

# **DEVA MATHA COLLEGE KURAVILANGAD**

**Affiliated to Mahatma Gandhi University, Kottayam**



## **SYLLABUS**

**UGC AIDED ADD ON COURSE**

**CERTIFICATE COURSE IN SERICULTURE**

**Academic Year: 2017-18**



**DEVA MATHA COLLEGE KURAVILANGAD**

***UGC Aided Add on Courses 2017-2018***

- 1. Foundation Course in Human Rights***
- 2. Communication Skills and Translation Studies***
- 3. Certificate Course in Sericulture***

Title : Certificate Course In Sericulture

Instructional Hours: 30 hours

# Syllabus

## CERTIFICATE COURSE IN “SERICULTURE”

TOTAL CREDITS 20

### Course Objectives

1. Give a thorough knowledge about cultivation of mulberry , maintenance of farm and seed technology
2. Train the students in plantation and harvesting of mulberry cultivation
3. Study about storage , transportation and preservation of leaf
4. Know about manuring, diseases and pests and thereby enhance production
5. Acquire skills necessary for self employment in mulberry cultivation

### THEORY

#### Unit I Introduction to sericulture.

CREDIT - 1

- 1.1 Definition, history and present status of sericulture in India.
- 1.2 Types of silkworms, their food plants and distribution.
- 1.3 Economic importance and uses of silk.

#### Unit II General aspects on mulberry cultivation.

CREDIT - 3

- 2.1 Classification, distribution and common varieties of mulberry used in sericulture.
- 2.2 Seedling and vegetative propagation of mulberry.
- 2.3 Chemical composition and nutritive properties of mulberry leaves.
- 2.4 Physical and chemical properties of soil: Soil moisture, water requirement and nature of soil for mulberry cultivation.
- 2.5 Levelling, ploughing and preparation of land for cultivation.
- 2.6 Manuring - organic, inorganic, bio fertilizers and micronutrients.

#### Unit III Mulberry management

CREDIT – 2

- 3.1 Plantation method - Row and pit system.
- 3.2 Plant management - Soil, ploughing, irrigation, drainage, weeding.
- 3.3 Pruning - Bottom, middle and top pruning, kolar system.
- 3.4 Harvesting - Timing of harvesting, leaf picking, shoot leaf harvesting and branch harvesting.
- 3.5 Storage, transportation and preservation of leaf.

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#### Unit IV Mulberry silkworm

CREDIT - 3

- 4.1 Taxonomic classification of *Bombyx mori*.
- 4.2 Races of mulberry silkworms.
- 4.3 Life cycle of *B.Mori* - Egg, larva, pupa, and adult. Lifespan, bionomics, circadian rhythm and behaviour.
- 4.4 External and internal morphology of egg larva and pupa.
- 4.5 Sexual dimorphism in larva, pupa and adult (male and female)
- 4.6 Growth rate of larval stages.

## Unit V Silkworm rearing house and appliances.

CREDIT – 3

- 5.1 Construction of ideal rearing house of suitable size at suitable site, representing C.S.B. model.
- 5.2 Humidity, their control devices, appliances used for silkworm rearing and disinfects.
- 5.3 Mountages - Bamboo, plastic, nylon, etc.
- 5.4 Feeding appliances - Leaf chamber, chopping knife, and chopping board.
- 5.5 Rearing method for young larva and mature larva.
- 5.6 Mounting and harvesting of cocoon.

### Outcomes:

1. On completion of the course students will be able to understand overall aspects of sericulture like cultivation, harvesting and storage.
2. This course will create awareness on the economic importance of mulberry cultivation.
3. Students will learn various technologies involved in sericulture cultivation

### Grading

Range of % of total marks	Grade
[90 – 100]	Outstanding (A+)
[80 – 89]	Excellent (A)
[70 – 79]	Very good (B+)
[60 – 69]	Good (B)
[50 – 59]	Satisfactory (C)
Below 50%	Failed

The continual evaluation marks can be awarded in the following manner:

Test papers (minimum 2)	20 marks
Seminar/viva	10 marks
Assignments	10 marks
Attendance	10 marks
<b>Total</b>	<b>50 marks</b>



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