

DEVELOPING STRATEGIES FOR THE CONTROL OF ERGOT ON FARM

MORLEY PhD STUDENTSHIP 2026

- Start date: 5th January 2026
- Application deadline: 30th August 2025
- Applications to be sent to lesley.boyd@niab.com
- Shortlisted applicants will be requested to submit an online application to the University of Cambridge Graduate Programme before 2nd October 2025
- Interviews will take place after 2nd October 2025

Niab and the University of Cambridge are pleased to announce a fully-funded, 4 year doctoral studentship (equivalent to UKRI DLA level), start date 5th January 2026, funded by The Morley Agricultural Foundation (TMAF).

TMAF PhD studentship will be aligned to BBSRC DLA programmes to provide students with the same training experience as those on a DLA. The student will be part of the University of Cambridge's cohort of Plant Sciences PhD students. Located at Niab and funded by TMAF, they will benefit from direct interaction with end users of their research, including agronomists, farmers and TMAF Board and Advisory Board members. Interactions with TMAF include an annual meeting of students and supervisors, presentations to the TMAF Board and Annual Meetings, TMAF Open Day at Morley, Norfolk, mentoring and social gatherings.

Project: Ergot is caused by the fungal pathogen *Claviceps purpurea* (Cp), a disease of cereal and grass flowers (florets). Cp replaces the seed with an ergot sclerotia, the overwintering structure of the fungus, that contains high levels of ergot alkaloids (EAs). Despite post-harvest removal of sclerotia, EAs have been detected in grain accepted at UK Mills, creating a serious risk scenario for the cereal food value chain. The levels of ergot on UK farms have increased in recent years, in part due to the adoption of Regenerative Farming practices promoted by Defra, poor weed control and the absence of effective fungicide control programmes. The project aims to understand the epidemiology of Cp to identify intervention points in the pathogen's lifecycle for management of ergot in cereal crops.

- **Obj. (1)** An assessment of agronomic practices, targeting the early stages of the Cp lifecycle, on ergot infections levels.
- **Obj. (2)** Identification and exclusion of ergot sclerotia during harvest.

This project will be jointly supervised by:

Dr. Lesley A. Boyd, Niab, Park Farm, Cambridge
Dr Aoife O'Driscoll, Niab, Park Farm, Cambridge
Dr David Clarke, Niab, Morley, Norfolk
Prof. Nik Cunneiffe, Plant Sciences, University of Cambridge.

Expected benefits for UK agriculture: This project will deliver a suite of agronomic practices that farmers and agronomists can easily adopt into their farming systems to address ergot, including (i) identification of seed treatments that reduce the viability of ergot sclerotia, (ii) fungicide strategies that target germinating sclerotia, (iii) crop intervention practices to remove viable sclerotia within the crop, and (iv) NIR-scanning to identify ergot sclerotia during harvest, allowing segregation of grain from ergot contaminated regions of the farm.

We are looking for a PhD candidate who has an interest in UK agriculture and a desire to undertake research that directly addresses a real-world problem.

Funding will be available for four years and it is expected that the thesis will be submitted within the funding period. The studentship is open to Home applicants only. Applicants must have a minimum BSc 2.i grade in their first degree or a MSc.

Informal enquiries about the project should be directed to: lesley.boyd@niab.com

Application process: Send (i) a letter outlining why you are interest in this project and why you want to do a PhD, (ii) your CV, (iii) the names and contact details of two referees and (iv) a copy of your first degree (and MSc degree) transcripts to lesley.boyd@niab.com before 30th August 2026.