

Maharashtra Shikshan Samiti,

Maharashtra Mahavidyalaya, Nilanga

Academic Year 2022-23

Department of Zoology

Add On/ Certificate Course Syllabus

Title: Sericulture

Duration: 30 Hrs. Marks: 50

Course Objectives:

- 1. Study the cultivation of mulberry plant, silk worm; identify and mulberry diseases.
- 2. Acquire skill to carry out silk worm rearing and post cocoon processing.
- 3. Study silkworm disease, their control and prevention.

Course Outcomes:

- 1. Ability to cultivate mulberry plant and silk worm, identify and manage mulberry diseases.
- 2. Properly carry out silk worm rearing and post- cocoon processing.
- 3. Identify and manage silkworm diseases, their control and prevention.

Course Content



Module I:

Introduction of Sericulture

- 1. History and scope of sericulture, present status of Sericulture in India.
- 2. Types of silkworm Mulberry, Tasar, Eri and Muga silkworm. Systematic position morphology, life cycle of silkworm.
- 3. Silk worm rearing-
 - 3.1. Prerequisite for silkworm rearing.
 - 3.2. Silkworm Rearing Equipments.
 - 3.3. Role of Environmental factors in rearing.

Module II:

(10 Hours)

Pest and diseases

- 1. Introduction and classification of different types of silkworm diseases.
- 2. Pest of silkworm: Uzi fly, dermestid beetles and vertebrates, Pathogenesis of silkworm diseases: Protozaon, viral, fungal and bacterial, control and prevention of pest and diseases.
- 3. Sericulture Economics and Marketing-
- 3.1. Economics of egg production: Expenditure and income.
- 3.2. Economics of silkworm rearing: Investment and returns.
- 3.3. Economics of silk reeling (per kg raw silk): cost and returns for different types of reeling establishments.

Module III:

(5 Hours)

- 1. Practical Identification of different types of silkworm, morphology of eggs,larva, Pupa of different silkworm types.
- 2. Practical Estimation of moisture Content of mulberry leaves and chawki rearing, Determination of mulberry leaf driage in the rearing bed.



Module IV:

(5 Hours)

1. Practical- Identification of different silkworm diseases and method of their disposal

2. Practical -Identification of major silkworm pests.

Prescribed Text Books / Recommended Books:

- 1. Manual on Scriculture; Food and Agriculture Organisation, Rome 1976
- 2. Applied Zoology Saras publication
- 3. Handbook Of Practical Sericulture S.R.Ullal and M.N. Narasimhanna CSB, Banglore.
- 4. Silkworm Rearing and Diseases of Silkworm, 1956,Ptd,By Director of Ptg., Stn & Pub. Govt. Press, Bangalore.

Scheme of Evaluation

Q.1.Multiple choice Question -25

Credit -1 (25 points)

Q.2. Prcatical Test

Credit -1(25 points)

Presentation / group discussion / oral test

1. Oral Test.

2. Presntation.

Credit- 2(50 points)

