 and their mean value is 2.725 about the adoption level of size of pit digging for in mango planting. Time of mango planting:- The data from the Table no. 1 that most of the respondents were high level of adoption about the time of mango plant transplanting for mango orchardists. Among the total sample size, 65.00 per cent respondents were high adoption followed by 21.25 per cent respondents were medium level of adoption and rest 13.75 per cent respondents were belonging to the not adopted categories about time of planting for mango orchardists. The total score obtained by the respondents were 402 and their mean value is 2.512 about the adoption of time of mango transplanting practices in mango orchardists. Proper propagation method:- The data from the Table 1 observed that most of the respondents were high level of adoption about recommended proper propagation methods in mango cultivation. Among the total sample size, 55.63 per cent respondents were high level of adoption followed by 22.50 per cent respondents were belonging to not level of adoption and remaining 21.87 per cent respondents were medium level of adoption categories about the recommended proper propagation methods in mango cultivation. The total score obtained by the respondents were 373 and their mean value is 2.331 about the adoption of proper propagation method in mango cultivation. Planting distance: - It is seen from the Table 1 that most of the respondents were high level of adoption about recommended planting distance for mango transplanting. Among the total sample size, 84.37 per cent respondents were reported to high level of adoption followed by 08.30 per cent respondents had not adopted and remaining 01.25 per cent respondents were belonging to medium level of adoption categories about the planting distance of mango planting. The total score obtained by the respondents were 443 and their mean value is 2.762 about the adoption level of planting distance in mango orchardists. Fertilizers management:- It is obvious from the Table 1 that most of the respondents were medium level of adoption about the fertilizer management in mango orchardists. Among the total sample size, 47.50 per cent respondents were reported to the medium level of adoption followed by 31.25 per cent respondents had not adopted and only 21.25 per cent respondents were belonging to the high level of adoption categories about the fertilizers management in mango orchard. The total score obtained by the respondents were 304 and their mean value is 1.900 about the adoption of fertilizers management in mango orchards. Irrigation management - The data from the Table 1 observed that most of the respondents were high level of adoption about recommended irrigation management in mango orchardists. Among the total sample size,75.00 per cent respondents were high level of adoption followed by 19.37 per cent respondents were belonging to not adoption category and remaining 05.62 per cent respondents were medium level of adoption category about the recommended irrigation management in mango orchardists. The total score obtained by the respondents were 409 and their mean value is 2.556 about the adoption of irrigation management in mango orchardists. Major pest and their control measures:- It is revealed from the Table 1 that most of the respondents were medium level of adoption against control of major insect pests and their control measures in mango orchardists. Among the total sample size, 75.62 per cent respondents were reported to medium level of adoption followed by 13.75 per cent respondents were high level of adoption and only 10.63 per cent respondents were belonging to not adoption category about the control of major insect pests in mango orchardists. The total score obtained by the respondents were 303 and their mean value is 1.137 about the adoption of major insect pests and their control measures. Major diseases and their control measures:- The data from the Table 1 revealed that most of the respondents were not level of adoption against control of major diseases of mango orchardists. Among the total sample size, 69.37 per cent respondents were reported to the not adopted adoption followed by 15.63 per cent respondents were reported to the medium level of adoption and remaining 12.50 per cent respondents were reported to the under high level adoption category about control of major diseases in mango orchardists. The total score obtained by the respondents were 406 and their mean value is 2.537 about the adoption of major disease and their control measures in mango orchardists. Pre harvest how to judge the ripen mango fruits:-It is obvious from the Table 1 most of the respondents were high level of adoption about the pre harvest how to judge the ripen mango fruits in mango orchardists. Among the total sample size, 71.25 per cent respondents were reported to the high level of adoption followed by 15.00 per cent respondents were medium level of adoption and only 13.75 per cent respondents were belonging to not adoption category about the pre harvest how to judge the ripen mango fruits of mango orchardists. The total score obtained by the respondents were 412 and their mean value is 2.575 about the adoption of pre harvest how to judge the ripen mango fruits in mango orchardists. Proper harvesting time:- It is seen from the Table 1 most of the respondents were high level of adoption about proper harvesting time of mango fruits. Among the total sample size, 67.50 per cent respondents were reported to high level of

