Appendix S6 – Additional network plots

Hunting habits die hard: Conserved prey preferences in army ants across two distant neotropical rainforests

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Content:

Figure S1. Predation networks at the prey genus and prey subfamily level. Network visualization of predator-prey interactions between 12 army ant species and ant prey at the level of the (A) prey genus (N = 1,281 prey specimens) and (B) the prey subfamily (N = 1,422 prey specimens). Army ant species are represented by black rectangles and ant prey by grey or colored boxes. (A) The most prevalent prey genera are highlighted in color. Connecting lines between rectangles (network links) indicate observed instances of predation, with the width of lines being proportional to the frequency of prey taxa being encountered during distinct army ant raids and emigrations. Note that *Cheliomyrmex andicola* is not included in the network as we were unable to identify its only prey, an earthworm, to species level. Abbreviations: *Ec.*: *Eciton*, *Lab.*: *Labidus*, *Neiv.*: *Neivamyrmex*, *Nom.*: *Nomamyrmex*.

A Predation network at the prey genus level
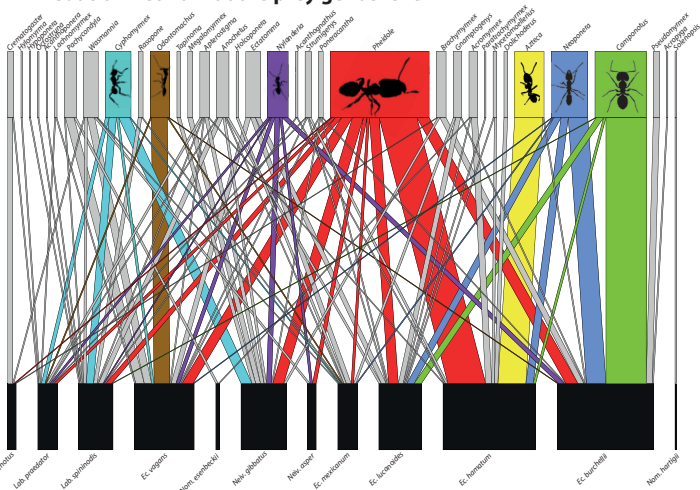
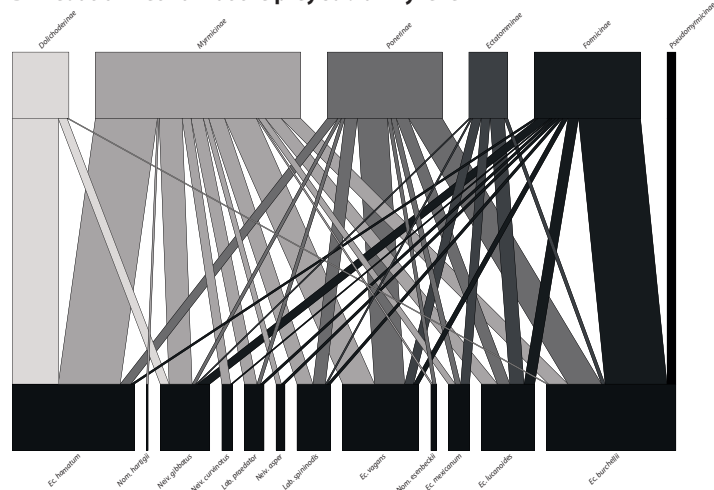**B Predation network at the prey subfamily level**

