

Dissertation Overview

• Chapter 1

- Type of Dosage Compensation in Neo-X with a multi-species approach

• Chapter 2

- Phylogeny of *Tribolium* species with divergence time estimates

• Chapter 3

- Meiotic Sex Chromosome Inactivation (MSCI) using scRNA-seq

Chapter 1 - Progress

Aim: Find out the Type of Dosage Compensation in Neo-X with a multi-species approach

- Get *T. confusum* Neo-X Expression in males
- Compare *T. confusum* Neo-X with Ancestral State.
 - Use *T.castaneum*, *T.fremani*, *T.brevicornis* and *G.cornutus* to estimate Ancestral State.
- Determine the Type of Dosage Compensation in Neo-X.