

A large database on functional traits for soil ecologists: BETSI

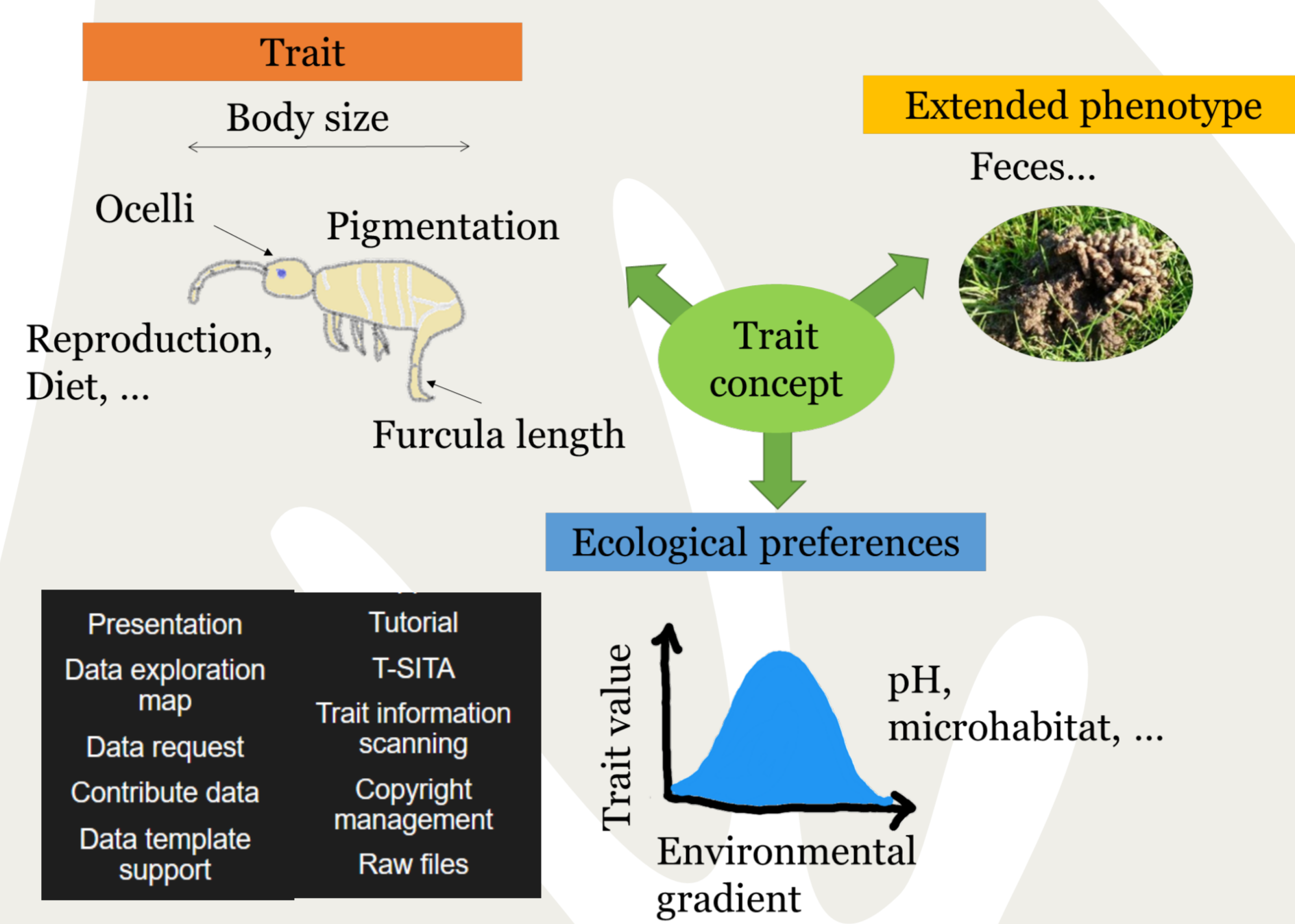
Joimel Sophie¹, Nahmani Johanne², Hedde Mickaël³, Auclerc Apolline⁴, Beaumelle Léa⁵, Bonfanti Jonathan², Cortet Jérôme², Ganault Pierre², Maunoury-Danger Florence⁶, Pey Benjamin⁷ & BETSI consortium

¹ECOSYS, ²CEFE, ³Eco&Sols, ⁴LSE, ⁵SAVE, ⁶LIEC, ⁷EcoLab

INTRODUCTION

- Functional approach : understand how organisms interact, respond and affect their environment
- Growing interest and need for data integration and accessibility
- Many databases on various taxa's functional traits were created
- No single database gathered functional traits of soil invertebrates across taxonomic groups
- BETSI, a database dedicated to soil invertebrates' functional traits in Europe was created to fill this gap

WHAT ARE "FUNCTIONAL TRAITS" ?



