



CSIRO Commonwealth Scientific and Industrial Research Organisation

Positions Details - 2009/392 - Postdoctoral Fellow - Plant-Soil Interface

Job Profile

Reference Number:	2009/392
Position Title:	Postdoctoral Fellow - Plant-Soil Interface
Division:	CSIRO Plant Industry
Location:	Floreat Park, WA
Classification:	CSOF4
Salary Range:	\$69K - \$76K plus Superannuation
Tenure:	3 year term
Applicants:	International Applicants Welcome
Relocation Assistance:	<i>May be offered to the successful applicant.</i>
Applications Close:	20 Jul 2009
Job Category:	Scientific Research

Jump To Section

[Advertisement](#)

[Position Description](#)

[Selection Criteria](#)

[More Information](#)

[Apply Now!](#)

Advertisement

An opportunity exists within CSIRO Plant Industry's Molecular and Physiological Wheat Breeding Group for an early career scientist to undertake novel and cutting edge research on the impact that crop plants have on key rhizosphere N transformations, in particular the process of nitrification. This research is part of a larger project that aims to identify wheat germplasm with enhanced N uptake, grain yield and grain protein content.

The key capabilities we are seeking in the successful candidate include:

- The ability to work in the field of soil/plant chemistry and agronomy, specifically at the plant root-soil interface;
- A good knowledge of microbiological transformations of N in soil and N uptake by plants;
- The capacity to present research findings both orally and in writing to a range of audiences.

You should be comfortable doing scientific research in the field as well as in glasshouse and laboratory environments. A strong commitment to team work will be highly regarded.

The Molecular and Physiological Wheat Breeding Group is a research unit of CSIRO Plant Industry. The Group is made up of a large team of research scientists and technicians located in Canberra, Brisbane and Perth. Our aim is to identify or develop germplasm carrying specific traits and trait combinations for improved performance in a range of Australian wheat-growing environments. We aim to make germplasm available in a form readily useable by commercial breeding programs as parents or in direct evaluation for commercial release.

The successful appointee must have completed the requirements for a PhD. Owing to terms of the fellowship, candidates must not have more than 3 years relevant Postdoctoral experience.

CSIRO is strongly committed to Diversity and offers [Flexible Working Arrangements](#) and enhanced leave entitlements.

Aboriginal and Torres Strait Islanders are encouraged to apply for all CSIRO positions.

[back to top](#)

Position Description

The key duties of this position will be to:

- As part of a team, evaluate wheat germplasm for capacity to produce compounds in wheat roots that inhibit nitrification;
- Determine impact of biological nitrification inhibition on N uptake in cereals through conduct of greenhouse and field trials;
- Identify the substances responsible for inhibition of nitrification;
- Contribute to team effort on studies of early growth vigour in cereals as part of strategies to improve N uptake;
- Present informative and high quality talks on improved N uptake in cereals to a range of audiences;
- Publish findings in research journals;
- Conduct work in such a manner as to help build CSIRO's research reputation for integrated and multi-disciplinary science related to improved N uptake in cereals;
- Contribute to the effective functioning of a research team and help deliver upon CSIRO's organisational objectives.

Key capabilities:

- Capable of working in the field of soil/plant chemistry and agronomy;
- Ability to work at the soil-root interface;
- Knowledge of microbiological transformations of N in soil and N uptake by plants;
- Ability to work in field as well as laboratory environments;
- Capable of communicating findings orally to a range of audiences;
- Capacity to write research papers;
- Strong commitment to team work;
- Active support of CSIRO's code of conduct and OHS&E.

[back to top](#)

Selection Criteria

Applicants **must** address the selection criteria. **Applicants who do not address the selection criteria will not be considered.** To assist you in preparing your application please read the information available at ["Guidelines for Applicants"](#)

Essential:

1. PhD in agronomy or soil science.
2. Demonstrated conceptual and practical knowledge plus experience in nutrient research in soil-plant systems.
3. Excellent interpersonal, written and oral communication, negotiation and representational skills.
4. Ability to work as part of a multi-disciplinary research team.
5. Current driver's licence.

Desirable:

1. Demonstrated practical experience in N research in soil-plant systems either under laboratory or field environments.
2. Experience with techniques used to study root function.
3. Knowledge of soil chemistry/microbiology.

[back to top](#)

More Information

Applications

Before you apply ensure that your documents are in Text, MS Word or PDF. Ensure your file is not larger than 1MB in PDF format, or 2MB for all other formats. Your Documents will be converted into PDF format. To view these documents once converted you will need to download Adobe Reader [Download Adobe Reader](#)

For further information about CSIRO please visit www.csiro.au.

CSIRO prefers applications be lodged online via this careers site.

You are required to include two documents (1) "A document Addressing the Selection Criteria" and (2) a "Resume or CV" including the names of at least two professional referees.

Note: Applications that do not address the selection criteria will not be considered.

If you experience difficulties applying online call 1300 301 509 and someone will be able to assist you. Outside business hours please email: csiro-careers@csiro.au.

If you are unable to lodge your application online you can fax your application (quoting reference number 2009/392) to +61 2 6276 6641 or alternatively post to:

CSIRO Careers Online
PO Box 225
DICKSON ACT 2602

Contact: If after reading the selection documentation you require further information please contact Dr Ian Fillery via email ian.Fillery@csiro.au or phone +61 8 9333 6681

Please do not email your application directly to Dr Fillery. Applications received via this method will not be considered. You must use the 'Apply Now' link, or an alternative method of submission as outlined above.

If you would like more information on CSIRO Plant Industry and the Molecular and Physiological Wheat Breeding Group, please follow the links at www.pi.csiro.au

[back to top](#)

[Apply Now!](#)