Daniel Sánchez-García

PhD in Biology

Museum and Institute of Zoology PAS, Warsaw (Poland)

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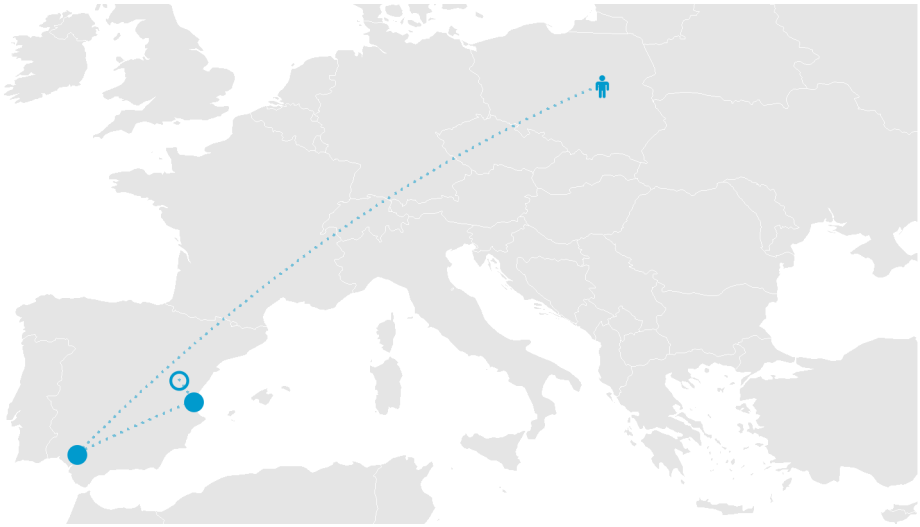
My journey



Education

PhD in Evolutionary Ecology

Museum and Institute of Zoology, Warsaw (Poland) 2019 - 2024

- PhD Thesis: The project aimed to get a better understanding of how reintroductions of parasites work, we performed a multi-level comparison of source and reintroduced populations of Phengaris teleius by studying 1) population genetics, 2) morphology of adult butterflies and 3) behavioural, chemical and acoustical adaptations of butterfly caterpillar to the Myrmica host ants.

Master of Biodiversity and Conservation Biology

Pablo de Olavide University, Sevilla (Spain) 2017 - 2018

- MSc Thesis: The work aimed to study the effect of temperature over ant assemblages from different habitats, applying different ecological perspectives. Taxonomic and functional diversity were studied, and a new index was developed to study the direct effect of temperature over the interspecific competition.

Degree of Biology

University of Valencia, Valencia (Spain) 2012 - 2016

- BSc thesis: The work aimed to provide new knowledge about the ant communities of Sierra de Javalambre. The main goals were: 1) study how ant species are distributed along the altitudinal gradient, studying variables like ground temperature, nest density and stone density; 2) study the patching effect of Juniperus sabina over ant activity and nesting areas.

Internships

Scientific assistant

Valencian Institute of Agricultural Research (IVIA), Department of Entomology, Valencia (Spain) February to May 2016

- Internship with the researcher Alejandro Tena working on a biological control applied study about the effect of the presence of the ant Lasius grandis on the behaviour of the parasitoid wasp Anagyrus pseudoccoci on mealybug colonies of Planoccocus citri (pest of citrus).

Environmental manager

Agricultural, Stockbreeding and Environmental public service (Diputación General de Aragón), Teruel (Spain) July to September 2015

- Internship with the environmental manager José Manuel González working on environmental impact reports; monitoring of fish river population dynamic for its management and conservation using electric fishing techniques; monitoring of deer population dynamic for its management and conservation in the Hunting Nacional Reserve “Montes Universales”; management and translocation of native plant species.

Publications

Also in *my Google Scholar profile* and available to download from *my Website*.

Sánchez-García, D., Wynhoff, I., Kajzer-Bonk, J., Sztencel-Jablonka, A., Nowicki, P., Casacci, L. P., & Witek, M. (2024). Temporal and spatial variation of morphological traits and genetic structure in Phengaris teleius myrmecophilous butterflies following habitat and climate changes three decades after reintroduction. *Global Ecology and Conservation*, *54*, e03104. https://doi.org/10.1016/j.gecco.2024.e03104

Trigos-Peral, G., Maák, I. E., Schmid, S., Chudzik, P., Czaczkes, T. J., Witek, M., Casacci, L. P., **Sánchez-García, D.**, Lorincz, Á., Kochanowski, M., & Heinze, J. (2024). Urban abiotic stressors drive changes in the foraging activity and colony growth of the black garden ant Lasius niger. *Science of the Total Environment*, *915*, 170157. https://doi.org/10.1016/j.scitotenv.2024.170157

Sánchez-García, D., Cerdá, X., & Angulo, E. (2022). Temperature or competition: Which has more influence on Mediterranean ant communities? *PLoS ONE*, *17*(4 April), 1–16. https://doi.org/10.1371/journal.pone.0267547

Angulo Aguado, E., Castro Cobo, S., **Sánchez-García, D.**, Sergio, F., Reyes-López, J. L., Álvarez Blanco, P., & Cerdá Sureda, X. (2019). ¿Se podrá controlar la expansión de la invasora hormiga argentina en Doñana? In J. Junoy (Ed.), *Especies exóticas invasoras: Catedra de parques nacionales* (pp. 249–262). Editorial Universidad de Alcalá.

