

Library Indian Institute of Science Education and Research Mohali



DSpace@IISERMohali (/jspui/)

- / Publications of IISER Mohali (/jspui/handle/123456789/4)
- / Research Articles (/jspui/handle/123456789/9)

Please use this identifier to cite or link to this item: http://hdl.handle.net/123456789/3052

Title: EXPERIMENTAL EVOLUTION OF FEMALE TRAITS UNDER DIFFERENT LEVELS OF

INTERSEXUAL CONFLICT IN DROSOPHILA MELANOGASTER

Authors: Nandy, Bodhisatta (/jspui/browse?type=author&value=Nandy%2C+Bodhisatta)

Gupta, Vanika (/jspui/browse?type=author&value=Gupta%2C+Vanika) Samant, M.A. (/jspui/browse?type=author&value=Samant%2C+M.A.) Sen, Sharmi (/jspui/browse?type=author&value=Sen%2C+Sharmi) Prasad, N.G. (/jspui/browse?type=author&value=Prasad%2C+N.G.)

Keywords: Drosophila melanogaste

Intersexual conflict

Female Longevity Genetics

Issue Date: 2014

Publisher: Society for the Study of Evolution

Citation: Evolution, 68(2), pp.412-425.

Abstract:

A number of studies have documented the evolution of female resistance to mate-harm in response to the alteration of intersexual conflict in the populations. However, the life-history consequence of such evolution is still a subject of debate. In this study, we subjected replicate populations of Drosophila melanogaster to different levels of sexual conflict (generated by altering the operational sex ratio) for over 45 generations. Our results suggest that females from populations experiencing higher level of intersexual conflict evolved increased resistance to mateharm, in terms of both longevity and progeny production. Females from the populations with low conflict were significantly heavier at eclosion and were more susceptible to mate-harm in terms of progeny production under continuous exposure to the males. However, these females produced more progeny upon single mating and had significantly higher longevity in absence of any male exposure-a potential evidence of trade-offs between resistance-related traits and other life-history traits, such as fecundity and longevity. We also report tentative evidence, suggesting an increased male cost of interacting with more resistant females.

https://onlinelibrary.wiley.com/doi/abs/10.1111/evo.12271 (https://onlinelibrary.wiley.com/doi/abs/10.1111/evo.12271)

http://hdl.handle.net/123456789/3052 (http://hdl.handle.net/123456789/3052)

Appears in Residuel Collections:

URI:

Research Articles (/jspui/handle/123456789/9)

Files in This Item:

File Description Size Format

need to add pdf....odt (/jspui/bitstream/123456789/3052/1/need%20to%20add%20pdf....odt) kB Text

View/Open (/jspui/bitstream/1234

Show full item record (/jspui/handle/123456789/3052?mode=full)

■ (/jspui/handle/123456789/3052/statistics)

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