



ST. XAVIER'S COLLEGE VAIKOM

Established in 1981 Reaccredited by NAAC with Grade B+
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MOOC ON ORGANIC FARMING FOR ACADEMIC YEAR 2021-22

ADDED CREDIT COURSE FOR UG FIRST YEAR COURSE

offered by M.G. University & Implemented
by St. Xavier's college vaikom



To develop the life skill of sustainable
and eco-friendly farming



ORGANISING COMMITTEE

PRINCIPAL

Dr. Rajumon T. Mavunkal

COLLEGE LEVEL COORDINATOR

Dr. Subi Joseph

MENTORS

Class Teachers

ST: XAVIER'S COLLEGE VAIKOM

MOOC, ORGANIC FARMING (2021- 2022)

ACTION PLAN - 1

MOOC on organic farming (online- hybrid) course is a novel initiative by MG University in accordance with the social initiative of the Government of Kerala to transform the state into an organic state under its 'Harita Kerala Mission'.

COURSE IMPLEMENTATION AND ITS RELEVANCE

Organic farming is a healthy and sustainable initiative. An organic farm at home ensures a healthy and nutritious food at home. It is an eco friendly attempt to keep our earth safe and sustainable. This added credit course is a step in that direction. It is mandatory to all Undergraduate students.

The course consists of two parts: Project work and online exam. As per the University guidelines, all students should go through the project work. Following criteria is adhered to while ensuing the project work.

- 1. PROJECT PROPOSAL**
- 2. PROJECT EXECUTION AND IMPLEMENTATION**
- 3. TIME SCHEDULE TO EACH STAGE**
- 4. CHALLENGES AND ITS REMEDIES**
- 5. FINAL PROJECT REPORT**

PROCEDURES TO STUDENTS TO EXECUTE THE PROJECT

During this stage the students have to follow these guidelines.

1. Create a project proposal
2. Procure the required materials
3. Prepare a potting mixture

1. Creating a Project Proposal

The students are required to fill in a project proposal which comprises of the following information

The seeds they have collected for farming

The fertilizers and agricultural implements

Their plan of action

2. Required Materials

Grow bags or any other materials for planting (25 no's, 40x24x24 cm)

Organic fertilizers and potting materials

Mixing of materials at the right proportion

Seeds (select any five of the following)

CROP	VARIETY	PLANTING MATERIAL	QUANTITY	SPACING
1.Amaranthus	Arun, Mohini	Seedlings	8g/cent	20x20cm
2. Bhindi	Arka-anamika, Kiran,Salkeerti	Seed	30g/cent	60x30cm
3.Chillies	Jwala,Ujjwala	Seedlings	4g/cent	45x45cm
4.Ginger (Can grow 4 or5 in 1 growbag)	Varada,Athira	Rhizome	6kg/cent	20x20 cm

Lime or dolomite (1kg for 1 cent)

Organic manure: Dried cow dung, vermi wash, neem oil cakes and green manure.

Pseudomonos

3. Creating the Potting Mixture

Grow Bags:

1. Create a potting mixture adding gravel, sand and organic manure in 1:1:1 ratio.

2. Sand can be replaced with coconut husk fibre and compost
3. Fill $\frac{3}{4}$ th of the grow bag with the potting mixture.
4. In open arable land; till the land first, add lime or dolomite first and allow the land idle for a week.
5. Apply organic manure
6. Form desired pits
7. Plant the seedlings/seeds

Planting Process

1. Soak the seeds in water for 6-12 hours
2. Treat the seeds with pseudomonas (20 grms/litre)
3. In case of seedlings, plant the saplings with utmost care
4. Provide shade for one week
5. Water the saplings in the morning and evening

ACTION PLAN – 2

Part two will guide the students on the activities they undertake On Organic farming. The mentors should review the progress of the stages. The students should undertake the following activities.

1. Record their observations regarding the growth of the plants
2. Plan and prepare further requirements like manure, organic pesticides etc

Record the Observations Regarding the Growth of the plants

1. Every 15 days, record the growth of the plant.
2. Record the dates of germination of seeds, formation of the first leaf, flower bud etc. Prepare a chart as per your observation in comparison with the chart provided by the MOOC mentors.
3. Photographic evidence is mandatory before submitting the final project.

MOOC on ORGANIC FARMING

Guidelines to Teachers for evaluation of Organic Farming Project in First Semester

The Project work on Organic Farming in the first semester of MOOC Course is to be evaluated based on the guidelines given below.

Total marks for the project in the first semester is 100. Out of this, 80 marks are allocated for the Report. Remaining 20 marks are for the Oral presentation by students.

I Report – 80 Marks

The break up of 80 marks for the Report is shown below. Mentor has to evaluate the report and assign marks as per the following scheme. While evaluating various aspects of the Project, the guidelines given for doing the Project should be considered.

Chapter 1. Introduction (5 marks)

Chapter 2. Materials and methods (20 marks)

2.1 Location of college and student

2.2 Crops selected,

2.2.1 Varieties

2.2.2 Source of seed/seedlings

2.3 Area/ no.of grow bags

2.4 Crop season

2.5 Weather condition prevailed (rainfall, rainy days, average atmospheric temperature etc.)

2.6 Agricultural implements and equipments used

2.7 Liming material and quantity

2.8 Manures

2.8.1 Basal application

2.8.2 Top dressing

2.8.2 Biofertilizers

2.8.3 Bio slurries

2.9 Bio pesticides

2.10. Bio control agents

2.11. Any other inputs used

- 2.12 Crop management
 - 2.12.1 Land preparation/ potting mixture preparation
 - 2.12.2 Liming
 - 2.12.3 Basal manuring
 - 2.12.4 Grow bag filling
 - 2.12.5 Seeding/ planting
 - 2.12.6 Top dressing
 - 2.12.7 Pest management
 - 2.12.8 Disease management
 - 2.12.9 Water management
 - 2.12.10 Harvest

Chapter 3. Observations and data collection.

(30 marks)

- Table.1. Germination / plant stand establishment percent
- Table 2. Height of plants in cm. (15 days interval)
- Table 3. No. of branches (15 days interval)
- Table.4.Day of first flowering (Days After Sowing/ planting)
- Table 5. Day of first fruiting (Days After Sowing/ planting)
- Table 6. Harvest days (Days After Sowing/ planting)
- Table 7. No. and weight of fruits from each harvest
- Table 8. Cumulative Yield (kg)

Chapter 4. Photos

(10 marks)

- 4.1. Grow bag preparation and lay out
- 4.2. Flowering stage
- 4.3. Fruiting stage
- 4.4. Harvest stage

Chapter 5. Cost Benefit analysis

(5 marks)

A write up on the expenditure incurred and income obtained

Chapter 6. Conclusion

(5 marks)

Inference on the most suitable and profitable crop for - the locality with reasons

Abstract

(5 marks)

A summary of the Project covering all the activities done.

II. Oral Presentation – 20 Marks

20 marks are allocated for the oral presentation by students. Power Point Presentation based on the content of Project report is to be done. Maximum number of slides is 12.