Figure S2. Modularity of the entire Ecuadorian army ant predation network. Interaction matrix between army ant species (rows) and prey species (columns) with blue squares indicating the link strength, i.e. the frequency of prey species in army ant raids/emigrations. Darker blue shading indicates more frequently observed interactions. Modules as detected by QuanBiMo (Dormann & Strauss, 2014) are depicted as red boxes.
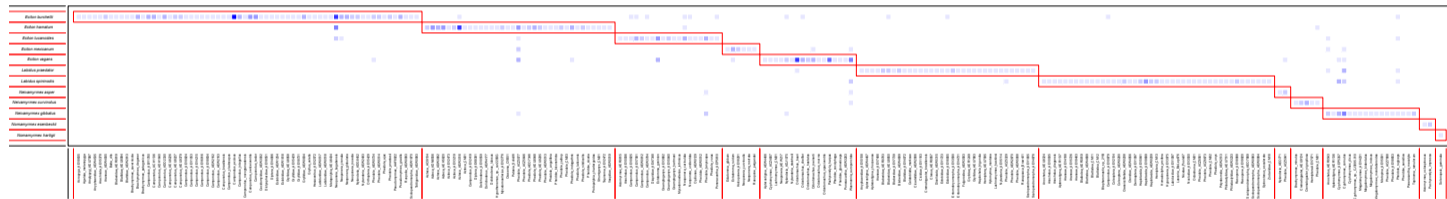
Figure S3. Shared ant prey species between the two neotropical populations. Interaction matrix between army ant species in Ecuador (EC) and Costa Rica (CR) and those ant prey species found in both populations. Blue squares represent the link strengths, indicating how frequently a prey species was discovered in distinct army ant raids or emigrations. Darker shades of blue indicate more frequent interactions. Modules, as detected by QuanBiMo (DORMANN & STRAUSS 2014), are depicted as red boxes. Abbreviations: *Acro.*: *Acromyrmex*; *Camp.*: *Camponotus*; *Crem.*: *Crematogaster*; *Ec.*: *Eciton*; *Ecta.*: *Ectatomma*; emigr.: emigration; *Gnam.*: *Gnamptogenys*; *Lab.*: *Labidus*; *Neiv.*: *Neivamyrmex*; *Neop.*: *Neoponera*; *Nom.*: *Nomamyrmex; Nyla.*: *Nylanderia*; *Odon.*: *Odontomachus*; *Pach.*: *Pachycondyla*; *Phei.*: *Pheidole*; *Pone.*: *Poneracantha*; *Tapi.*: *Tapinoma*; *Wasm.*: *Wasmannia.*
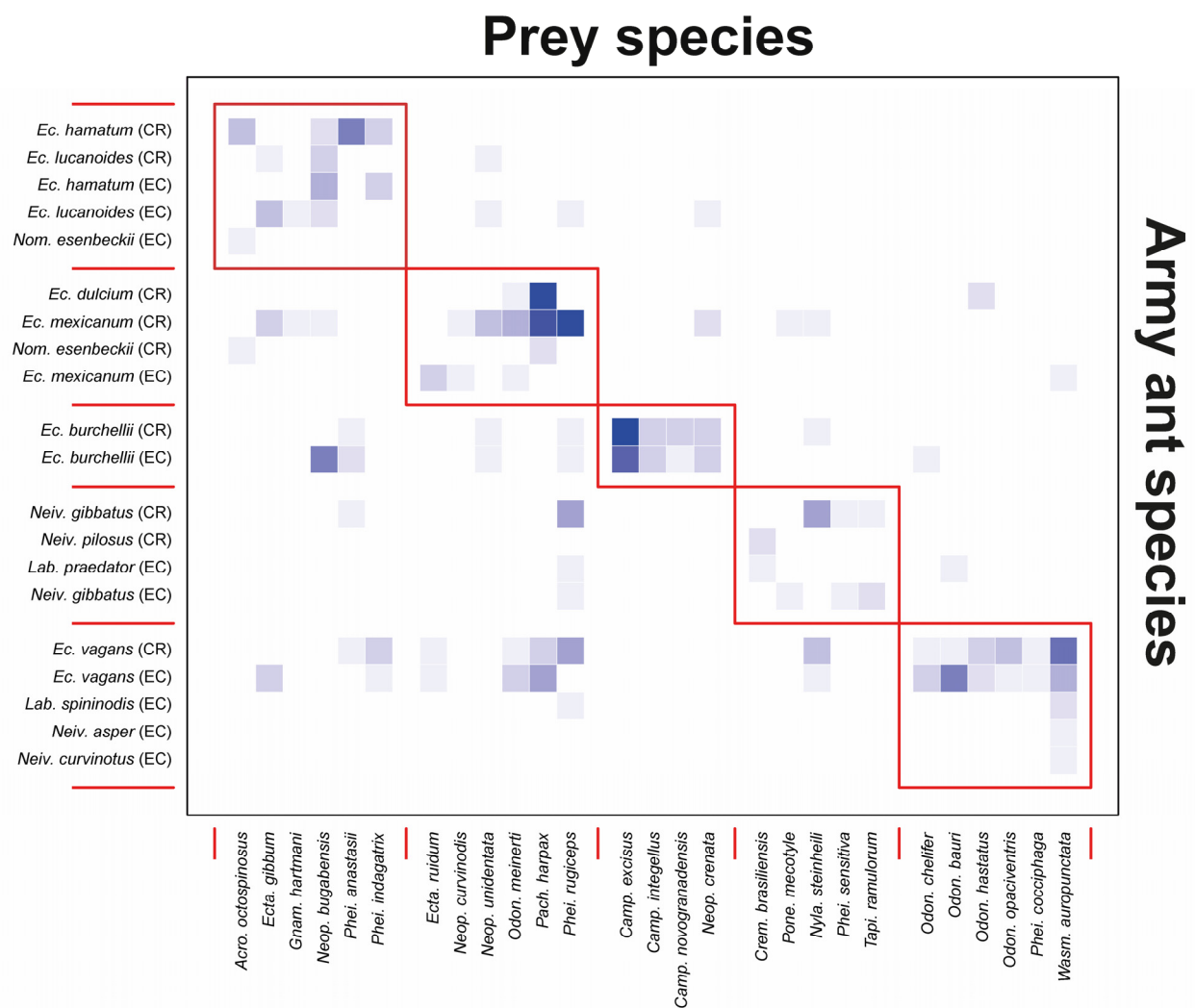
References

DORMANN, C.F. & STRAUSS, R. 2014: A method for detecting modules in quantitative bipartite networks. – Methods in Ecology and Evolution 5: 90-98.