CONCLUSIONS AND PERSPECTIVES

- BETSI: a collaborative and an interactive database
- Already offers great opportunities for trait-based approach in soil ecology
- Pan-European soil-biology data warehouse (Eudaphobase) will improve the potential of functional trait approaches to assess global soil biodiversity response to global changes

BETSI DATABASE FUNCTIONING

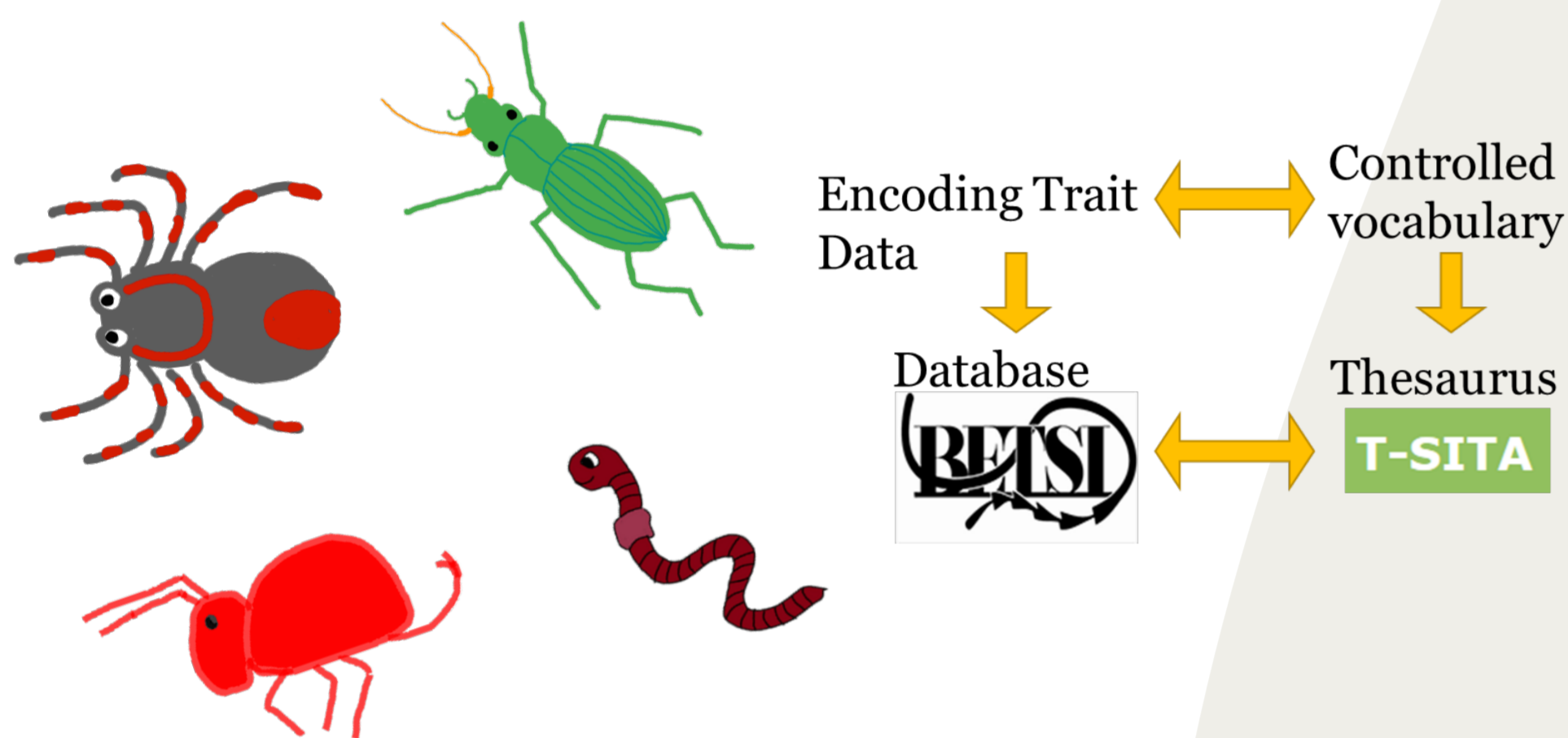


Fig. 1: Betsi database process

