Vacancy for a PhD fellow Impact of symbionts on herbivory and reproduction in arthropods



Diploma - Master degree in Biology, Biotechnology, Bioscience engineering, or related field

Job description - We are offering a PhD scholarship to unravel the molecular-genetic mechanisms that shape herbivory and reproduction in insects and mites. Arthropods are associated with a diverse set of bacteria. Certain intracellular bacteria infect the reproductive tissues of their arthropod host and spread rapidly through host populations by manipulating reproduction. Symbiont-mediated reproductive phenotypes will be a major focus of this PhD scholarship. Bacteria can further influence the evolution and ecology of arthropods by facilitating novel feeding ecologies, such as herbivory. Bacteria promote arthropod herbivory by horizontal gene transfer, or by initiating a long-term symbiotic relationship. This project will contribute to resolving the enigmatic genetic, molecular, and biochemical mechanisms that shape these hostsymbiont interactions, with an emphasis on haplodiploid arthropods. The successful applicant will be hosted at the Terrestrial Ecology research group, Department of Biology, Ghent University, Belgium. He/she/they will work within a dynamic and complementary research team that focuses on understanding the evolution and mechanistic basis of reproductive symbiosis and herbivory. The scholar is expected to start between January and March 2024.

Job profile - Candidates should have a strong background in evolutionary and molecular biology. Previous training in genetics and molecular biology techniques will be seen as an advantage. Applicants must be highly motivated, driven to perform state-of-the-art research, and exhibit excellent written and spoken English skills. Applicants must work independently but effectively within a team. The position is available for a four-year period, pending a positive intermediate evaluation. To assess student research experience. We aim to hire students that reflect the diversity of society and thus welcome applications from all qualified candidates regardless of personal background.

How to apply - Applications should include a CV, full contact details of three references, and a motivation letter describing research interests and goals, the intended start date, and previous research experience. The documents should be sent as a single PDF to <u>nicky.wybouw@ugent.be</u> before September 11, 2023.