





Library Indian Institute of Science Education and Research Mohali



DSpace@IISERMohali / Thesis & Dissertation / Master of Science / MS-15

Please use this identifier to cite or link to this item: http://hdl.handle.net/123456789/1374

Investigating the Maternal effects of Predation on mosquito, Aedes aegypti.

Authors: P, Akshay

Keywords: Predation on mosquito

Adult mosquito traits

Adult traits: Longevity and wing length

Wing length

Issue

Jun-2020

Date:

Publisher: IISER Mohali

MS-15

Abstract:

Predator presence in the surroundings can shape the prey morphology, life history and behaviour. Prey employs various strategies to escape from predators and with apt phenotypic changes they can get away from predators. However, these predator escape strategies comes with a cost at the level of forgaing, mating or other activities. So predator presence can have negative impacts on prey physiological conditions. But very little is known about the transgenerational effects predation on prey. Maternal provisioning can reduce the risk of offspring being caught by predators by promoting growth rate and anti-predatory behaviours. Most of the studies on such maternal effects of predation are focused on the risk of predation experienced during adulthood. So in this study Aedes aegypti mosquitoes were used to test if the predation risk experienced during larval stage can affect i) mother's development, maternal investments in eggs and life history traits like longevity and body size (Wing length) and thereby (ii) influence offspring development, anti- predatory behaviour and other life history traits. Results revealed that Aedes aegypti responded to predation environment by developing faster and producing large eggs. The impact of predation risk in Aedes aegypti larvae carries over to next generations, through maternal effects.

URI:

http://hdl.handle.net/123456789/1374

Appears in

Collections:

Files in This Item:

File	Description	Size	Format	
MS15162.pdf		334.14 kB	Adobe PDF	View/Open

Show full item record

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

