

## **ABSTRACT**

Intrasexual selection acts on traits that are involved in male-male competition. Adult males fight to access mates either directly or indirectly by acquiring resourceful territories. In the fruit fly *Drosophila melanogaster*, males show aggression while competing for a mate. In this thesis, we try to explore how male-male aggression evolves under sexual selection. For this we use laboratory populations of *Drosophila melanogaster* evolved under different levels of sexual selection by altering the adult sex-ratio. In these populations males under high sexual selection pressure have evolved higher sperm competition ability, higher fitness under competitive environment and higher courtship ability (Nandy et. al., 2013). To investigate whether higher male aggression has also evolved in populations under high sexual selection pressure, we video recorded pairs of virgin males provided with a common decapitated female and quantified aggression. After completing one replicate of experiment, we found no difference in aggression among males from populations with different intensities of sexual selection