Digital supplementary material to


The content of this digital supplementary material was subject to the same scientific editorial processing as the article it accompanies. However, the authors are responsible for copyediting and layout.
Appendix, as digital supplementary material to this article, at the journal's web pages:

Data S1a. Raw data for each individual (IN1-IN60) from the colony A of *Odontomachus chelifer* (LATREILLE, 1802).

Data S1b. Raw data for each individual (IN1-IN30) from the colony B of *Odontomachus chelifer* (LATREILLE, 1802).

Data S1c. Raw data for each individual (IN1-IN7) from the colony C of *Odontomachus chelifer* (LATREILLE, 1802).

Data S2. Frequencies of inactive and active behavior classes of *Odontomachus chelifer* (LATREILLE, 1802).

Data S3. WBN (worker-behavior network) from the colony A of *Odontomachus chelifer* (LATREILLE, 1802).

Data S4. WBN (worker-behavior network) considering inactivity behavior from the colony A of *Odontomachus chelifer* (LATREILLE, 1802).

Data S5. WBN (worker-behavior network) from the colony B of *Odontomachus chelifer* (LATREILLE, 1802).

Data S6. WBN (worker-behavior network) considering inactivity behavior from the colony B of *Odontomachus chelifer* (LATREILLE, 1802).

Data S7. WBN (worker-behavior network) from the colony C of *Odontomachus chelifer* (LATREILLE, 1802).

Data S8. WBN (worker-behavior network) considering inactivity behavior from the colony C of *Odontomachus chelifer* (LATREILLE, 1802).

Data S9. BBNs (behavior-behavior networks) from each individual of the colonies (A, B and C) of *Odontomachus chelifer* (LATREILLE, 1802).

Data S10. BBNs (behavior-behavior networks) of inactivity from each individual of the colonies (A, B and C) of *Odontomachus chelifer* (LATREILLE, 1802).

Data S11. BBN (behavior-behavior network) from the colony A of *Odontomachus chelifer* (LATREILLE, 1802).

Data S12. BBN (behavior-behavior network) considering inactivity behavior from the colony A of *Odontomachus chelifer* (LATREILLE, 1802).

Data S13. BBN (behavior-behavior network) from the colony B of *Odontomachus chelifer* (LATREILLE, 1802).

Data S14. BBN (behavior-behavior network) considering inactivity behavior from the colony B of *Odontomachus chelifer* (LATREILLE, 1802).

Data S15. BBN (behavior-behavior network) from the colony C of *Odontomachus chelifer* (LATREILLE, 1802).

Data S16. BBN (behavior-behavior network) considering inactivity behavior from the colony C of *Odontomachus chelifer* (LATREILLE, 1802).

Data S17. $H_s'$ index (specialization index) from the colonies (A, B and C) of *Odontomachus chelifer* (LATREILLE, 1802) compared to the values obtained from the null models considered.

Data S18. DOLi (specialization index for individuals) from the colonies (A, B and C) of *Odontomachus chelifer* (LATREILLE, 1802) compared to the values obtained from the null models considered.

Data S19. DOLT (specialization index for tasks) from the colonies (A, B and C) of *Odontomachus chelifer* (LATREILLE, 1802) compared to the values obtained from the null models considered.

Data S20. Matrix of $P$-values (post-hoc G-test) from the absolute frequency of the BBNs (behavior-behavior networks) for each active behavioral act, when they are in self-interaction or when occurs behavior switching with other active behaviors.

Data S21. Modularity ($Q$) values from the colonies (A, B and C) of *Odontomachus chelifer* (LATREILLE, 1802) compared to the values obtained from the null models considered.

Data S22. Modularity ($Q$) values and standard deviation (SD) from BBNs (behavior-behavior networks) of the colonies (A, B and C) of *Odontomachus chelifer* (LATREILLE, 1802) and the null model considered.
Data S23. WNODF (weighted nestedness) from the colonies (A, B and C) of *Odontomachus chelifer* (Latreille, 1802) compared to the values obtained from the null models considered.

Data S24. Nestedness among columns considering all data (UNODFc) and standard deviation (SD) of the BBNs (behavior-behavior networks) from the colonies of *Odontomachus chelifer* (Latreille, 1802) and the null model considered.

Data S25. Nestedness among rows considering all data (UNODFr) and standard deviation (SD) from BBNs (behavior-behavior networks) of the colonies of *Odontomachus chelifer* (Latreille, 1802) and the null model considered.

Data S26. Nestedness among columns considering a cut-off of 10% of the data (UNODFc) and standard deviation (SD) from BBNs (behavior-behavior networks) of the colonies of *Odontomachus chelifer* (Latreille, 1802) and the null model considered.

Data S27. Nestedness among rows considering a cut-off of 10% of the data (UNODFr) and standard deviation (SD) from BBNs (behavior-behavior networks) of the colonies of *Odontomachus chelifer* (Latreille, 1802) and the null model considered.

Script S1. R script for the analysis of the behavioral repertoires from the colonies of *Odontomachus chelifer* (Latreille, 1802).

Script S2. R script for the analysis of the WBNs (worker-behavior networks) from the colonies of *Odontomachus chelifer* (Latreille, 1802).

Script S3. R script to read each one of the individual BBNs (behavior-behavior networks) from the colonies of *Odontomachus chelifer* (Latreille, 1802).

Script S4. R script for the creation of the BBN (behavior-behavior network) and UNODF analysis (weighted nestedness) from the colony A of *Odontomachus chelifer* (Latreille, 1802).

Script S5. R script for the creation of BBN (behavior-behavior network) and UNODF analysis (weighted nestedness) from the colony B of *Odontomachus chelifer* (Latreille, 1802).

Script S6. R script for the creation of BBN (behavior-behavior network) and UNODF analysis (weighted nestedness) from the colony C of *Odontomachus chelifer* (Latreille, 1802).

Script S7. R script for the creation of BBNs (behavior-behavior networks) null models by the TNET package version 03.0.16.

Script S8. R script for the comparison of the absolute frequency of the BBNs (behavior-behavior networks) for each active behavioral act, when they are self-interacting or when occurs behavior switching with other active behaviors.

Script S9. R script for the creation of BBNs (behavior-behavior networks) null models of inactivity by the TNET package version 03.0.16.

Script S10. R script of the BBNs (behavior-behavior networks) null models for betweenness centrality from the colonies of *Odontomachus chelifer* (Latreille, 1802).

Script S11. R script of the BBNs (behavior-behavior networks) null models for degree centrality from the colony A of *Odontomachus chelifer* (Latreille, 1802).

Script S12. R script of the BBNs (behavior-behavior networks) null models for degree centrality from the colony B of *Odontomachus chelifer* (Latreille, 1802).

Script S13. R script of the BBNs (behavior-behavior networks) null models for degree centrality from the colony C of *Odontomachus chelifer* (Latreille, 1802).

Script S14. R script of the BBNs (behavior-behavior networks), modularity (Q) values and weighted nestedness (UNODF) from the colonies of *Odontomachus chelifer* (Latreille, 1802).

Script S15. R script of the BBNs (behavior-behavior networks) null models of the modularity (Q) values from the colonies of *Odontomachus chelifer* (Latreille, 1802).