"Dissemination of Education for Knowledge, Science and Culture"
- Shikshanmaharshi Dr. Bapuji Salunkhe

Shri Swami Vivekanand Shikshan Sanstha Kolhapur's

Raje Ramrao Mahavidyalaya, Jath. Sangli

Department of Zoology

CERTIFICATE COURSE IN SERICULTURE

Academic Year- 2022-23

Structure, Scheme and Syllabus

for

CERTIFICATE COURSE IN SERICULTURE

(Subject to the modifications that will be made from time to time)

WHAT IS SERICULTURE?

Sericulture is also known as silk farming. In simple terms, it is the cultivation of silkworms to produce silk. We use silk to make clothes and apparels. But have you ever wondered where silk came from? Silkworms are used to produce silk. This practice has existed for a very long time. With time, scientific methods were introduced to silk production. This has improved the overall productivity and quality of the silk produced! Certificate in Sericulture course trains students in areas such as – species of silkworms, plant cultivation (for hosting silkworms), silk production and processing.

AIM

The main aim of this course is to create a skilled work force in India, who can perform multiple roles in the field of sericulture. This will help make the sericulture scene in India more organized and productive. At present, sericulture is largely unorganized. It is a cottage industry. But with skilled workers, this field can grow further and generate more job opportunities and profits!

OBJECTIVES

- It is a job oriented certification program. It is a short term, skill-enhancing training program
- Prepare the rural youth/farmers for accepting sericulture as profit making enterprise;
- Impart knowledge and technical skills in various aspects of Sericulture.
- Create awareness about the opportunities and employment in Sericulture
- Emphasizing self-employment and entrepreneurship among youths.

TYPE OF COURSE

It is certification program.

DURATION

The training program is 1 month long.

ELIGIBILITY

10th pass from a recognized board or possess relevant experience in sericulture field.

EVALUATION:-

All Students performance will be evaluated through

a. Attendance	10 Marks
b. Assignments	20 Marks
c. Class Test	20 Marks
d. Written test	50 Marks
Total	100 Marks

SYLLABUS

Unit I: Introduction (**5 periods)**

1. **Sericulture-** Definition, history and present status.
2. **Silkworms-** Types of silkworms, their food plants and distribution.
3. **Silk production-** Mulberry cocoon and yarn.

Unit II: Silkworm Biology **(10 periods)**

1. **Life cycle of *Bombyx mori*-** Morphology of egg, larva, pupa and adult of Bombyx mori.
2. **Silkworm rearing-** Rearing house: Location, orientation, plan and utilities. Rearing appliances.
3. **Incubation-** definition, requirement of environmental conditions, incubation devices; identification of stages of development; black boxing and its importance.
4. **Chawki rearing-** Preparation; brushing and its methods; types of chawki rearing – traditional and improved method; optimum environmental conditions; methods and frequency of feeding; methods of bed cleaning; spacing; moulting and care during moult.
5. **Late age Silkworm rearing-** Methods; optimum environmental conditions; feeding quantity and frequency; methods of bed cleaning; spacing; moulting and care during moult.

Unit- III: Mulberry Plant Morphology (**5 periods**)

1. **Mulberry species-** Classification, distribution and common varieties used in Sericulture in India.
2. **Vegetative morphology-** Characters of root, stem, bud and leaf.

Unit-IV: Requirement for Mulberry Cultivation (**5 periods**)

1. **Soil-** Physical and chemical properties.
2. **Soil nature-** Acid soil, saline soil, calcareous soil, eroded soil
3. **Soil water-** Soil moisture, water requirements.
4. **Climatic conditions-** Temperature, photoperiod, humidity and rainfall.

Unit: V Mulberry Cultivation and Harvesting (5 periods)

1. **Pruning-** Bottom pruning, middle pruning and repeated pruning.
2. **Harvesting**-Various methods—leaf picking, shoot-leaf harvesting, branch cutting.
3. **Leaf storage-** Wooden leaf chamber, transportation and preservation.
4. **Leaf yield-** Estimation of leaf yield per unit area-acre/hectare.

PRACTICAL SYLLABUS

1. Morphology of the silkworm, Bombyx mori.
2. Life cycle of the mulberry silkworm.
3. Ground plan of grainage building and equipment's.
4. Identification of different types of eggs and incubation of eggs.
5. Visit to an egg production centre.

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(Coordinator)