UNIVERSITÉ DE FRIBOURG
UNIVERSITÄT FREIBURG

PostDoc Position
in Evolutionary Invasion Ecology

Rationale:

Besides their great relevance for the environment, biological invasions have been recognized as unprecedented bio-geographical experiments to study fundamental ecological and evolutionary processes, such as local adaptation to the novel conditions in the introduced range. The proposed study capitalizes on ongoing studies in the framework of the EU-COST Action FA1203 on "Sustainable management of *Ambrosia artemisiifolia* in Europe (SMARTER; ragweed.eu), and will specifically focus on the recently and accidentally introduced ragweed leaf beetle *Ophraella communa* into Europe. This North-American insect has also been introduced into Asia where it is successfully used as a biological control agent. The planned study complements our findings on host impact and specificity of *Ophraella* made so far by including genetics and genomics. It is focusing on the potential of this biological control candidate to rapidly evolve and adapt to novel abiotic (temperature: spread potential) and biotic (host plants: non-target effects) conditions in view of rendering risk-benefit assessments in biological control more predictive.

We seek a highly motivated person to explore the genetic basis of successful species invasions and subsequent local adaptation. He/she will (i) identify the spatial genetic patters and introduction sources of *Ophraella* using populations from North America, Asia and Europe, and (ii) lead an artificial selection experiment in the field on different host plants. The project is tightly linked to a PhD position within the same project (cf. separate advertisement).

Requirements

PhD in evolutionary biology with main strength in lab-based evolutionary genomics and bioinformatics in order to take the project lead in HT sequencing approaches (GBS and Pool-seq) and the subsequent bioinformatics and statistical analyses. Colleagues in our Department with expertise in bioinformatics and computational biology are ready to provide support and supervision, where necessary. Further knowledge of, and experience in plant-herbivore interactions is highly desirable. Drivers license.

Salary and conditions

Salary dependent on age and status (gross salary in the first year about 80'000 €).

Start date: preferentially on 1 September 2016. The PostDoc position is for 2 years, with potential extension depending on funding.

Applications

Applicants should send their CV, including publication list, a short motivation letter with a summary of research experience and interests, and the names of 3 professional referees to the email address below **as a single pdf-file before 22 May 2016.**

For further information, please contact:

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