adoption followed by 22.50 per cent respondents were medium level of adoption and remaining 10.00 per cent respondents were belonging to the not adoption category about the proper harvesting time of mango fruits from mango orchard. The total score obtained by the respondents were 412 and their mean value is 2.575 about the adoption of proper harvesting time of mango fruits. Correct harvesting procedure:- The data from the Table 1 revealed that most of the respondents were medium level of adoption of correct harvesting procedure of mango fruits. Among the total sample size, 74.37 per cent respondents were reported to the medium level of adoption followed by 14.38 per cent respondents were reported to the high adoption and remaining 11.25 per cent respondents were reported to the under not adoption category about correct harvesting procedure of mango fruits from mango orchard. The total score obtained by the respondents were 302 and their mean value is 1.887 about the adoption of correct harvesting procedure of mango fruits from mango orchards. Application of plant growth regulators in mango orchards:- The data from the Table 1 revealed that most of the respondents were not adoption category about the application of plant growth regulators in mango orchardists. Among the total sample size, 76.88 per cent respondents were reported to the not adoption category followed by 13.12 per cent respondents were reported to the medium level of adoption and remaining 10.00 per cent respondents were reported to the high level of adoption category about the application of plant growth regulators of mango orchardists. The total score obtained by the respondents were 213 and their mean value is 1.1331 about the application plant of growth regulators in mango orchardists. Post-harvest management care of plants:- The data from the Table 1 revealed that most of the respondents were medium level of adoption about post-harvest management care of mango plants. Among the total sample size, 68.12 per cent respondents were reported to the medium level of adoption followed by 16.80 per cent respondents were reported to the not adoption category and remaining 10.00 percent respondents were reported to the high level of adoption category about post-harvest management care of mango plants. The total score obtained by the respondents were 293 and their mean value is 1.831 about the adoption of post-harvest management care of mango plants in mango orchardists. Storage of fruits after harvesting: - It is seen from the Table 1 most of the respondents were medium level of adoption about recommended practices of storage of fruits after harvesting. Among the total sample size, 55.63 per cent respondents were reported to medium level of adoption followed by 22.50 per cent respondents were high level of adoption and remaining 21.88 per cent respondents were belonging to the not level of adoption category about the storage practices of fruits after harvesting of mango fruits. The total score obtained by the respondents were 321 and their mean value is 2.006 about the adoption of storage practices of fruits after harvesting of mango fruits. Packing of mango for disposal at short distance market: - It is highlighted from the Table 1 that most of the respondents were medium level of adoption about the packing of mango fruits for disposal at short distance market. Among the total sample size, 78.75 per cent respondents were reported to medium level of adoption followed by 13.75 per cent respondents were high level of adoption and only 07.50 percent respondents were belonging to not level of adoption about the packing of mango fruits for disposal at short distance market. The total score obtained by the respondents were 330 and their mean value is 2.062 about the adoption of packing of mango fruits for disposal at short distance market. Packing of mango fruits for disposal at long distance market: - It is highlighted from the Table 1 that most of the respondents were medium level of adoption about the packing of mango fruits for disposal at long distance market. Among the total sample size, 78.12 per cent respondents were reported to medium level of adoption followed by 14.38 per cent respondents were high level of adoption and only 07.50 per cent respondents were belonging to not adoption about the packing of mango fruits for disposal at long distance market. The total score obtained by the respondents were 308 and their mean value is 1.925 about the adoption of packing of mango fruits for disposal at long distance market. Type of material used during packaging: - The data from the Table 1 revealed that most of the respondents were high level of adoption about packaging material used during packing of mango fruits. Among the total sample size, 81.87 per cent respondents were reported to the high level of adoption followed by 13.13 per cent respondents were not adopted and remaining 05.00 per cent respondents were reported to the medium level of adoption category about packaging material used during packing of mango fruits. The total score obtained by the respondents were 430 and their mean value is 2.687 about the adoption of packaging material used during packing of mango fruits. Transportation of mango fruits: - The data from the Table 1 revealed that most of the respondents were high level of adoption about transportation of mango fruits for long and short distance market. Among the total sample size, 85.62 per cent respondents were reported to the high level of transportation facilities adoptability followed by 10.63 per cent respondents had not transportation facilities adoption and remaining 03.75 per cent respondents were reported to the medium level of adoption of transportation facilities for transportation for long and short distance market.The total score obtained by the respondents were 440 and their mean value is 2.750 about the adoption of transportation facilities of mango fruits for long and short distance market. Chemical used during transportation:- The data from the Table 1 revealed that most of the respondents had not adopted any chemicals during transportation of mango fruits for long and short distance market. Among the total sample size, 77.50 percent respondents were reported to the not adoption of any chemicals followed by 17.50 percent respondents were reported to the medium level of adoption of any chemicals and remaining 05.00 percent respondents were reported to the high level of adoption of any chemicals category about transportation of mango fruits for short and long distance market. The total score obtained by the respondents were 204 and their mean value is 1.275 about the adoption of chemicals used during transportation of mango fruits for marketing. Marketing procedure (local market /short market):- It is clear from the Table 1 that is the medium level of adoption about the marketing procedure of mango fruits of short and long distance market. Among the total sample size, 80.00 per cent respondents were belonging to the medium level of adoption followed by 12.50 per cent respondents were belonging to the not adoption and remaining 07.50 per cent respondents were belonged to the high level of adoption category about the marketing procedure of mango fruits of short and long distance market. The total score obtained by the respondents were 428 and their mean value is 2.675 about the adoption of

