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Title:	Sexual activity increases resistance against <i>Pseudomonas entomophila</i> in male <i>Drosophila melanogaster</i>
Authors:	Gupta, Vanika (/jspui/browse?type=author&value=Gupta%2C+Vanika) Ali, S.Z. (/jspui/browse?type=author&value=Ali%2C+S.Z.) Prasad, N.G. (/jspui/browse?type=author&value=Prasad%2C+N.G.)
Keywords:	Deployment Immunity Trade-off
Issue Date:	2013
Publisher:	BMC
Citation:	BMC Evolutionary Biology,13(1).
Abstract:	Background: Maintenance and deployment cost of immunity is high, therefore, it is expected to trade-off with other high cost traits like sexual activity. Previous studies with <i>Drosophila melanogaster</i> show that male's ability to clear bacteria decreases with increase in sexual activity. We subjected this idea to test using two pathogens (<i>Pseudomonas entomophila</i> and <i>Staphylococcus succinus</i>) and three different populations of <i>Drosophila melanogaster</i> . Results: We found that sexual activity enhanced male survivorship in a pathogen specific manner. Sexually active males show higher resistance than virgins upon infection with <i>Pseudomonas entomophila</i> . Interestingly, the beneficial effects of sexual activity increased with time of co-habitation with females and declined when access to females was restricted. We observed no change in male survivorship upon experimentally varying the number of sexual interactions. Conclusion: Our results show that the sexual activity-immunity trade-off in males cannot be generalised. The trade-off is potentially mediated through complex interactions between the host, pathogen and the environment experienced by the host.
URI:	https://bmcevolbiol.biomedcentral.com/articles/10.1186/1471-2148-13-185 (https://bmcevolbiol.biomedcentral.com/articles/10.1186/1471-2148-13-185) http://hdl.handle.net/123456789/2824 (http://hdl.handle.net/123456789/2824)
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