

Position Description

Date: September 2026 **Ref:** 2080

Position | Tūranga: Internship – Screening Native Grasses for Biological Nitrification Inhibition Capacity

Responsible to Tō kaiwhakahaere:	Science Team Leader, Richard Scott and Senior Scientist, Saman Bowatte
Group Tari:	Resilient Agriculture
Function Wāhanga:	Climate Change and Forage Innovation
Team Tīma:	Climate Change and Forage Innovation
Location Wāhi:	Grasslands Research Centre, Palmerston North
Employment Type Momo Mahi:	Fixed Term – 12 weeks
Korn Ferry Grade Taumata Korn Ferry:	12

Organisational context

The Bioeconomy Science Institute Maiangi Taiao is New Zealand's newest public research organisation, formed through the merger of AgResearch, Plant & Food Research, Manaaki Whenua - Landcare Research, Scion, and the New Zealand Food Innovation Network. Our purpose is to drive innovation and commercial outcomes in the bioeconomy, using research and technology to support enduring economic growth and resilience, a healthy environment and beneficial social outcomes for New Zealand. We pursue opportunities to lift innovation, commercial outcomes, and adoption of advanced technology to drive economic growth across New Zealand. Through world-leading science, we drive innovation across agriculture, horticulture, forestry, aquaculture, biotechnology, and manufacturing. We protect and enhance ecosystems, strengthen biosecurity and climate resilience, and develop cutting-edge bio-based products and technologies.

We honour Te Tiriti o Waitangi and embed te ao Māori throughout our transformation journey. As we come together, we are committed to learning and growing together through inclusive, equitable, and culturally responsiveness ways of working. All roles contribute, in ways relevant to their work, to giving effect to our Te Tiriti commitments through partnership, participation, protection and equity.

Role purpose | Te Take o te Tūranga

Nitrification is a natural soil process that contributes to nitrate leaching into waterways and nitrous oxide emissions from grazed pastures. Finding ways to slow this process could help reduce agriculture's environmental impact and improve nitrogen-use efficiency. One promising approach is biological nitrification inhibition (BNI), where plant roots naturally release compounds that suppress nitrification in the soil. This project will investigate selected native grasses to identify species with strong BNI potential. The research could contribute to the development of natural, locally adapted solutions for cleaner waterways, lower greenhouse gas emissions, and healthier farming systems, supporting te Taiao

Accountabilities | Ngā whakaritenga

- Grow selected native grasses in hydroponic systems and maintain experimental plants.
- Learn and conduct biological nitrification inhibition (BNI) bioassays using laboratory techniques.
- Collect, manage and analyse experimental data to evaluate BNI capacity of native grass species.
- Prepare a final report and presentation summarising research findings.
- Learn from experienced researchers in a collaborative scientific environment.

About you | Ō Pūmanawa

We are seeking a motivated student who:

- Currently enrolled in, or recently completed, an undergraduate degree in plant science, soil science, environmental science, agriculture, biology, or a related discipline.
- An interest in environmental sustainability, agricultural systems, and scientific research.
- Strong attention to detail and the ability to collect and record data accurately.
- Good communication skills and the ability to work both independently and as part of a team.
- Motivation to learn new laboratory and research techniques.

Information And Records Management | Te Whakahaere | Ngā Mōhiotanga Me Ngā Putu Raraunga

- Ensure that information and records are maintained, created, and disposed of in compliance with relevant statutory, regulatory, and Institute policy requirements, documenting business transactions and activities securely and following established policies and procedures.

Health, Safety, And Wellbeing | Hauora, Haumaru Me Te Oranga

- Contribute to a positive health, safety and wellbeing culture by taking reasonable care for their own health, safety and wellbeing and that of others; complying with legislative requirements, organisational policies and standard operating procedures; reporting hazards, incidents, near misses, and safety observations; and promoting psychological wellbeing through open communication and the early recognition of stress, fatigue, and mental health concerns.

Organisational objectives | Ngā Whāinga Tōpūtanga Katoa

- Actively develops and applies the cultural capability relevant to their role and contributes to giving effect to the organisation's Te Tiriti o Waitangi Framework
- Ensures that all information created or received during your work is managed as per the Institute's Information Management policy. This includes naming, storing, classifying, and ensuring it is available to other employees.

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- Actively participates in the Bioeconomy Science Institute Maiangi Taiao performance process, including setting objectives and having a robust development plan. Proactively and constructively contributes to performance conversations and personal development.
 - Takes responsibility to understand and apply Institute policy, processes, systems, and procedures daily.
 - Commits to accurate and timely information sharing and recordkeeping as per set organisational standards.
 - The accountabilities set out above are not exhaustive. Therefore, it may be necessary for you to undertake other reasonable accountabilities as required, which are within your abilities.