



Trinity College Dublin
Coláiste na Tríonóide, Baile Átha Cliath
The University of Dublin

Fully funded 4 year PhD available at Trinity College Dublin and Teagasc on ‘Herbicide resistance in Irish grass weeds’

As part of an DAFM-funded project, *Evolving grass weed challenge and their impact on the adoption of carbon-smart tillage systems* at Trinity College, we would like to appoint a PhD student to start in September 2022. This multi-disciplinary PhD project will use molecular/biochemical analyses to: determine the frequency and distribution of target-site and non-target-site herbicide resistance mechanisms in Irish grass weed populations, co-supervised by Dr Susanne Barth (Teagasc); use genetic diversity analysis to identify whether native black-grasses have independently evolved resistance or whether they are of UK origin, primarily supervised by Prof Trevor Hodkinson (Botany, Trinity College Dublin); and survey the extent of herbicide resistance in Irish grass weeds to herbicides with the same, and different, modes of action, and the consequential impact on management strategies, co-supervised by Dermot Forristal (Teagasc). The PhD student will be based at the Teagasc Crops Oak Park Research Centre, Carlow. We are now seeking applications from highly qualified and ambitious candidates to undertake this PhD registered at the Botany Department, School of Natural Sciences, Trinity College Dublin.

This scholarship includes:

- EU Fees for a PhD in Science at TCD for 4 years
- Annual stipend: €18,000 (currently for 48 months)

Application Procedure

You must be able to work independently, be hard working and solution-oriented and willing to participate fully within a dynamic and friendly research team. The successful candidate will hold an Honours Degree (2.1 or higher) in a cognate discipline (e.g. Botany, Plant Sciences, Agriculture, Genetics). An MSc or equivalent research experience would be an advantage. Other highly desirable skills include previous experience of lab-based molecular techniques, a good knowledge of data analyses (e.g. experimental design, R coding skills), and a demonstrated ability to communicate research findings.

Applications should comprise of a single PDF Document that contains the following:

A cover letter: Your letter should clearly set out your suitability and motivation for this PhD with reference to your past relevant experience and achievements.

A CV that includes your relevant experience, undergraduate results, postgraduate results (if applicable), any relevant publications and contact information for 2 academic referees.

Please send applications by 27th of June 2022 to: Trevor.Hodkinson@tcd.ie and susanne.barth@teagasc.ie

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