

Job Description

Job title	Cereal Pathologist	Location - base	Park Farm, Histon, Cambridge
Team	Field Crop Research	Job group	Specialist
Department	Plant Pathology	Post ref.	SV/A1376
Reports to	Senior Specialist	Line manages	Part-time Technical Assistant, and Full-time Senior Pathology Technician

1. Team overview

The Field Pathology Team is focused on delivering high quality field trials and research across a range of cereal and broadleaved crops and their respective pathogens and comprises 8 technical staff managed by two research leaders. The team have access to extensive walk-in growth room and glasshouse facilities, laboratories, and a range of field trial sites across Cambridgeshire as well as a site in Norfolk. The Field Pathology Team is an integral part of the Plant Pathology Department consisting of 21 research staff plus several PhD students and visiting workers who deliver a wide range of levy (AHDB, Defra/APHA), commercial, and UKRI projects.

2. Role purpose

The postholder will provide a practical senior scientific (specialist) support in the area of plant pathology, with the main focus on fungal rust and mildew diseases of cereal and legume crops, which is essential to delivery of the UK Cereal Pathogen Virulence Survey (UKCPVS) and our levy, commercial, and UKRI work. The postholder will line manage one part-time technical assistant and one senior plant pathology technician and report to a Senior Specialist (or Head of Department, when Senior Specialist is unavailable). The vast majority of the work will involve a lab-based isolation and multiplication of fungal rust and mildew isolates, isolates pathotyping, and assessment of disease resistance to pathogens in cereal and legume crops under growth room conditions. Moreover, the postholder will also contribute to cereal disease field trials when required alongside other technical personnel, which would involve isolates multiplication, field plot inoculation, and disease scoring.

3. Financial authority/responsibility

Responsibility for raising Purchase Orders – shared with other PO raisers within the department.

Responsibility for raising Invoices to the various funders and clients.

4. Key relationships

Internal Staff under the potholder's line management; line manager and Head of Department; other Field Pathology Team members; other Plant Pathology Department members; Cambridge trials team manager and members; Seed Handling Unit (SHU) manger and members.

External: Funders (mainly AHDB and Defra/APHA) and commercial clients.

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5. Key tasks/responsibilities

	Approx. % of time
Planning and delivery of experimental project work <ul style="list-style-type: none"> • Uses project milestone and task lists to devise and deliver an integrated plan to ensure successful delivery of UKCPVS. • Uses project Gantt chart, milestone, and task lists to devise plans to discuss with research leader for experimental work involving fungal rusts and mildews of cereal and legume crops to ensure successful delivery of other relevant projects. • Carries out experimental work (with the help of other technical personnel when relevant or required) in UKCPVS and other projects to the highest standards. • Helps assess cereal pathology field trials for disease levels and other characters when required. 	60
Project reporting and publications <ul style="list-style-type: none"> • Carries out basic statistical summary analysis via pre-prepared codes or menu commands in Genstat or R. • Collates and interprets experimental data. • Drafts M&Ms and Results sections, plus figures, tables and legends for publications and project reports. • Contributes to project meetings as required. 	10
Staff management <ul style="list-style-type: none"> • Supervises and motivates junior and support staff whilst working alongside. • Ensures safe working and in accordance with SOPs. 	10
Finances and resources management <ul style="list-style-type: none"> • Raises Purchase Orders – shared duty with other PO raisers within the Department. • Raises Invoices to the various funders and clients on request of departmental research leaders. • Assists research leader/ line manager plan spend on staff, consumables, equipment etc. to ensure spending aligns with quarterly budget forecasts. • Helps line manager cost new projects. • Arranges and oversees repair and regular servicing of growth rooms and relevant equipment (incubators, fridge/freezers, other). 	5
Knowledge exchange/ knowledge transfer <ul style="list-style-type: none"> • Supports the planning, organisation, and delivery of project-related events e.g. annual UKCPVS Stakeholders Meeting. • Helps prepare and demonstrate posters and other exhibits at annual external Knowledge Exchange (KE)/Knowledge Transfer (KT) events e.g. Cereals. • Helps prepare and demonstrate posters and activities at NIAB Poster Day and other local KE/KT events. • Helps prepare content to pathology-related Landmark articles. • Helps organise and deliver demonstrations of UKCPVS and field pathology research activities to industry and stakeholder audiences. 	7
Training provision <ul style="list-style-type: none"> • Provides specialist training for all grades of technical staff in relevant techniques. • Advises and guides visiting workers and students in relevant techniques. 	5
Any other duties as required	3

6. Working conditions

- Work is split between laboratory, field, and office (bench-and desk-based activities), which varies according to the season.
- Due to peaks in workload, it may not be possible to take holiday at certain times of the year unless pre-arranged with sufficient notice.
- Long hours and weekend working are sometimes necessary at peak times. Overtime and TOIL are available. Occasional overnight absences from Cambridge base may be required.

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- Regular exposure to plant material and plant pathogens; exposure to pollen and insects during fieldwork.
- Managed exposure to chemicals e.g. seedling treated with growth inhibiting substances. Occasional use of standard and experimental agrochemicals using hand-held equipment. Full training will be provided as needed.
- Regular Visual Display Unit usage.
- Lone working in growth rooms, glasshouse, and field.

Person Specification

Criteria	Essential	Desirable
Qualifications		
BSc in Plant Pathology or equivalent qualifications/experience	x	
PhD in Plant Pathology or equivalent qualifications/experience		x
Full current driving licence for a car/light van/4WD	x	
Knowledge and skills		
Excellent verbal and written communication skills	x	
Excellent interpersonal skills	x	
Advanced competency in Microsoft Office 365 applications – Outlook, Word, Excel, SharePoint, PowerPoint	x	
Strong numeracy and data handling skills	x	
Excellent organisational and planning skills with the ability to prioritise and work to deadlines, even when under pressure	x	
Good analytical and problem-solving skills		x
Knowledge of basic statistical analysis methods and tools such as GenStat and R	x	
Pesticide application certification (PA1 and PA6)		x
Experience		
Experience handling fungal plant pathogens, in particular rusts (and mildews)	x	
Experience working with, growing and inoculating cereal crops (growth room and field)	x	
Experience with the staff supervision and training		x
Experience with planning and delivering research to the highest standard		x
Experience with delivering KE/KT activities		x
Experience managing project finances		x
Attributes		
Accuracy and attention to detail	x	
Evidence of commitment to personal development and willing to learn new skills	x	
Collaborative and open-minded regarding science	x	
Innovative in their approach to research	x	
Flexibility – able to work alone and as part of a team		x
Proactive and self-motivated; confident about working without direct supervision		x