- Designed to host different types of trait data : Harmonization
- Open database 129 185 entries on 44 413 species
- 56 traits coming from about 2000 references
- 298 definitions for traits and ecological preferences

CURRENT USES AND OPPORTUNITIES

- BETSI is supported by an international, open research network
- 20 articles and 4 PhD thesis conducted

Fig. 3: Functional traits

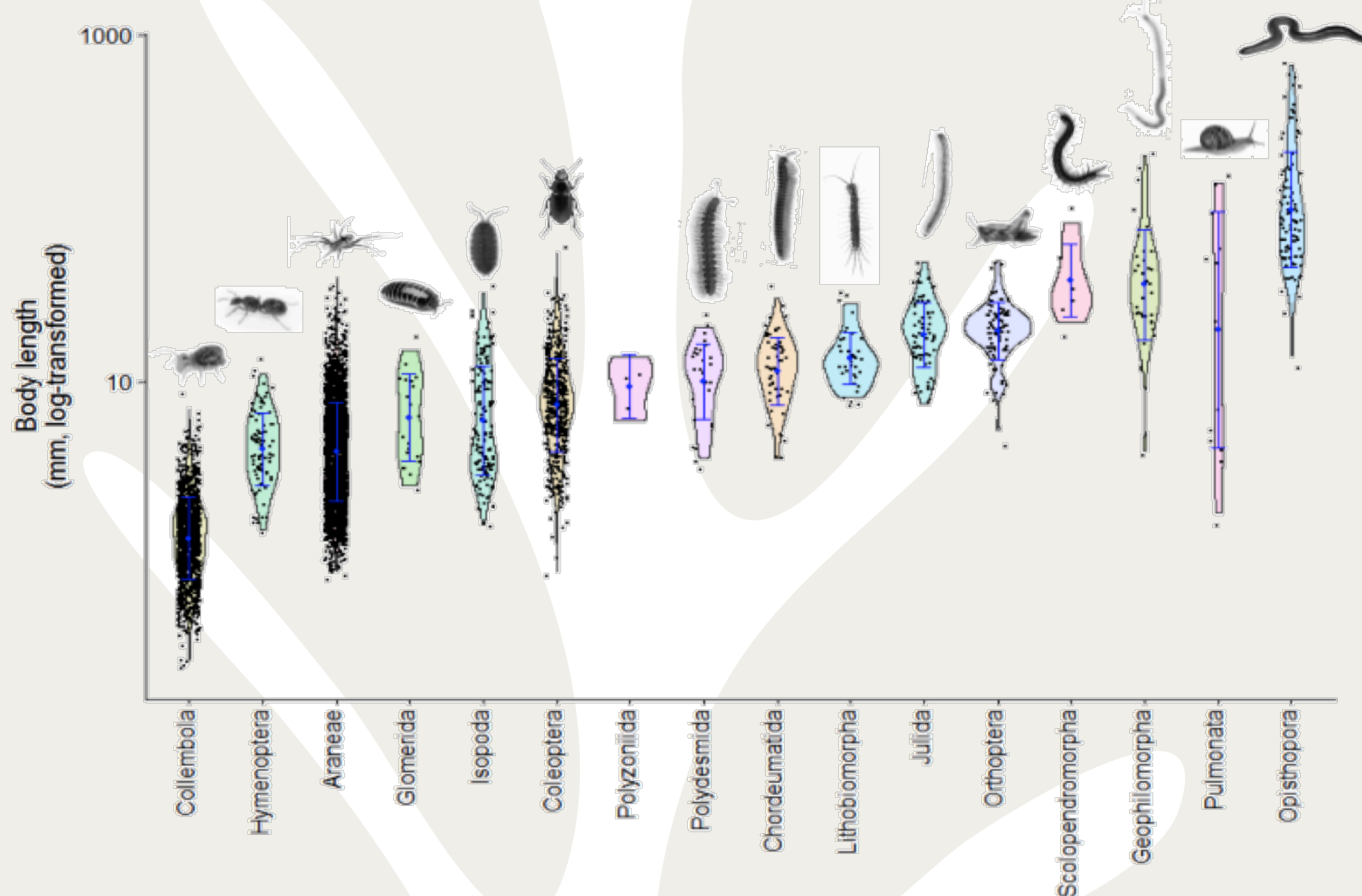


Fig. 4: Specie body length data in Betsi (Hedde et al. in prep)

