# Position Description

## Research Projects – CSOF3

The following information is for applicants

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| Advertised Job Title**:** | Research Projects Officer/Science Technician - Nematology & Biosecurity |
| Job Reference: | 59743 |
| Relocation Assistance**:** | Will be provided to the successful candidate if required. |
| Applications Are Open To: | All Applicants |
| Percentage of Client Focus - Internal: | 80% |
| Percentage of Client Focus - External: | 20% |
| Reports to the: | Team Leader |
| Number of Direct Reports: | 0 |
| Name and Contact Details For Applicant Enquiries | Mike Hodda (02) 6246 4371 |
| Contact Details For Applying | Call 1300 984 220 or email [careers.online@csiro.au](mailto:careers.online@csiro.au). |
| How to Apply: | Please apply online at [jobs.csiro.au](https://jobs.csiro.au/) and enter the requisition number**.** Internal applicants please apply via ‘Jobs Central’ through the ‘People Hub’ icon |

## Role Overview:

The general role of Research Projects staff in CSIRO is to collaborate in scientific activities with other research staff (Research Scientists, other Research Projects staff, Research Managers, and Technical Services) by assisting with detailed planning, undertaking or assisting with experimental and observational work, and in carrying out the more practical aspects of the work.

The Insect & Nematode Biosecurity Team consists of a senior scientist, 2 technicians, and 4 honorary associates working with several CSIRO business units, the Australian Department of Agriculture & Water Resources, state agriculture departments, industry bodies, universities and consultants. We have a very broad customer focus.

The team operates in a collegiate, co-operative way, so team members are expected to step in to help others or provide a different viewpoint for activities outside their immediate responsibilities at times. Equally, the help and support of other team members will be available when needed.

The purpose of this position is:

* to become familiar with and maintain the team’s database on plant health biosecurity diagnostics, so that it can be supplied for the research and delivery activities of the team;
* to assist with obtaining background documents and data for meetings of plant health diagnostics coordinators;
* to obtain information on diagnostic resources (specimen collections, human expertise, and information) required to identify biosecurity pests of national importance for plant health;
* to assist with preparing presentations for diagnosticians;
* to assist with curation of the nematode collection;
* to extract nematodes from various materials and prepare temporary or permanent slides; and
* to take high-quality images in a number of formats, possibly including live, moving animals.

Familiarity with whole-animal biology, taxonomy, biosecurity, nematology and/or entomology will be an advantage. The person will be required to communicate effectively verbally and in writing with colleagues, as well as professionals outside CSIRO, via email, telephone and in person. They may need to travel interstate for short periods to attend meetings. They will need to work collaboratively with a team including other technical staff and a senior scientist, as well as with stakeholders outside CSIRO. The role requires someone who is highly motivated, willing and able to complete detailed work using well-defined protocols to high standards over long periods, but also able to work under direction in areas where new methods and materials have to be developed.

## Duties and Key Result Areas:

* **Develop some familiarity with the Australian plant health diagnostic system, including:**
  + The main elements and features of the system;
  + The diagnostic resources for plant, environmental and amenity pests, including
    - National Diagnostic Protocols (NDPs), IPCC Diagnostic Protocols, keys and other information resources,
    - Images (PaDIL etc),
    - Human capability,
    - Physical collections, and
    - Molecular tools;
  + The main pests of national interest (NPPPs, HPPs and NAQS targets: 141, 350 & 60 taxa, respectively); and
  + The audit, diagnostic principles, and collections strategy activities recently completed by the team
* **Maintain a database of diagnostic resources for NPPPs, including:**
  + Maintaining an up-to-date list of diagnostic resources for all the taxa on the NPPP list; and
  + Collating and summarizing information from several different databases, one for each diagnostic resource, within a framework of diagnostic requirements that is provided to assess what is needed for each NPPP.
* **Assist in the preparation of reports, scientific publications, seminar presentations, and training materials, including:**
  + Proofreading MSS for spelling, grammar and clarity, checking bibliographic citations, producing publication-standard diagrams, formatting MS for particular journal specifications;
  + summarising data and main findings;
  + Producing graphics summarizing and illustrating concepts (under direction); and
  + Organizing entomological training materials and resources.
* **Curatorial activities with the nematode collection:**
  + Extract nematodes from various substrates;
  + Make temporary or permanent microscope slides;
  + Use the collection database and paper records to enter and retrieve data;
  + Use photomicroscopy and image manipulation software to produce diagnostic images of dead, fixed nematodes and live, moving nematodes.
* **General technical duties for the team:**
  + Source & purchase equipment;
  + Help with general administration and running of the team when other team members are away;
* Communicate openly, effectively and respectfully with all staff, clients and suppliers in the interests of good business practice, collaboration and enhancement of CSIRO’s reputation.
* Work collaboratively as part of a multi-disciplinary, often regionally dispersed research team, and business unit to carry out tasks in support of CSIRO’s scientific objectives.
* Adhere to the spirit and practice of CSIRO’s Code of Conduct, Health, Safety and Environment plans and policies, Diversity initiatives and Zero Harm goals.
* Other duties as directed.

