

# Master/Bachelor Thesis in:

Pollination biology of *Iris pseudacorus* natural populations

Connectivity of *Iris pseudacorus* populations between habitat islands

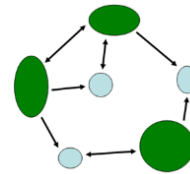
## Background

The present investigation is part of the PhD project **Influence of agricultural land-use change on plant gene flow between habitat islands**, which inside the frame of the BioMove Research Group ([www.biomove.org](http://www.biomove.org)), aims to investigate the ecological and genetic mechanisms influencing connectivity within and among meta-populations of seven wetland species, *Iris pseudacorus* among them. These wetland species are located in water bodies (kettle holes) constituting sites of native flora functioning as model systems for studying meta-populations dynamics and connectivity.

Pollination biology of this species will give us insights about their reproductive strategies and its ability to move and colonize new habitats. This information is directly related to gene flow and population connectivity. Combining both, we will be able to understand pollen gene flow of *Iris pseudacorus* and its meta-population dynamic.

## Requirements

- ✓ Bachelor/Master student interested in pollination biology or population genetics.
- ✓ Motivation to work in the field OR in the lab.
- ✓ Ability to work independently.
- ✓ Good communicational English skills.
- ✓ Driving license (desirable).



## You will learn:

### Pollination biology

- ✓ Pollination techniques (nectar and pollen sampling, pollinators observation)
- ✓ Use of UV powder to track pollinators movement
- ✓ Morphometrics and pollen/ovule ratio analysis

### Connectivity (population genetics)

- ✓ Laboratory techniques (DNA isolation, PCR, Sequencing)
- ✓ Microsatellites development
- ✓ Bioinformatics (R, STRUCTURE)

**When:** As soon as possible

**Where:** **Field:** AgroScapeLabs Quillow Catchment  
**Lab:** Potsdam University Maulbeerallee

**Contact:** PhD student Sissi Lozada  
[sislozad@uni-potsdam.de](mailto:sislozad@uni-potsdam.de)

Institut für Biochemie und Biologie  
Biodiversitätsforschung/  
Spezielle Botanik  
AG: Prof. Jasmin Joshi  
Universität Potsdam  
Maulbeerallee 1 Büro 2.08  
14469 Potsdam