Imaging and morphometrics of sexually dimorphic fireflies

Background

Fireflies are well known bioluminescent beetles, but much less is known about their different degrees of sexual dimorphism. In some species, such as *Photuris* spp., very few morphological characters show dimorphic traits, whereas in species such as *Lampyris* spp., extreme sexual dimorphism has evolved, to the extreme were females are neotenic.

Project objectives

Quantification of the degree of morphological sexual dimorphism in firefly species with several degrees of sexual dimorphism.

♂ ♀

Lampyris

♂ ♀

Photinus

♂ ♀

Photuris

Student requirements

- Basic lab skills.
- Highly motivated.
- Commitment to the project.

Learning outcome

- 3D imaging.
- Image processing and measurement of traits using various software.
- Statistical analysis in R.

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