

# Royal Holloway and Santander Travel Awards Report

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In my NERC-funded PhD project, I investigate aspects of diaspore heteromorphism, which is the production of two or more distinct types of fruits or seeds by a single plant. Part of my research involves exploring the dispersal ecology of *Aethionema arabicum* (“stone-cress”), a basal member of the cabbage (Brassicaceae) family.

I was delighted to have been awarded both the RHUL and Santander Travel Awards last March, to present my work at the 6<sup>th</sup> International Seed Science Society (ISSS) Seed Ecology Conference in Regensburg, Germany. Seed ecology is a broad topic concerning the strategies plants utilise to ensure their reproduction, ranging from:

- appropriate timing of seed production;
- nutrient allocation during seed development;
- mechanisms of seed (or fruit) dispersal;
- soil seed bank dynamics;
- environmental conditions that impose or alleviate dormancy;
- and factors that influence successful seedling establishment.

The conference comprised keynote talks, oral presentations and poster sessions, and was preceded by an introductory workshop on functional seed ecology for use in field and experimental studies. One of the conference invited keynote speakers was my supervisor, Prof. Gerhard Leubner. Given the worldwide accolade of the Seed Biology lab at RHUL ([www.seedbiology.de](http://www.seedbiology.de)), the talk was met with great interest! The conference was held in Regensburg – the first capital of Bavaria and, since 2006, a UNESCO World Heritage Site with over 1000 miraculously-preserved monuments dating back to the Roman Empire. It is one of the most vibrant cities in southern Germany with a booming industry.

My talk, “**A tale of two morphs: dispersal ecology and adaptations in the dimorphic fruits and seeds of *Aethionema arabicum***”, was accepted and chosen for the “Seed Dispersal in Time and Space” session. Dispersal has far-reaching demographic, ecological and evolutionary consequences, and research in this area has seen an upsurge in light of the global climatic crisis.





The mid-conference excursion took participants 40 km south-west of Regensburg, in Kelheim, where a boat trip passed the famous breakthrough of the Danube through the Jurassic mountains. The boat stopped at the Weltenburg monastery, which hosts the oldest monastic brewery in the world (founded in 1050 AD). Walking back to Kelheim, we passed typical native beech forests with their specific flora, rocky outcrops, and small dry calcareous grasslands.

The 6<sup>th</sup> Seed Ecology meeting provided a great platform from which I could present my two recently-published papers. With my PhD finishing in September, sadly this was my last academic conference! Receiving both the RHUL and Santander Travel Awards has therefore been an honour. I am extremely grateful for the grants – and once again, I urge any current Royal Holloway student who is seeking research-related travel support to apply for these Awards next year!

