

Thesis-Topics 2024 - Taxonomy & Systematics (Bachelor, Master BEE)

Master thesis: 1. Taxonomy and phenotypic evolution of Southern Seashore spiders (Toxopidae: *Myro*)

Supervisors: Dr. Jonas Wolff; Dr. Michael Kelly; Prof. Peter Michalik

Background: Southern Seashore Spiders are a genus of cursorial hunters that are distributed at the Southern edge of the world: from the South Island of New Zealand over Tasmania across a number of sub-antarctic islands, and often along seashores. The genus diversified in Tasmania and the sub-Antarctic, resulting in multiple species, some of which are not described or seem to be synonymous species, as indicated by a preliminary molecular phylogenetic analysis of our lab.

Question: How many species of *Myro* are there and how did their body size and shape adapted to different habitats? Are two genera co-occurring in Tasmania synonyms? Do different island populations of *Myro kerguelensis* represent different species? And are the Tasmanian and New Zealand species synonymous?

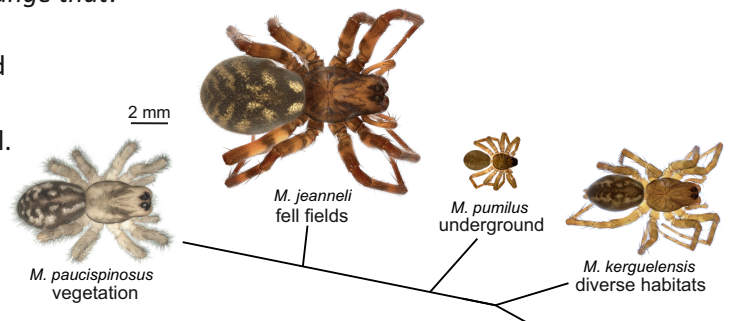
So far this is not known to science - and you could change that!

Start: any time 2024

- Tasks:**
- microscopic investigation of specimens and recording of characters
 - revision of genus, taxonomic description (incl. drawings) and naming of 2-3 new species
 - analysis of morphometric data that is available for different island populations

Why should I take this topic?

- work with material of interesting animals from exotic locations with interesting biogeographic patterns
- improve microscopy and documentation skills, learn to handle comparative data
- learn about biodiversity, taxonomy, systematics and the work done at research museums
- work in a young, interdisciplinary team



Bachelor or Master thesis: 2. Taxonomic description of Tasmanian Stiphidiidae

Supervisors: Dr. Jonas Wolff; Dr. Michael Kelly; Prof. Peter Michalik

Background: Stiphidiidae is a family of spiders endemic to Australia and New Zealand that often construct intricate sheet webs with geometric patterns. The taxonomy of this family is incomplete, with a particular gap in the documentation of the Tasmanian fauna.

Question: How diverse is the family Stiphidiidae in Tasmania?

So far this is not known to science - and you could change that!

Start: any time 2024

- Tasks:**
- microscopic investigation of specimens and recording of characters
 - taxonomic description (incl. drawings) and naming of 2-5 new species

Why should I take this topic?

- work with material of interesting animals from exotic locations with interesting morphologies
- improve microscopy and documentation skills, learn to handle comparative data
- learn about biodiversity, taxonomy, systematics and the work done at research museums
- work in a young, interdisciplinary team



Caught your interest? Please contact

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