



Converse of Rensch's Rule is not Necessarily True in Millipedes

Cooper M*

University of Stellenbosch, South Africa

*Corresponding author: Mark Cooper, University of Stellenbosch, Matieland 7602, Stellenbosch, South Africa, Tel: +27714620070; Email: cm.i@aol.com

Editorial

Volume 5 Issue 5

Received Date: October 03, 2022

Published Date: October 14, 2022

DOI: 10.23880/izab-16000410

Abstract

Previous studies on Rensch's rule showed tests in the Diplopoda. These produced correct results of hypo-allometry however they were somewhat misinterpreted. The original corroboration of the rule appeared to be incorrect.

Keywords: Dimorphism; Rensch; Rule; Sexual; Size

Introduction

Rensch's rule states that sexual size dimorphism (SSD) decreases with body size when females are larger [1]. This rule has implications for the outcome of mating events and has been tested in the Diplopoda with the correct interpretation of the results [2-8]. The correct interpretation of the rule for Diplopoda is indeed the converse which shows SSD increases with body size. The gradients (m) in the first two allometric equations (*Centrobolus* and *Sphaerotherium*) are positive [1,6]. Covariates of SSD may include the allometry of gonopods and size-based post-insemination associations [2,3,7].

Conclusion

The converse of Rensch's rule is corroborated while the rule may probably be rejected here.

References

1. Cooper MI (2014) Sexual size dimorphism and corroboration of Rensch's rule in *Chersastus* millipedes. J Entomol Zool Stud 2(6): 264-266.
2. Cooper MI (2016) Sexual conflict over the duration of copulation in *Centrobolus inscriptus*. J Entomol Zool Stud 4(6): 852-854.
3. Cooper M (2016) Post-insemination associations between males and females in Diplopoda: A remark on Alcock's (1994) predictions of the mate-guarding hypothesis. J Entomol Zool Stud 4(2): 283-285.
4. Cooper MI (2017) Allometry of copulation in worm-like millipedes. J Entomol Zool Stud 5(3): 1720-1722.
5. Cooper M (2017) Re-assessment of Rensch's rule in *Centrobolus*. J Entomol Zool Stud 5(6): 2408-2410.
6. Cooper MI (2018) Sexual size dimorphism and the rejection of Rensch's rule in Diplopoda. J Entomol Zool Stud 6(1): 1582-1587.
7. Cooper MI (2018) Trigoniulid size dimorphism breaks Rensch. J Entomol Zool Stud 6(3): 1232-1234.
8. Cooper M (2018) *Centrobolus* size dimorphism breaks Rensch's rule. Arthropods 7(3): 48-52.
9. Cooper M (2019) Julid and spirobolid millipede gonopods functional equivalents. J Entomol Zool Stud 7(4): 333-335.

