# Postdoctoral Fellowship – CSOF4

Role summary for potential applicants

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| Advertised Job Title**:** | Postdoctoral Fellowship in insect pest ecology |
| Reference Number**:** | 57302 |
| Classification**:** | CSOF4 |
| Salary Range: | AU $80 to AU $91k plus up to 15.4% superannuation |
| Location**:** | Black Mountain / Canberra |
| Tenure: | Specified Term of 2 years |
| Relocation assistance**:** | Will be provided to the successful candidate if required. |
| Applications are open to: | Australian Citizens Only  Australian Citizens and Permanent Residents Only   * All Candidates |
| Functional Area**:** | Research Scientist / Engineer - Postdoc |
| % Client Focus - Internal: | 20% |
| % Client Focus - External: | 80% |
| Reports to the: | Project Leader - Integrated Agriculture Systems |
| Number of Direct Reports: | 0 |

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| **Role Overview:** |
| This postdoctoral research role will value-add to an existing multi-organisational GRDC-funded project with the aim of generating new knowledge about the life-cycles and biology of a range of invertebrate pest and beneficial species in Australian grain production landscapes. This research will enable pathways for better spray decision-making and the proactive management of pests by grain growers. This postdoctoral position is focussed on gaining a better understanding of the ecological roles that native and introduced earwig species play in grain fields. In particular, how diet breadth and food choice determines their interactions with crop plants and invertebrates, and identifying which factors influence these species acting as pests or beneficials in grains production systems.  We are seeking a postdoctoral researcher with expertise in using innovative experimental and survey approaches to understand the behaviours and activities of invertebrates in managed systems. To address the research questions he/she may use a range of approaches from small-scale controlled microcosm studies, replicated field trials on commercial properties, through to molecular gut content analyses.  The successful candidate will have the opportunity to join a team of researchers who are committed to delivering research outcomes that lead to improved pest management decision-making by grain growers. The fellow will be appointed to CSIRO but form part of a team of researchers based in southern and western Australia (SARDI, University of Melbourne, DAFWA, and NSW DPI). There is an opportunity for the fellow to negotiate and undertake periods of secondment to our partner organisations within other Australian locations in order to facilitate the project goals.  The successful candidate will work in CSIRO Agriculture & Food in the Integrated Agricultural Systems Program based in Canberra. This group includes world-leading researchers in invertebrate ecology, landscape ecology, crop and pasture agronomy, mixed farming systems research and crop and systems modelling. The post-doctoral fellow will collaborate with scientists within CSIRO across Australia and interact extensively with other research partners in the project. This may include direct interaction with farmers, advisors and grower group networks to ensure research outputs generate impact and industry relevant outcomes.  **Postdoctoral Fellowships** at CSIRO provide opportunities to scientists and engineers, who have completed their doctorate and, in this case, have less than four years relevant postdoctoral work experience. These fellowships will help launch their careers, provide experience that will enhance their career prospects, and facilitate the recruitment and development of potential leaders for CSIRO.  Postdoctoral Fellows work closely with a leading Research Scientist or Engineer in their respective field. They carry out innovative, impactful research of strategic importance to CSIRO with the possibility of novel and important scientific outcomes. They present the findings in appropriate publications and at conferences. |

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| **Duties and Key Result Areas:** |
| * Plan and execute research studies that address applied research questions with particular emphasis on invertebrate population processes at multiple spatial and temporal scales. * Analyse and interpret ecological data collected from field-based research projects, which include multiple species, using a range of approaches and tools. * Produce client reports and high quality scientific papers suitable for publication in peer-reviewed International journals. * Present research findings to collaborating farmers, advisors, grower groups and industry partners. * Prepare appropriate conference papers and present at national and international conferences and workshops as required. * Work collaboratively with colleagues within CSIRO and the broader teams to develop innovative research projects that are relevant to Australian primary producers.   ***CSIRO’s postdoctoral training program***is developed between the Postdoctoral Fellow and a CSIRO scientist. The program will focus on enhancing the Fellows’ capabilities to the level expected of an independent researcher and will include on-the-job and course-based development encompassing:   * Discipline-specific techniques and protocols * Professional growth * Project management * Communication and influencing skills * Working and collaborating with others   <http://www.csiro.au/en/Careers/Student-and-graduate-programs/Postdoctoral-fellowships> |

