





## Library Indian Institute of Science Education and Research Mohali



## DSpace@IISERMohali / Thesis & Dissertation / Master of Science / MS-17

Please use this identifier to cite or link to this item: http://hdl.handle.net/123456789/4105

Title: Sexual selection and the genetic basis of sperm competitive ability in laboratory population of drosophila melanogaster

Authors: Meena, Rakesh

Keywords: Sexual selection genetic basis

sperm competitive ability

drosophila melanogaster

Apr-2022 Issue

Date:

Publisher: IISER Mohali

Abstract:

In many promiscuous species, females have the potential to store sperm deposited by many males at the same time. This leads to postcopulatory sexual selection (PSS) mediated by sperm competition. It has been reported that strong PSS can lead to the rapid evolution of sperm competitive ability related traits in males. However, the genetic basis of this rapid evolution is not well understood. Here, I used laboratory populations of Drosophila melanogaster experimentally maintained under either high or low levels of sexual selection to investigate two aspects of the genetic basis of sperm competitive ability: (1) Role of the X chromosome, and (2) Patterns of dominance. To that end I set up reciprocal crosses between the populations evolving under high and low levels of sexual selection and measured the sperm competitive abilities of the F1 progeny. However, I could not find any differences between the sperm competitive abilities of the F1 progeny from any of the crosses.

URI: http://hdl.handle.net/123456789/4105

Appears in Collections:

MS-17

Files in This Item:

File	Description	Size	Format	
Yet to obtain consent.pdf		144.56 kB	Adobe PDF	View/Open

Show full item record

Items in DSpace are protected by copyright, with all rights reserved, unless otherwise indicated.