marketing procedure of mango fruits of short and long distance market.Processing of mango fruits: - The data from the Table 1 revealed that most of the respondents were medium level of adoption about processing procedure of mango fruits. Among the total sample size, 80.00 per cent respondents were reported to the medium level of adoption followed by 12.50 percent respondents were reported to the high level of adoption and remaining 07.50 percent respondents were reported to the under not adoption level category about processing procedure mango fruits. The total score obtained by the respondents were 308 and their mean value was 1.925 about the adoption of processing procedure of mango fruits. Chemical used during processing: - The data from the Table 1 revealed that most of the respondents had not adopted any chemicals during processing of mango fruits. Among the total sample size, 75.63 percent respondents were not adopted followed by 17.50 percent respondents were reported to the medium level of adoption and remaining 06.87 percent respondents were reported to the under high level of adoption of chemicals during processing about chemical used during processing of mango fruits. The total score obtained by the respondents were 121 and their mean value is 1.275 about the adoption of chemical used during processing in mango fruits.

Conclusion

Adoption level of mango orchardist regarding mango production technology, adoption of new and improved techniques of mango cultivation was less in the whole of the study area. Most of the respondents reported that all the works of orchard management were done in the traditional style. Due to lack of knowledge and awareness regarding new technology of orchard management had not followed by them. Most of the respondent leased out their orchards for two fruiting year and after than the management of orchard was done by the contractors only. Once the orchardists gave the orchard to the contractor on contract basis and contractor did not take any decision regarding orchard management and adoption of new technology related to mango orchard management.

References

1. Balaji J, Manjunath L. Technological gap in adoption of recommended practices of mango cultivation. Agriculture Update. 2011;6(2):38-41.
2. Campbell RJ. Management practices for Indian mango cultivars in the Western Hemisphere. Acta Horticulture. 2009;(820):469-472.
3. Chavhan KT, Ahire RD, Pisure BL. Knowledge about mango production technology. Biosciences. 2015;8(23):6530-6533.
4. Das S, Ghoshal R, Gouranga M, Acharya SK. Adoption behaviour of betel vine cultivation in relation to scientific practices in some selected areas of Howrah district. Environment and Ecology. 2010;28(4A):2591-2593.
5. Desai N, Sukanya TS, Mamatha B, Patil RB. Yield Gap Analysis in Adoption of Production Technology of Mango by the Farmers. Asian Journal of Agricultural Extension, Economics & Sociology. 2017;(15)3:1-12.
6. Govinda GV. A study on sustainable grape cultivation practices adopted by Bangalore Blue and Thompson Seedless growers in Bijapur and Bangalore rural districts in Karnataka. Ph.D. Thesis, Univ. Agric. Sci., Bangalore, 2002.
7. Jadhav B. Technological gap in adoption of recommended practices of mango cultivation. Master's thesis submitted to University of Agricultural Sciences, Dharwad, 2002.
8. Kota SK. Knowledge and adoption of export oriented practices followed by the mango growers. Master's thesis submitted to Mahatma Phule Krishi Vidyapeeth, Rahuri, 2002.
9. Kota SK, Tarde JV, Babar MS. Knowledge and Adoption of Export Oriented Practices Followed by the Mango Growers. International J of Extension Edu. 2012;8:51-55.
10. Raj RK, Pradhan L, Ray P, Behera M. Vegetable's cultivation grower's knowledge and adoption of management practices. Journal of Interacademicia. 2002;13(4):501-506.