# Research Projects – CSOF3

Role summary for potential applicants

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| Advertised Job Title**:** | Research Technician |
| Reference Number**:** | 58193 |
| Classification**:** | CSOF3 |
| Salary Range: | AU $61k to AU $78k plus up to 15.4% superannuation |
| Location**:** | Floreat, Perth, Western Australia |
| Tenure: | Specified term of 12 months |
| Relocation assistance**:** | Will be provided to the successful candidate if required. |
| Applications are open to: | [ ]  Australian Citizens Only[x]  Australian/New Zealand Citizens and Australian Permanent Residents Only |
| Functional Area**:** | Research Projects |
| % Client Focus - Internal: | 20% |
| % Client Focus - External: | 80% |
| Reports to the: | Team Leader/Senior Research Scientist |
| Number of Direct Reports: | 0 |

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| **Role Overview:** |
| The role of Research Projects staff in CSIRO is to collaborate in scientific activities with other research staff usually by assisting with detailed planning, undertaking or assisting with experimental and observational work, and in carrying out the more practical aspects of the work. This particular position involves work in two broad teams.The “water and nutrients in crop production” team investigates crop management techniques to improve the water and nutrient use of major crops in Australia. The research goal is to deliver low cost and low risk soil management options to WA farmers. This includes investigation of the impact of soil constraints, such as water repellence, soil acidity, and soil compaction, on root growth and crop yield. This role requires a mix of field work at sites in the WA wheat belt, and laboratory investigations and measurements into the behaviour of water repellent soils. Data management and analysis skills will also be required. The interactive CSIRO Plant Pathology and Crop Genomics group works on solutions to major yield-limiting problems facing the agricultural industry with a focus on legume genomics, necrotrophic fungal pathogens (those that kill host plants), biopesticides (biocontrol agents) and insect pests. Visit our website to learn more <https://research.csiro.au/crop-disease>. The appointee will assist with research investigating legume populations and plant-microbe/pest interactions at both phenotypic and molecular levels and assist with the day to day running of the laboratory.  |

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| **Duties and Key Result Areas:** |
| * Liaise with collaborators and team members to ensure proper agronomic and scientific management of field trials.
* Plan and coordinate field trips to trial sites for the research team. Occasional overnight absences will be required.
* Plan and assist with soil and plant sample collection, and field and laboratory data and statistical analysis
* Work with legume mutant populations to help identify and further characterise interesting mutants through forward and reverse genetic approaches. This will include growing plants, screening for visible phenotypes, isolating high quality DNA and helping with the generation of transgenic plants.
* Work in a team to examine RNAi constructs and microbial strains for the control of insect pests. This will include growing host plants to maintain aphid colonies, set up aphid artificial diet assays and monitor aphid growth.
* Communicate effectively and respectfully with all staff, clients and suppliers in the interests of good business practice, collaboration and enhancement of CSIRO's reputation.
* Work as part of a multi-disciplinary, often regionally dispersed research team, to carry out tasks under limited direction in support of scientific research.
* Work collaboratively with colleagues within your team, the business unit and across CSIRO, to reach objectives.
* Adhere to the spirit and practice of CSIRO’s Values, Health, Safety and Environment plans and policies, Diversity initiatives and Zero Harm goals.
* Other duties as directed.
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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 Bachelors or Masters Degree or equivalent experience in a relevant science field.
2. **Licence:** A current ‘A’ class drivers licence.
3. **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.
4. **Behaviours:** A history of professional and respectful behaviours and attitudes in a collaborative environment.
5. **Adaptability:** The ability to effectively manage a number of competing priorities simultaneously, and carry out non-routine tasks under general direction.
6. **Problem Solving:** Proven ability to investigate routine problems by identifying and considering the implications of a range of available alternative solutions**.**

***Essential Criteria:***1. Demonstrated knowledge and practical skills in conducting field experiments involving factors affecting crop growth and yield**,** and in sampling and analysing soil and plant materials.
2. Demonstrated experience with spreadsheets or other methods to accurately record and retrieve data efficiently.
3. Ability to conduct field work at various sites that will require overnight stays.
4. Demonstrated knowledge and practical skills in working with plants using controlled growth facilities and knowledge about plant development and morphology.
5. Demonstrated knowledge and basic practical skills is aspects of plant molecular biology such as DNA and RNA isolation, gene cloning and working with transgenic plants.
6. The ability to work effectively as part of a multi-disciplinary, regionally dispersed research team, and carry out tasks under general direction from Scientific Researchers.
7. Demonstrated understanding and commitment to sound occupational health, safety and environmental standards for a molecular laboratory and field work.
8. The ability & willingness to contribute novel ideas and approaches in support of scientific investigations.

**Desirable Criteria:**1. Knowledge of farming systems in Western Australia.
2. Knowledge and experience working with legume plants.

**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.** |

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| **Other Information:** |
| **How to Apply**Please apply for this position online at <https://jobs.csiro.au/> and enter requisition number **58193**. 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. **Contact:** If after reading the position details above you require more information please contact:**Dr Phil Ward**via email: phil.ward@csiro.auPlease do not email your application directly to Dr Ward. Applications received via this method may not be considered by the selection panel.**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. |