

BSP409 GENETICS LAB

Course Outcomes:

After undergoing the course, students will be able to:

- Understand the importance of *D. melanogaster* as an excellent model in Genetics.
- Maintain and conduct experiments using *D. melanogaster*.
- Conduct crossing experiments to learn Mendelian and non-Mendelian Genetics
- Solve genetic problems such as legal issues like paternity and maternity disputes.

1. Salient features and method of maintenance of *Drosophila melanogaster* culture.
2. Techniques for handling and examining the flies.
3. Preparation of salivary gland chromosomes of *D. melanogaster* and identification of different arms.
4. Preparation of salivary gland chromosomes in *D. nasuta*
5. Identification of blood types in human.
6. Experiments to demonstrate patterns of inheritance of a few characters (Crossing).
7. Study of (i) mating behaviour in *Drosophila* (ii) somatic mitosis in *Drosophila*.
8. Biochemical separation of eye pigments in *Drosophila*
9. Genetic problems.

