

21AGRO304 PRINCIPLES OF ORGANIC FARMING

Hours Per Week :

L	T	P	C
1	-	2	2

Total Hours :

L	T	P
15	-	30



Source:

<https://images.app.goo.gl/qKF4TE8FYXVjVLz7A>

Course Description and Objectives:

The course provide students to learn about importance of organic farming and acquire knowledge on basic principles and practice of organic farming including certification and accreditation processes

Course Outcomes:

Upon completion of the course, the student will be able to achieve the following outcomes:

COs	Course Outcomes
1	Acquire knowledge required to advocate the farmers on organic farming practices and certification process so as to get the premium price for agricultural produce
2	Able to practice and promote organic farming for the larger benefit of farming communities and environment

SKILLS:

- ✓ *Detailed knowledge on processing organic fertilizers*
- ✓ *Certification process and standards of organic farming*

ACTIVITIES:

- o Visit of organic farms
- o Plan for organic fertilizers units (Vermicompost, NADEP compost etc.,)
- o Calculate cost of organic production system
- o Indigenous techniques for insect, pest disease and weed management

UNIT - 1

Organic farming, principles and its scope in India; Initiatives taken by Government (central/state), NGOs and other organizations for promotion of organic agriculture

UNIT - 2

Organic ecosystem and their concepts, Organic nutrient resources and its fortification Restrictions to nutrient use in organic farming

UNIT - 3

Choice of crops and varieties in organic farming; Fundamentals of insect, pest, disease and weed management under organic mode of production

UNIT - 4

Operational structure of NPOP; Certification process and standards of organic farming

UNIT - 5

Inspection – certification - labelling and accreditation procedures for organic products. Processing, labelling, economic considerations and viability, marketing and export potential of organic products

LABORATORY EXPERIMENTS**LIST OF EXPERIMENTS**

1. Visit to organic farm to study the various components, identification and utilization of organic products
2. Compost making- aerobic and anaerobic methods
3. Vermicompost preparation and Preparation of enriched farm yard manure
4. Visit to organic clusters and bio control lab to study the maintenance of biofertilizers/ bio-inoculant cultures
5. Biological nitrogen fixers
6. Methods of application of Bio-pesticides (Trichocards, BT, NPV)
7. Preparation of neem products and other botanicals for pest and disease control
8. Preparation of green pesticides (panchagavya, beezamrutam, jeevamrutam, ghanajeevamrutam, dravajeevamrutam)
9. Different methods of biofertiliser applications
10. Quality analysis of biofertilisers / bioinoculants and compost
11. Case studies of Indigenous Technical Knowledge (ITK) for nutrient , insect, pest, disease and weed management
12. Economic analysis of organic production system
13. Study of post harvest management in organic farming
14. Study of quality parameters of organic produce
15. Visit to organic farms to study the various components and their utilization

REFERENCES

1. Arun K. Sharma. 2002. A Hand book of organic farming. Agrobios, India. 627p
2. Palaniappan, S.P and Annadurai, K.1999. Organic farming - Theory and Practice. Scientific publishers, Jodhpur, India. 257p
3. Mukund Joshi and Prabhakarasetty, T.K. 2006. Sustainability through organic farming. Kalyani publishers, New Delhi. 349p
4. Balasubramanian, R., Balakishnan, K and Siva Subramanian, K. 2013. Principles and practices of organic farming. Satish Serial Publishing House. 453p
5. Tarafdar, J.C., Tripathi, K.P and Mahesh Kumar, 2009. Organic agriculture Scientific Publishers, India. 369p
6. Tiwari, V.N., Gupta, D.K., Maloo, S.R and Somani, L.L. 2010. Natural, organic, biological, ecological and biodynamic farming. Agrotech Publishing Academy, Udaipur. 420p
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