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| **Selection Criteria:** |
| *Under CSIRO policy only those who meet all essential criteria can be appointed*  ***Pre-Requisites:***   1. **Education/Qualifications:** A doctorate (or will shortly satisfy the requirements of a PhD) in a relevant science discipline area, such as ecology, entomology, biology or agronomy.   ***Please note:*** *To be eligible for this role you must have* ***no more than 4 years*** *of relevant postdoctoral experience.*   1. **Licences:** A valid Australian driver’s licence, and experience driving manual vehicles. 2. **Communication: High level written and oral communication skills with the ability to represent the research team effectively internally and externally, including at national and international conferences.** 3. **Publications: Ability to manage and analyse scientific data with a record of publication in quality international peer reviewed journals.** 4. **Behaviours:** A history of professional and respectful behaviours and attitudes in a collaborative environment.   ***Essential Criteria:***   1. Demonstrated research capability in invertebrate ecology (e.g. multi-species interactions), with particular emphasis on population processes at multiple spatial and temporal scales. 2. Demonstrated experience in collecting, analysing and interpreting ecological data from field-based research projects, using a range of approaches and tools. 3. The ability to conduct controlled laboratory or semi-field experiments that specifically involve the manipulation of live invertebrates to address a research question. 4. **The ability to work effectively as part of a multi-disciplinary, regionally dispersed research team, plus the motivation and discipline to carry out autonomous research.** 5. A record of science innovation and creativity, plus the ability & willingness to incorporate novel ideas and approaches into scientific investigations to solve real-world problems. 6. Willingness to travel for short periods away from home base in order to interact with team members and conduct field work as required. There is opportunity for the postdoctoral fellow to negotiate and undertake periods of secondment to our partner organisations within other Australian locations in order to facilitate the project goals.   **Desirable Criteria:**   1. An understanding of Integrative Pest Management strategies with particular relevance to processes affecting beneficial and pest insect populations in agricultural landscapes. 2. Appreciation for and experience in communicating and engaging with diverse stakeholders.   **As Australia’s Innovation Catalyst, CSIRO has strategic actions underpinned by behaviours aligned to**:   * Excellent science * Inclusion, trust & respect * Health, safety & environment * Delivery on commitments.   **In your application and at interview you will need to demonstrate alignment with these behaviours.**  To be appointed as a Postdoctoral Fellow within CSIRO, candidates are required to have **submitted** their PhD at the time of commencement, as a minimum requirement, if PhD conferment has not been obtained. If a candidate has submitted, but their PhD has not yet been formally attained, the starting salary will be CSOF4-1 ($80,833)*.* Upon CSIRO receiving written confirmation that the PhD has been awarded (within a six month period from commencement date), the salary will be increased to the negotiated level and the difference will be back-paid to the Officer’s start date.  **Other special requirements:**  Appointment to this role may be subject to conditions including security/medical/character clearance requirements. Applicants who are not Australian Citizens or Permanent Residents may be required to undergo additional security clearance processes; which may include medical examinations and an international standardised test of English language proficiency (i.e. IELTS test).- <http://www.ielts.org/default.aspx> |

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| **Other Information:** |
| **How to Apply**  Please apply for this position online at <https://jobs.csiro.au/> and enter requisition number 57302. Internal applicants please apply via ‘Jobs Central’ in SAP (click ‘Recruitment’)  Please load your CV (Maximum 2MB). You may also be required to respond to some screening questions.  If you experience difficulties applying online call 1300 984 220 for assistance. Outside Australian business hours please email: [csiro-careers@csiro.au](mailto:csiro-careers@csiro.au).  **Referees**: If you do not already have the names and contact details of two previous supervisors or academic/ professional referees included in your resume/CV please add these before uploading your CV.  **Contact:** If after reading the selection documentation you require further information please contact:  Dr Sarina Macfadyen (Project Leader) via email: sarina.macfadyen@csiro.au or phone: +61 (0)2 6246 4432. Please do not email your application directly to Dr Macfadyen. Applications received via this method will not be considered.  **About CSIRO**  Australia is founding its future on science and innovation. Its national science agency, the Commonwealth Scientific and Industrial Research Organisation (CSIRO) is a powerhouse of ideas, technologies and skills for building prosperity, growth, health and sustainability. It serves governments, industries, business and communities across the nation.  Find out more! [www.csiro.au](http://www.csiro.au).  We work flexibly at CSIRO, offering a range of options for how, when and where you work. Talk to us about how this role could be flexible for you.  Find out more! [CSIRO Balance](https://www.csiro.au/en/Careers/A-great-place-to-work/Work-life-balance)  **CSIRO Agriculture and Food** carries out research and development for new agricultural technologies, value added foods, crop and livestock improvement, aquaculture, farming systems, sustainability and advancement of international agriculture. |