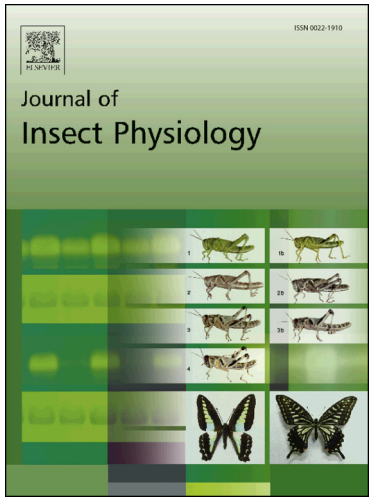
Accepted Manuscript




# Variation in the web-based chemical cues of *Argiope keyserlingi*

Jessica Henneken, Jason Q.D. Goodger, Therèsa M. Jones, Mark A. Elgar

PII: S0022-1910(17)30091-4
DOI: http://dx.doi.org/10.1016/j.jinsphys.2017.06.005
Reference: IP 3659

To appear in: *Journal of Insect Physiology*

Received Date: 7 March 2017
Revised Date: 2 June 2017
Accepted Date: 7 June 2017

Please cite this article as: Henneken, J., Goodger, J.Q.D., Jones, T.M., Elgar, M.A., Variation in the web-based chemical cues of *Argiope keyserlingi*, *Journal of Insect Physiology* (2017), doi: http://dx.doi.org/10.1016/j.jinsphys.2017.06.005

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

ACCEPTED MANUSCRIPT

# Variation in the web-based chemical cues of *Argiope keyserlingi*

Jessica Henneken[1], Jason Q.D. Goodger[1], Therèsa M. Jones[1] and Mark A. Elgar[1]

[1]*School of Biosciences, The University of Melbourne, Victoria, Australia*

**Abstract**

Pheromones are chemical compounds used to transmit information between individuals of the same species. Pheromone composition is influenced by both genetic and environmental factors. Numerous studies, predominately of insects, have demonstrated a role for diet in pheromone expression. The chemical composition of spider web-silk varies with diet and in many species these chemicals are crucial to mate choice processes. Here, we investigated individual variation in the chemical compounds found on the surface of web-silk of female *Argiope keyserlingi*, and further explored the degree to which they are influenced by diet, investment in egg sac production and site of collection. We observed variation in the web-based chemical cues both between and within individuals. Additionally, we found that some of this variation could be explained by diet and gravid status but not by collection site. We discuss our findings in relation to mate choice processes and the costs and benefits of the observed variation in these web-based chemicals.

**Keywords**

*Argiope*; diet; individual variation; pheromones; silk

ACCEPTED MANUSCRIPT

Download English Version:

https://daneshyari.com/en/article/5593105

Download Persian Version:

https://daneshyari.com/article/5593105

Daneshyari.com