

Fly Club at Benenden

Several girls have been part of a rather different club this year – they have been investigating the genetics of the fruit fly *Drosophila melanogaster* in Benenden Fly Club!

They have been learning about the fruit fly life cycle, why it is used as a model organism for genetic investigations and how to distinguish between male and female flies.

During the winter a virtual lab was used via the internet where crosses between flies were set up and genes followed through generations. Pupils investigated classic monohybrid and dihybrid genetic inheritance as well as looking at dominant and recessive alleles of various genes.

This summer the girls have had hands on experience with making genetic crosses of real fruit flies!

The genetics of the sex-linked white gene has been explored, as well as a mutation called vestigial that causes the flies to develop very small wings.

By performing the relevant fly crosses between mutant and wild type (normal) flies, the girls have been able to follow the inheritance of these traits and show Gregor Mendel's classic 3:1 ratio which first proved that organisms must have two copies of each gene.

We have also made some humane fly traps to attempt to capture and look at some native Benenden fruit flies!

Spring/Summer 2019