



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/123456789/3123>


Title:	Asymmetric Assortative Mating Behaviour Reflects Incomplete Pre-zygotic Isolation in the Nasonia Species Complex
Authors:	Raychoudhury, Rhitoban (/jspui/browse?type=author&value=Raychoudhury%2C+Rhitoban)
Keywords:	Hymenoptera Mate discrimination Mate preference Parasitoid wasps Pre-zygotic hybridization barriers Speciation
Issue Date:	2014
Publisher:	Blackwell Publishing Ltd
Citation:	Ethology, 120(8), pp.834-843.
Abstract:	Preference of con- over heterospecific mates leading to assortative mating can substantially contribute to pre-zygotic reproductive isolation and prevent fitness losses if post-zygotic hybridization barriers already exist. The jewel wasp genus Nasonia displays quite strong and well-studied post-zygotic reproductive isolation due to a ubiquitous Wolbachia infection causing cytoplasmic incompatibility between different species. Pre-zygotic isolation, however, has received far less research attention in this model organism, especially concerning the mechanisms and criteria of mate choice. In the present study, we analysed mate rejection and mate acceptance rates in cross-comparisons between all four Nasonia species. We put emphasis on observing which sex is more likely to interrupt interspecific matings and how discriminatory behaviour varies across the different species in all possible combinations. We found an asymmetric distribution of assortative mating among the four Nasonia species that appears to be highly influenced by the respective combinations of sex and species. Females appeared to be the main discriminators against heterospecific mating partners, but interestingly, we could also detect mate discrimination and rejection behaviour in males, a widely neglected factor in research on mating behaviour in general and on Nasonia in particular. Moreover, the asymmetry in the assortative mating behaviour was partially reflective of sym- or allopatric distributions of natural Nasonia populations.
Description:	Only IISERM authors are available in the record.
URI:	https://onlinelibrary.wiley.com/doi/abs/10.1111/eth.12250 (https://onlinelibrary.wiley.com/doi/abs/10.1111/eth.12250) http://hdl.handle.net/123456789/3123 (http://hdl.handle.net/123456789/3123)
Appears in Collections:	Research Articles (/jspui/handle/123456789/9)

Files in This Item:

File	Description	Size	Format
Need to add pdf.odt (/jspui/bitstream/123456789/3123/1/Need%20to%20add%20pdf.odt)		8.63 kB	OpenDocument Text

[View/Open \(/jspui/bitstream/123456789/3123/1/Need%20to%20add%20pdf.odt\)](#)

Show full item record (</jspui/handle/123456789/3123?mode=full>)

 (</jspui/handle/123456789/3123/statistics>)

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