García, F., Cuesta-Segura, A. D., Espadaler, X., García, J. C., & **Sánchez-García, D.** (2019). Lasius piliferus Seifert, 1992: descripción de la reina y actualización de su distribución ibérica (Hymenoptera: Formicidae). *Boletín de La Sociedad Entomológica Aragonesa (S.E.A.)*, *65*, 39–44.

García García, F., Espadaler Gelabert, X., Cuesta-Segura, A. D., & **Sánchez-García, D.** (2018). Primera cita ibérica para Temnothorax conatensis Galkowski & Lebas, 2016, y actualización de la distribución para Temnothorax grouvellei (bondroit, 1918) (Hymenoptera: Formicidae). *Iberomyrmex*, *10*, 22–27.

Espadaler, X., **Sánchez-García, D.**, & García-García, F. (2017). Temnothorax ibericus Menozzi (1922), un endemismo ibérico orófilo (Hymenoptera, Formicidae). *Iberomyrmex*, *9*, 5–9.

Sánchez-García, D., & Espadaler, X. (2017). Una nueva especie parásita social para la península ibérica. Bothriomyrmex communista Santschi, 1919 (Hymenoptera: Formicidae) en España. *Iberomyrmex*, *9*, 11–13.

Sánchez-García, D., & Espadaler, X. (2015). Cardiocondyla obscurior Wheeler, 1929 (Hymenoptera, Formicidae) en España. *Iberomyrmex*, *7*, 7–9.

Conference talks and posters

Sánchez-García, D., Cerdá, X., & Angulo, E. (2024). Modificación del hábitat como herramienta de control de la invasión de la hormiga argentina. *XVIII International Congress of Myrmecology. Taxomara 2024*, *Malaga*, Spain (Talk).

Sánchez-García, D., Cerdá, X., & Angulo, E. (2024). Recovering native ant communities by removing suitable conditions for the invasive Argentine ant. *IV International Young Researchers Conference on Invasive Species. IyrCIS*, Online (Talk).

Sánchez-García, D., Casacci, L. P., Wynhoff, I., Kajzer-Bonk, J., Sztencel-Jablonka, A., Nowicki, P., & Witek, M. (2023). Changes in morphology and genetic structure in two populations of Phengaris (=Maculinea) teleius 30 years after separation. *Butterfly Conservation Symposium 2023*, *Wyboston*, England (Talk).

Sánchez-García, D., Casacci, L. P., Wynhoff, I., Kajzer-Bonk, J., Nowicki, P., & Witek, M. (2022). Short-time evolution in the morphology of the myrmecophilous Maculinea teleius butterfly. *8th Polish Evolutionary Conference 2022*, *Toruń*, Poland (Talk).

Sánchez-García, D. (2019). Fotografía de insectos: material, técnicas y aplicaciones. *XIV International Congress of Myrmecology. Taxomara 2019*, *Chefchaoue*, Morocco (Talk).

Sánchez-García, D., Cerdá, X., & Angulo, E. (2018). ¿Temperatura o competencia, qué afecta más a las hormigas de Doñana? *XIII Iberian Congress of Myrmecology. Taxomara 2018*, *León*, Spain (Talk).

Sánchez-García, D., Cuesta-Segura, A. D., Herraiz, J. A., Trigos-Peral, G., García García, F., Catarineu, C., Arcos González, J., & Fernández Martínez, J. A. (2017). Listado actualizado de las hormigas de la península ibérica e islas Baleares (Hymenoptera: Formicidae). *XII Iberian Congress of Myrmecology. Taxomara 2017*, *Madrid*, Spain (Poster).

Sánchez-García, D. (2016). Aspectos ecológicos sobre la mirmecocenosis de solana de la Sierra de Javalambre (Teruel). *XI Iberian Congress of Myrmecology. Taxomara 2016*, *Murcia*, Spain (Talk).

Funding

2022	PRELUDIUM grant 2021/41/N/NZ8/04360 (NCN, Poland). Bacteria – ant – plant interaction: the effect of ants as bacteria dispersal vectors and indirect drivers of plant health.	*202.001 pln; aprox. 44.500 eur*

Reviews

- Manuscripts reviewed for Plant-Arthropod Interactions (1), Polish Journal of Ecology (1), Insect Conservation and Diversity (1)

Courses

2019	Ecological networks in R
2018	Animal tracking

Memberships

since 2012	Iberian Asociation of Myrmecology

Skills

Technical skills

Coding Languages	general R packages	Other
R	markdown – ggplot2 – geomorph – vegan	GCMS – morphometrics – network analysis – genetics – ant taxonomy

Languages

Skill	Spanish	English
Reading	Native	C1
Writing	Native	C1
Listening	Native	C1
Speaking	Native	C1

Common European Framework of Reference for Languages: A1/A2: Basic User. B1/B2: Independent User. C1/C2: Proficient User

References

- **Dra. Magdalena Witek**, Museum and Institute of Zoology, PAS, Warsaw (Poland) mawitus@yahoo.co.uk
- **Dr. Xim Cerdá**, Doñana Biological Station, Seville (Spain) xim@ebd.csic.es

- **Prof. Dr. Ximo Baixeras** University of Valencia, Valencia (Spain) ✉ joaquin.baixeras@uv.es