

University of Groningen

Deadly combinations

Koevoets, Tosca

IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.

Document Version

Publisher's PDF, also known as Version of record

Publication date:

2012

[Link to publication in University of Groningen/UMCG research database](#)

Citation for published version (APA):

Koevoets, T. (2012). *Deadly combinations: Hybrid incompatibilities in the parasitic wasp genus Nasonia*. s.n.

Copyright

Other than for strictly personal use, it is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license (like Creative Commons).

The publication may also be distributed here under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license. More information can be found on the University of Groningen website: <https://www.rug.nl/library/open-access/self-archiving-pure/taverne-amendment>.

Take-down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Downloaded from the University of Groningen/UMCG research database (Pure): <http://www.rug.nl/research/portal>. For technical reasons the number of authors shown on this cover page is limited to 10 maximum.

Deadly combinations:
hybrid incompatibilities in the parasitic wasp genus *Nasonia*

Tosca Koevoets

1. Haldane's observation that the heterogametic sex is more vulnerable to hybridization than the homogametic sex, has more to do with the fact that the sex-chromosome goes through rounds of hemizygoty in the heterogametic sex rather than to special properties of the sex-chromosome itself (Chapter 2).
2. Reproductive systems that lack heteromorphic sex-chromosomes, but contain autosomes that inherit differently in the two sexes, should evolve sex-specific genic incompatibilities that follow Haldane's rule. One such reproductive mode is that of haplodiploidy (Chapter 2).
3. Environmental conditions and experimental setup are crucial in the identification of genomic regions responsible for hybrid mortality. It should therefore be realized that the genes that are uncovered as essential in causing postzygotic reproductive isolation between species, are greatly influenced by the conditions used to measure postzygotic isolation (Chapter 5 & 7).
4. The mechanisms that explain Haldane's rule under chromosomal sex-determination will lead to male-specific hybrid incompatibilities under haplodiploidy. Haplodiploidy should therefore be included in research on Haldane's rule, even if genetic mechanisms that affect haplodiploids have less effect under diploidy (this thesis).
5. The genes responsible for the isolation of species in nature, are likely different from what is uncovered under laboratory conditions (Chapter 5).
6. 'Speciation genes' are often mistakenly appointed a role during speciation, while only their role in decreasing hybrid fitness is tested. Therefore a more descriptive term like 'putative barrier genes' would be more appropriate (Noor & Feder, 2006), as this also implies that barrier genes might not emerge under all conditions.
7. When doing laborious experiments, keep what can be kept and note what can be noted; you never know what small detail might later save your experiment (Chapter 6).
8. Being a hard worker is not just about the hours you spend at work; it is more about what you do in the time you are there.
9. Scientific research is just like poker. Knowing how to play increases your chances, but in the end it all comes down to having the right cards (or a very good poker face).
10. Only carnivores with guilt about their own eating-habits comment on egg-eating vegetarians.
11. It takes the constant input of energy to keep anything from going into chaos (Second law of thermodynamics).
12. "When the going gets tough, the tough get going" (Billy Ocean).