

BRIEF REPORT OF WORKSHOP ON DROSOPHILA AS MODEL ORGANISM

Two-day workshop was organized by Drosophila Resource Centre, Dept. of Biochemistry on 22nd and 29th September 2022. Third year students (24) and two faculties from Biochemistry Department of Shaheed Rajguru College of Applied Sciences for Women participated in the workshop.

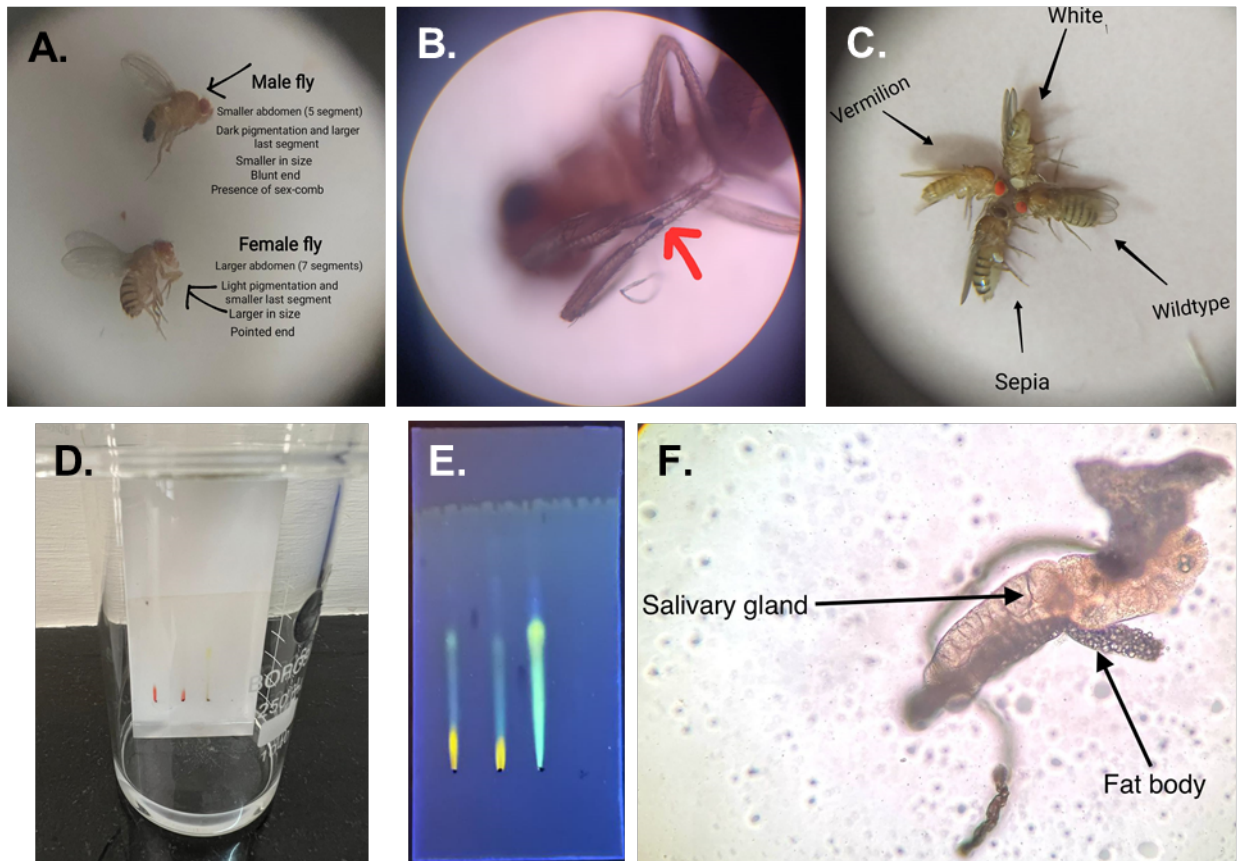
The workshop covered the following practicals:

1. Introduction to various model organisms and why is drosophila used as model organism
2. Maintenance and culturing of drosophila
3. Male female differentiation and collection of virgin flies
4. Study of lifecycle stages of drosophila
5. To study mutant phenotypes of *Drosophila melanogaster*
6. To separate eye pigments (pterins) by thin layer chromatography
7. To prepare stained squashes of salivary glands showing well spread polytene chromosomes

Few experiments were shown as demonstration in small groups (food preparation etc.), few others were observation-based, while hands-on-training was given for maintenance and culturing of drosophila, separation of eye pigments by TLC and preparation of stained squashes of salivary glands showing well spread polytene chromosomes.



Glimpses of few of their observations and results:



- A. *Differentiation of male and female fly*
- B. *Sex comb in male drosophila*
- C. *Eye color mutants of drosophila*
- D and E. *Thin layer chromatography of pterins*
- F. *Salivary glands of drosophila seen upon dissection of third instar larvae*

Students got immensely benefitted from the workshop. 87% students graded it as 1 (perfect) while remaining wanted a longer duration of the training so gave grade 2. They requested for more such educational workshops in future.

The two faculties trained at the centre also sought guidance for establishing drosophila lab in their college. They were provided with wild type, mutant flies and food vials to begin.

Convenor and Mentor: Dr. Neeru Dhamija

Co-Convenor and Mentor: Dr. Anita Goel