## Competencies:

1. **Teamwork and Collaboration: Proactively seeks and considers the ideas and opinions of others from within and outside the team to help form decisions, plans or actions.**
2. **Influence and Communication: Puts forward ideas by presenting factual information supported by data, definitions, examples, illustrations or other aids, which will assist in conveying meaning.**
3. **Resource Management/Leadership: Provides instruction and assists other staff to complete allocated tasks and activities.**
4. **Judgement and Problem Solving:** Identifies and considers the implications of a range of available alternatives in order to select the most appropriate response to problems of a familiar or recurring nature.
5. **Independence: Recognise and makes immediate changes to improve performance (faster, better, lower cost, more efficiently, better quality, improved client satisfaction).**
6. **Adaptability:** Willingness to change ideas or perceptions based on new information, contrary evidence or other people's points of view. Prepared to try out different approaches.

## Selection Criteria:

*Under CSIRO policy only those who meet all selection criteria can be appointed.*

***Pre-Requisites:***

1. **Education/Qualifications**: Relevant Bachelors/Masters Degree &/or equivalent experience in whole animal or field biology or a related field.
2. **Communication:** Ability to communicate in a fluent and courteous manner, both orally and in writing, offering factual information supported by proven data, and providing appropriate feedback when required.
3. **Behaviours:** A history of professional and respectful behaviours and attitudes in a collaborative environment.
4. **Adaptability:** The ability to effectively manage a number of competing priorities simultaneously, and carry out non-routine tasks under general direction.
5. **Problem Solving:** Proven ability to investigate routine problems by identifying and considering the implications of a range of available alternative solutions.

***Essential Criteria:***

1. Knowledge or experience in identification or taxonomy or diagnostics of nematodes, insects, other invertebrates and plant pests using different methods.
2. The ability to complete detailed work requiring a high degree of concentration to a consistently high standard.
3. The ability to collate and summarise data, including interpretation and uncertainty, using an understanding of the project requirement.
4. Ability and willingness to work flexibly according to changing demands and as projects develop.
5. Ability to schedule and complete tasks according to externally-imposed deadlines independently, and work under limited direction for short periods.
6. The ability to work effectively as part of a multi-disciplinary research team, and carry out tasks under general direction from Scientific Researchers.

## *Desirable Criteria:*

1. Knowledge or experience related to crop health or biosecurity.
2. The ability & willingness to contribute novel ideas and approaches in support of scientific investigations.

## Special Requirements:

Appointment to this role may be subject to conditions including security/national police/medical/character clearance requirements. Applicants who are not Australian Citizens or Permanent Residents may be required to undergo additional security clearances, which may include medical examinations and an international standardised test of English language proficiency (i.e. IELTS test).- <https://ielts.com.au/>

1. Ability and willingness to work with flash photographic equipment and other repeatedly flashing lights.
2. Ability and willingness to work with microscopes.
3. Ability and willingness to work under human research ethics conditions including confidentiality.
4. Ability and willingness to attend occasional meetings with stakeholders interstate for several days (approximately once or twice per year with several weeks forewarning).
5. Ability and willingness to work in the field

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