

## PHD OPPORTUNITY

### Novel multispecies sward mixtures to enhance sustainability and resilience of livestock production systems

<b>University College / Management Unit</b>	UCD College of Health and Agricultural Sciences
<b>University School / Unit</b>	UCD School of Agriculture and Food Science
<b>Post title</b>	PhD
<b>Project title</b>	Novel multispecies sward mixtures to enhance sustainability and resilience of livestock production systems.
<b>Post duration</b>	48 months
<b>Supervisors / Mentors</b>	Assoc. Professor Helen Sheridan Assist. Professor Zoe McKay Prof. Tommy Boland
<b>Main location for project</b>	UCD Lyons Farm
<b>Provisional start date</b>	01-09-2024
<b>BiOrbic challenge alignment</b>	Climate Neutral Animal Agriculture

#### Background

Multispecies swards (MSS) comprised of grasses, legumes and forage herbs, are a biological tool to enhance the sustainability of livestock production systems. Research at UCD Lyons Farm over the last decade has shown their ability to increase forage dry matter (DM) yield under reduced fertiliser nitrogen (N) inputs and enhance grazing livestock health and performance. However, it is essential that scientific research underpins the establishment and management recommendations associated with MSS. Reliable information regarding the factors that influence sward establishment and persistence of the forage herb component is required to ensure their potential to enhance the sustainability of livestock grazing systems is to be realised. It is also likely that there are further unexploited opportunities to enhance the performance, resilience and persistence of the swards through the inclusion of additional, novel species.

#### Objectives

- To identify novel species with agronomically – environmentally important attributes for inclusion in MSS.
- To determine the contribution of these species to herbage DM and their nutritive value.
- To identify appropriate establishment and rejuvenation techniques for MSS.

#### Requirements

Applicants should have a good primary degree (First or Second Class Honours) or MSc in an Agricultural Science or a related discipline. The successful candidate should be highly self-motivated and be prepared for laboratory work and extended periods of field work with modern analytical equipment.

#### Award

The student will be based, in the first instance, at UCD Lyons Farm, Celbridge, Co. Kildare and will be registered at University College Dublin, working under the supervision of Associate Professor Helen Sheridan, Assistant Professor Zoe McKay, and Professor Tommy Boland. The PhD position will provide



a stipend of €22,000 plus a University fees contribution of €5,500 (EU students) or €9,500 (non EU student).

### **Further Information/Applications**

Associate Professor Helen Sheridan, email: [helen.sheridan@ucd](mailto:helen.sheridan@ucd); Assistant Professor Zoe McKay, email [zoe.mckay@ucd.ie](mailto:zoe.mckay@ucd.ie) School of Agriculture and Food Science, University College Dublin.

### **Application Procedure**

Submit an electronic copy of Curriculum Vitae and a letter of interest simultaneously to the above prior to **30<sup>th</sup> June 2024**.

### **BiOrbic Acknowledgement**

“This project is funded by BiOrbic, Ireland’s National Bioeconomy Research Centre. BiOrbic is a national collaboration of researchers, focused on the development of a sustainable, circular economy. Encompassing 100+ researchers from twelve institutions in Ireland, along with International collaborators, BiOrbic is focused on training and developing the next generation of Bioeconomy leaders.”