Supporting Information S1 for

**Antlions (Myrmeleontidae) in the Doñana National Park**

For all correspondence, please contact Hanna Serediuk: [hanna.serediuk@ebd.csic.es](mailto:hanna.serediuk@ebd.csic.es) or [hanna.serediuk@gmail.com](mailto:hanna.serediuk@gmail.com)

Methods

During the 2023–2024 field seasons, antlion larvae and adults were collected from 58 locations across Doñana National Park, focusing on habitats with sandy or loose soils suitable for antlions. Larvae were gathered by hand and placed in individual transparent plastic containers with 500 g of sieved sand from the collection sites. The containers were covered with tulle to prevent adults from escaping after emergence. Larvae were reared in a climate-controlled chamber at the Doñana Biological Station under conditions of 25±1 °C, 16L:8D photoperiod, and 65±5% humidity. After a 24-hour acclimation period, larvae were fed daily with either *Messor barbarus* Linnaeus, 1767 ants or *Tenebrio molitor* Linnaeus, 1758 larvae. Rearing was monitored daily until adults emerged, which were preserved in 70% alcohol.

Adult antlions were collected using butterfly nets and Malaise traps between March and August in 2023 and 2024. Malaise traps were deployed in four key habitats within the park and remained open continuously, while butterfly nets were used during field visits. All specimens were preserved in 96% ethanol and stored at the Doñana Biological Station (EBD-CSIC).

The species and life stages of antlions larvae were identified using keys by Badano & Pantaleoni (2014) and Badano et al. (2016). Collection sites ranged from 2 to 38 meters above sea level and included a variety of habitats such as dunes, shrublands, grasslands, and roadsides.

All raw data necessary to replicate these results are accessible in the file

“List of Myrmeleontidae species of Doñana National Park (data 2023-2024).xlsx”, which contains the compressed data. A description of the essential collected data is provided below.

**Description of key collected data**The dataset contains detailed records of antlion specimens collected in Doñana National Park during 2023–2024. The collected data include information on the identification, collection context, and environmental conditions associated with each specimen. Below is an outline of the key data fields included in the dataset:

* **ID** — Sequential number assigned to each specimen, serving as a unique identifier.
* **Order** — Taxonomic order to which the specimen belongs.
* **Family** — Taxonomic family of the collected specimen.
* **Species** — Full scientific name of the species, including the author and year of description.
* **Date** — Date when the specimen was collected in the field.
* **Collection Stage** — Life stage of the specimen at the time of collection (e.g., larva or imago).
* **Number** — Number of individuals collected at the specific site.
* **Gender** — Gender of the collected specimen, where applicable (e.g., 1♀, 1♂, 1 larva).
* **Altitude above sea level** — Elevation (in meters) of the collection site.
* **Coordinates** — GPS coordinates (latitude and longitude) of the collection site.
* **Habitats** — Description of the habitat where the specimen was collected (e.g., scrubland, urbanized areas).

# Additional references

Badano, D., Pantaleoni, R.A., 2014. The larvae of European Myrmeleontidae (Neuroptera). Zootaxa, 3762(1), 1-71. <https://doi.org/10.11646/zootaxa.3762.1.1>