Utilising sunlight to enhance crop survival at freezing temperatures

This fully funded 4-year PhD studentship is part of a multi-disciplinary €4.9M H2020 grant which will enable a consortium of researchers from across Europe to embark on a project named ‘Boostcrop’. The project will design and develop spray-on sunlight-activated ‘molecular heaters’ to enhance crop growth under cold and freezing stress. Basic research in Arabidopsis thaliana will be performed alongside applied research in a variety of horticultural crops. The student will analyse the impact of leaf heating on plant physiology and productivity across a range of temperatures. Using Arabidopsis as a model, they will additionally use a range of plant physiology and molecular biology approaches to investigate interactions between light and temperature signalling pathways. The project includes a generous allowance for travel to enable interaction with European collaborators and industrial partners.

Closing Date: 29th March 2019

Eligibility: Home and EU students

Subject areas: Botany/Plant Science, Cell Biology/Development

References:


Funding notes: Fully funded for 4 years. This includes a stipend at RCUK rates, tuition fees, bench fees and travel.