

Expression of Interest EOI

Part 1 – General Details

EOI ID	1041
EOI Title	Scoping study: Improving Revegetation Success in Australian Cotton Landscapes: Understanding the Role of Soil Microbial Communities, Soil Health and Establishment Practices
Expected Start Date	12/10/2026
Expected End Date	07/12/2026
CRDC Pillar	3. Planet
CRDC Theme	3.1 Natural Capital
CRDC Outcome	3.1.6 By 2030, growers are enhancing and maintaining biodiversity and soil condition, and are more resilient to impacts
Application Type	
EOI Close Date	21/09/2026

Part 2 – Expression of Interest Requirements

Project Investment:				
Year	2026/27			TOTAL
Indicative budget (up to)	\$80,000.00			\$80,000.00

Issue to be addressed and project description:

Revegetation is a critical component of improving biodiversity, ecosystem function and natural capital within Australian cotton-growing landscapes. However, restoration projects often experience inconsistent establishment and survival rates, reducing the environmental and economic return on investment for growers, CRDC and delivery partners.

Experience and observations suggest that plantings may perform differently due to differences in soil condition, soil organic matter, microbial communities, root development, water availability or the protected establishment environment provided by tube stock compared to direct seeding. However, the relative importance of these factors remains unclear and may be complicated by climate, soil type, species selection, site preparation and ongoing management.

Emerging Australian and international research indicates that soil microbial communities play important

roles in plant health, ecosystem functioning and restoration processes. Evidence suggests that agricultural land-use history can alter microbial communities for extended periods, restored vegetation does not necessarily restore below-ground ecosystems, and microbial inoculation can improve plant growth under some conditions. However, it remains uncertain whether microbial communities are drivers of revegetation success, indicators of broader ecosystem condition, barriers to recovery, or simply responses to successful restoration.

This uncertainty creates an important investment question for CRDC: is there a scientifically credible, practically achievable and economically justifiable opportunity to improve revegetation success through soil microbiome management, soil health interventions or improved plant establishment practices?

The proposed scoping study will provide an independent, evidence-based assessment of this opportunity. Importantly, the study will not assume that microbial interventions are required. Instead, it will evaluate the relative influence of soil biology, soil health, climate and management factors on restoration outcomes and determine where future investment is likely to deliver the greatest value.

The study will review current evidence, investigate the role of soil microbial communities in revegetation success or failure, examine the mechanisms behind tube-stock and direct-seeding performance differences, evaluate potential interventions and assess the costs and benefits of further investment. The project will provide CRDC with a robust evidence base on future RD&E gaps and opportunities.

Expected project outputs and outcomes:

Expected Outputs

Final report that delivers

- a clear evidence review assessing the strength of evidence that soil microbial communities affect native plant establishment, survival and long-term restoration success (distinguishing between research evidence from practitioner observations);
- an assessment of whether microbial communities function primarily as drivers, indicators, barriers, consequences of recovery, or interacting components within broader restoration systems and under what soil, climatic and management conditions most likely to be material.
- an evidence-based interpretation of whether microbes are practical intervention targets, useful monitoring indicators, or secondary responses to soil, climate and management conditions;
- a shortlist of practical interventions or monitoring approaches that warrant further consideration; and
- clear recommendations for future RD&E identifying gaps and opportunities.

Expected Outcomes

CRDC and the Australian cotton industry have the evidence and knowledge needed to improve the success and cost-effectiveness of restoration activities across cotton-growing regions supporting a more resilient, sustainable and profitable Australian Cotton industry.

Additional guidance:

Part 3 – Selection Criteria

The following selection criteria will be used by the CRDC to assess the full research proposals (FRPs) received for each Expression of Interest.

The rationale of the project, how it will support CRDC's Strategic Plan and the potential impacts for the Australian cotton industry and the Australian community.

This criterion will be assessed on the soundness of the proposal's understanding of the issues, and the extent to which the project outcomes will address the issues and support CRDC to achieve its measures of success.

Project methodology.

This criterion will be assessed on the soundness and clarity of the proposed R&D methods to achieve project deliverables and outcomes.

The skills and capacity of the research team to undertake the project.

This criterion will be assessed on the track record, technical knowledge and experience of all key personnel in the research area and the demonstrated capacity of the nominated researcher/s to provide project coordination, management, monitoring and evaluation for the timely delivery of high quality outputs.

The proposed 'Pathway to Impact'.

This criterion will be assessed on the appropriateness of the proposed 'Pathway to Impact' and the demonstrated capacity of the project personnel to effectively translate research/project outcomes to on ground actions. Please include the target audience and process for extension/ communication/ commercialisation (as appropriate), as well as any collaboration partners and potential risks. Note that successful FRPs may be requested to develop specific milestones for delivery of project outcomes in collaboration with CottonInfo or CRDC Commercialisation Manager at the outset of the project.

Proposed collaborations for the project and / or the collaborative networks of the project team.

This criterion will be assessed on the demonstrated ability of the project personnel to form productive networks to build on national and international research already undertaken in related areas.

How this project is cost effective for the Australian cotton industry, including details of the resources being brought to the project.

This criterion will be assessed on the cost effectiveness of this project including cash and in-kind commitments from the applicants and leverage through domestic or international linkages. Budget including descriptive text will also be assessed as part of this criterion.

Important to note:

- Applicants are expected to have read the CRDC [Strategic Plan](#) and [Researchers Handbook](#) before applying for funding.
- Where there are system limitations that prevent the ability to include graphs, pictures or background documents, attachments can be uploaded with your application. Please note you must abide by character limits where applicable. Attachments cannot be used as workarounds for the text fields in Fluxx, unless otherwise advised by CRDC.
- Some organisations require a two-step submission process. For these organisations, applications must be approved by the authorised Grantee Admin before they can be submitted to CRDC. Please allow your Grantee Admin sufficient time to action this before the EOI closing date.
- Applications may be submitted in Fluxx up to 11.59 pm on the close date, noting the above requirement (if applicable to your organisation).
- This EOI is not a guarantee of funding.
- If you are unsure of your organisation's requirements, or for any other queries, contact the Innovation Administration team via 02 6792 4088 or research@crdc.com.au

To apply, [follow this process](#).