

PRACTICAL –VI
RESEARCH METHODOLOGY, BIOSTATISTICS AND ENTOMOLOGY

Semester	Subject Code	Category	Practical		Theory	Practical	Credits
			Hrs/ week	Total Hours/ Semester			
IV	21CPZO43	Core Practical-VI	4	60	Nil	60	4

OBJECTIVES:

- To understand and observed the principle and application of the instruments.
- To understand the principles and methods of various instruments used in biology.
- It helps to acquire knowledge on the Computer aided techniques for data analysis (SPSS)
- To imbibe the knowledge and analysis of biological data.
- To comprehend the morphology of insects, morphology of silworm, digestive system , nervous system , mounting of silk glands and study of silkworm pathology.
- It helps to acquire knowledge on the Preparation of Insect Box.

RESEARCH METHODOLOGY AND BIOSTATISTICS

20 Hours

1. Spectrophotometric estimation of any biological constituent.
2. Electrophoresis - Paper / Agarose gel / PAGE
3. Computer aided techniques for data analysis (SPSS)
4. Problems relating to test of significance (Chi - square test and t - test)
5. Problems relating to correlation, regression and ANOVA.

ENTOMOLOGY

40 Hours

1. Study of morphology of an insect (local insects to be used)
2. Study of external morphology of silkworm moth, larvae and pupae.
3. Dissections of digestive and nervous systems in Bombyxmori larvae.
4. Mounting of Silk glands of Silkworm.
5. Study of silkworm pathology: viral - bacterial - fungal diseases (Field visit - Slides/Specimens /Xerox)
6. a. Field study to collect insect species
b. Identification of at least 10 insects belonging to different orders.
7. a. Field study for various methods of pest management.
b. Field visit to ware houses and Plant protection centers.
8. Insect Box Preparation.

SYLLABUS DESIGNERS

Dr D.Sasikala, Assistant Professor & HOD

Dr.V.Kiruthiga, Assistant Professor

Dr V.Rekha, Assistant Professor

DrA.Vinodhini, Assistant Professor

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