# ADOPTION OF ORGANIC FARMING PRACTICES

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Modern agriculture based on the use of chemical fertilizer and pesticides certainly has helped to increase farm productivity. However, the high cost of these chemical inputs, their adverse environmental effects and implications to human health have prompted both farmers and agricultural researchers to develop alternative farm techniques. Organic farming is the solution to mitigate the above problem.

The importance of organic farming manures despite its declining use has never been in doubt both in maintaining the soil and augmenting the availability of nutrients particularly the secondary micro nutrients. It is estimated that India has a potential of about 67 million tonnes of compost, which could provide around 10 million tonnes of plant nutrients. Moreover, there is scope for conversion of human and animal refuse in to valuable organic manure directly or through suitable bioconversion. Organic source of nutrients are free from the problems of pollution, they can be generated of the farm level and are less costly.

The present research work has been undertaken with a point of view to determine the extent of adoption of organic farming practices by farmers in the villages selected for popularizing and diffusing the organic farming technology by the State Department of Agriculture. Government of Madhya Pradesh, Bhopal. The Department of Agriculture has launched a massive programme of organic farming through out of the state to reduce the increasing cost of chemical fertilizers and pesticides. This will effect upon cost and benefit ratio of various crops.

## METHODOLOGY

The study was conducted in Sehore district of Madhya Pradesh. The data were collected from 75 farmers living in the villages where the work of transfer of technology of organic farming was undertaken by State Department Agriculture Govt. of M.P. A well structured interview schedule was used for data collection. Twenty organic farming practices were selected in consultation with subject matter specialists of the Department of Agriculture as well as scientist of the Agriculture University.

The organic farming practices were classified into two major categories, viz. integrated plant nutrient management and integrated pest management. In each practice ten items were included for study purpose.

A score of two was given for complete adoption, one for partial adoption and zero for non- adoption. Percentage was calculated to study the practices wise adoption by respondents. Further. Mean, percentage adoption score were also calculated for easy interpretation and inference.

## RESULTS AND DISCUSSION

**Extent of Adoption of Organic Farming Practices**–The data presented in Table-1 indicated the extent of adoption, it was observed that majority of the respondents (40.00%), were found to be medium level of adopters, followed by high (34.67%), and low (25.34%) level of adoption about organic farming practices.

**Table 1. Distribution of farmers according to level of adoption of organic farming practices** (n = 75)

| Categories of adoption | Number of respondents | Percentage |
|---|---|---|
| Low (13-16) | 19 | 25.34 |
| Medium (16-19) | 30 | 40.00 |
| Large (19-22) | 26 | 34.67 |
| **Total** | **75** | **100.00** |

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The data illustrated in the Table-2 indicated practices wise adoption of organic farming by the respondents. As mentioned earlier all the practices of organic farming under study were categoriesed in two components viz. integrated plant nutrients management and integrated pest management. The data revealed that percentage mean (55.20%) was recorded in integrated plant nutrients management, while, 69.86 per cent was observed in case of integrated pest management. It can be concluded that farmers were more interested in adoption of integrated pest management in comparison to integrated plant nutrient management

**Table 2. Practices wise adoption of organic farming practices by the respondents**

| S. No. | Organic farming practices | Frequency | % |
|---|---|---|---|
| **A.** | **Integrated plan nutrient management** | | |
| 1. | *In situ* incorporation of crop residues | 39 | 152.00 |
| 2. | Selection of good seed | 72 | 96.00 |
| 3. | Seed inoculation | 75 | 100.00 |
| 4. | Application of FYM/Nadep compost | 75 | 100.00 |
| 5. | Raising green manure and incorporation | 27 | 36.00 |
| 6. | Application of vermicompost | 16 | 21.34 |
| 7. | Use of Bio-gas slurry | 41 | 54.67 |
| 8. | Use of Amrit pani | 27 | 36.00 |
| 9. | Use of Amrit Sanjeevani | 11 | 14.67 |
| 10. | Use of Mathka khad | 31 | 41.34 |
| | **Mean percentage** | | **55.20** |
| **B.** | **Integrated pest managemen** | | |
| 11. | Summer Ploughing | 69 | 92.00 |
| 12. | Hand weeding | 75 | 100.00 |
| 13. | Use of Neem Oil | 69 | 92.00 |
| 14. | Use of Neem leaf extract | 64 | 85.34 |
| 15. | Use of tobacco decoction | 11 | 14.67 |
| 16. | Use of light trap/pheromone trap | 24 | 32.00 |
| 17. | Installation of Bird perches before flowering | 63 | 84.00 |
| 18. | Spray of Ha NPV/Btearly infestation stage | 16 | 21.34 |
| 19. | Use of Cow urine | 74 | 98.67 |
| 20. | Use of rotated/ fermentated curd Milk | 59 | 78.67 |
| | **Mean percentage** | | **69.86** |

As evident from the Table that out of ten practices included in integrated plant nutrient management, most of respondents had adopted seed inoculation, application of FYM/Nadep compost, selection of good seeds and about half of the respondents adopted use of biogas slurry and *in situ* incorporation of crop residues. Application of vermicompost and use of Amrit sanjjevani were adopted only by few of the respondents.

Similarly, the data as shown in the Table indicated that out of ten practices included in integrated pest management, most of respondents had adopted hand weeding, (98.67 per cent), summer ploughing (92.00%), use of Neem oil (92.00%), use of Neem leaf extract (85.34%), installation of bird perches before flowering (84.00%), use of rotated/ fermentated curd milk (78.67%). while, the Use of light trap/pheromone trap, spray of Ha NPV / Bt at early infestation stage and use of tobacco decoction were adopted only by few of the respondents.

## CONCLUSION

The study concluded that majority of the respondents had adopted seed inoculation, application of FYM/ Nadep compost, selection of good quality seeds practices only out of ten practices of integrated plant nutrient management advocated by State Department of Agriculture in organic farming villages. Similarly hand weeding, summer ploughing, use of Neem oil, use of Neem leaf extract, installation of bird perches and use of rotated/fermentated curd milk were popular for integrated pest management. It is also suggested that training to farmers, demonstration on farmers fields and field visits of the organic farming demonstration will motivate farmers to great extent for its immediate adoption.

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