



## Job Description

<b>Job title</b>	Cereal Pathology Senior Technician	<b>Location - base</b>	NIAB, Park Farm, Histon, Cambridge
<b>Team</b>	Plant Pathology	<b>Job group</b>	Senio Technical
<b>Department</b>	30	<b>Post ref.</b>	SV/A1147
<b>Reports to</b>	Lesley Boyd (Charlotte Nellist)	<b>Line manages</b>	N/A

### 1. Team [or department, unit or project] 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

- Organise the inoculation and assessment of disease resistance tests for the Variety and Recommended Lists purposes.
- Organise and deliver the practical pathology work for a number of research projects and contract work. This may include molecular biology, glasshouse, growth room, and field trial work.

### 3. Financial authority/responsibility

*Authority to raise Purchase Orders within defined limits.*

### 4. Key relationships

**Internal** Lesley Boyd (covering maternity leave for Charlotte Nellist), members of Pathology Field Team, Head of Department and other members of Plant Pathology department, Cambridge trials team manager and members, Seed Handling Unit (SHU) manger and members.

**External:** Project partners and collaborators; visitors to trials (funders, breeders).

Date issued	29.05.2024	Page	1
Author	[LB]	Filename	SV/A1147 -Cereal pathology senior technician 29.05.2024

## 5. Key tasks/responsibilities

Use of table with % time is optional. Details should appear in this section rather than the Role purpose section above. Where appropriate, give headings on each row, with bullets underneath the heading.

	Approx. % of time
Preparation of pathogen inoculations for field disease assessment trials, including eyespot, Fusarium Head Blight of wheat, net blotch and Rhynchosporium of barley, cereal rusts, and others if and when required.	30
Inoculate field trials of wheat, barley and oats.	10
Assess inoculated and uninoculated cereal field trials for a range of fungal diseases, requiring good record keeping.	40
Helps out, when needed, other members, of the Pathology Team. Oversees/assists host visits from funders and breeders to the field trials. Some molecular diagnostic and marker work involving screening for the presence of pathogens. Collates and helps interpret experimental data. Contributes to project meetings as required. Helps arrange and oversees repair and regular servicing of growth rooms and relevant equipment (incubators, fridge/freezers, other). Helps maintain pathogen collections. Helps maintain safe and clean work environment.	20

## 6. Working conditions

- Work is split between laboratory, field and office work, 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.
- Regular Visual Display Unit usage.
- Containment Level 1 laboratory conditions. Regular use of laboratory equipment, including microscopy.
- Physically demanding work: walking, standing, bending and occasional manual handling of items up to 25 kg.
- Working outdoors in any weather condition at all times of the year, meaning exposure to sunlight and rain. Occasional working in glasshouses and polytunnels in high temperatures.
- Regular exposure to plant material, pathogens, pollen, bees and other insects.
- Occasional exposure to dust e.g. soil particles, from milled seeds.
- Managed exposure to chemicals e.g. seeds treated with pesticide and fertiliser. Use of standard and experimental agrochemicals using hand-held equipment. Full training will be provided as needed.
- Lone working in field and glasshouse.

Date issued	29.05.2024	Page	2
Author	[LB]	Filename	SVA1147 -Cereal pathology senior technician 29.05.2024

# Person Specification

Criteria	Essential	Desirable
<b>Qualifications</b>		
BSc degree in plant biological topic, or equivalent qualifications/experience	x	
Pesticide application certification (PA1 and PA6)		x
<b>Knowledge and skills</b>		
Good verbal and written communication skills	x	
Good interpersonal skills	x	
Good IT skills – email, word processing, spreadsheets, document sharing	x	
Good organisational and planning skills	x	
Good analytical and problem-solving skills	x	
<b>Experience</b>		
Experience of managing disease assessment field trials, i.e. preparation of inoculum and assessment of disease	x	
Knowledge of fungal diseases of cereal crops		x
<b>Attributes</b>		
Accuracy and attention to detail.	x	
Evidence of commitment to own personal development and willing to learn new skills	x	
Collaborative and open-minded regarding science	x	
Innovative	x	
Flexibility – able to work alone and as part of a small team	x	
Proactive and self-motivated; confident about working without direct supervision	x	
<b>Other</b>		
Full driving license enabling travel to field sites and occasional travel to NIAB sites elsewhere in Great Britain. Transport can be provided.	x	

Date issued	29.05.2024	Page	3
Author	[LB]	Filename	SVA1147 -Cereal pathology senior technician 29.05.2024