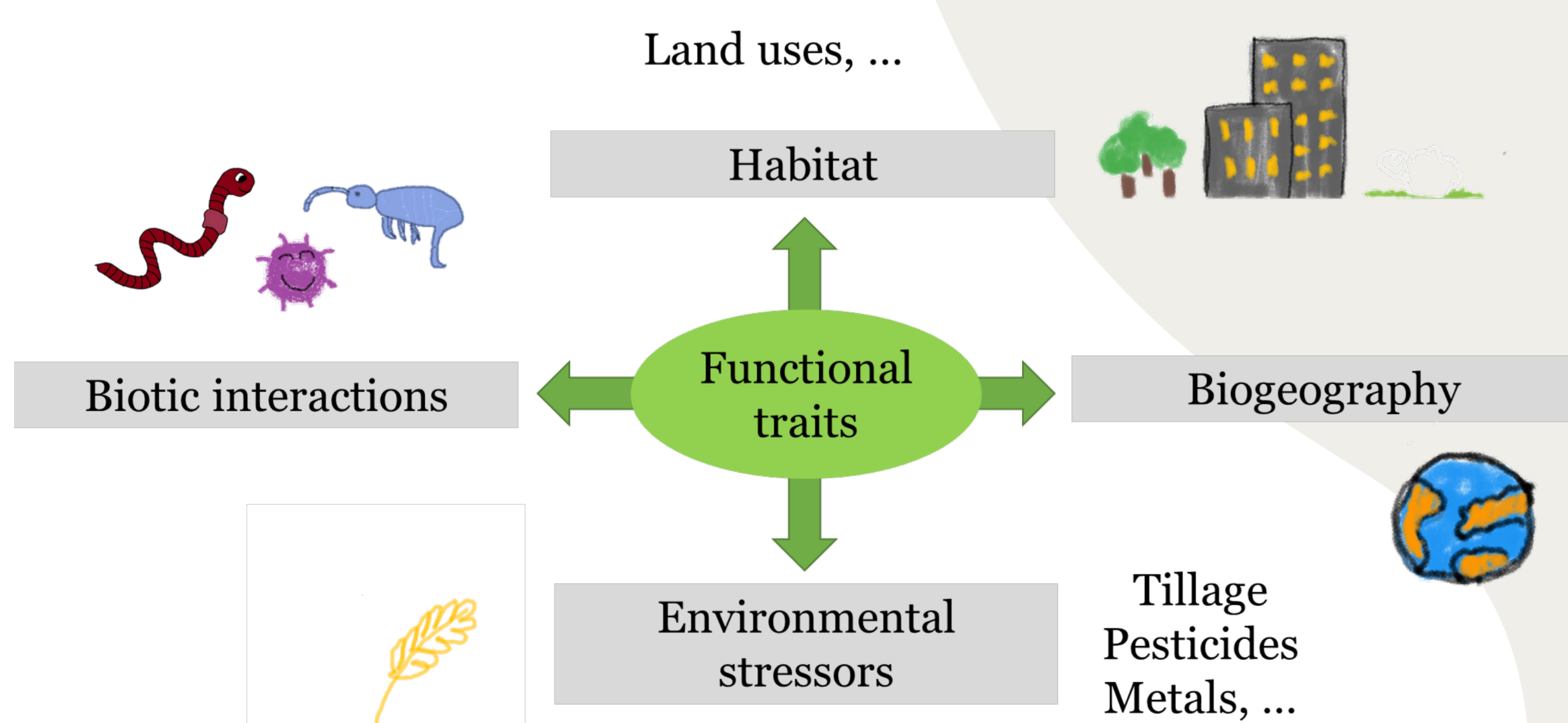


Fig. 2: Functional traits

edapho
base

