

Expression of Interest EOI 2022-23

Part 1- General Details

EOI ID	2223EOI0330		
EOI Title: (max 80 char)	Validation of soil testing guidelines and critical values for nutrients for the management of modern cotton cultivars		
Type of Research	Knowledge creation		
Proposed Start Date:	1/07/2022	Proposed End Date:	30/06/2025
<i>Please refer to CRDC's Strategic R&D Plan 2018-2023 for the following:</i>			
CRDC Goal	1. Increase productivity and profitability on cotton farms		
CRDC Key Focus Area	1.1 Optimised farming systems		
CRDC Outcome	1.1.2 Improved input efficiencies		
CRDC Performance Indicator	Positive input/output ratios resulting from adoption of new practices		
Rural RD&E Priorities	Soil, Water and Managing Natural Resources		
Science and Research Priorities	Soil and water		
R&D Manager	Meredith Conaty	FRP Due Date	13/10/2021

Part 2 –Expression of Interest Requirements

Issue to be addressed and project description:				
<p>Modern cotton varieties grow differently to the historical varieties used to calculate critical soil test results for some nutrients – they are higher yielding, have higher retention rates driving demand early in the season, and very high input high yielding irrigated systems produce plants with a biomass which can be significantly higher than what the average biomass was previously. Some growers have been questioning if the current critical limits for nutrients are accurate in terms of the demand and pace of demand for some nutrients, which may be driving down the reliance on soil testing as a decision support tool for fertiliser decisions. This project will add a great deal to the picture we have as an industry of plant demand and ensuring growers have the right tools for assessing their soils. Leaf testing is beginning to become more and more important as a tool for assessing plant nutrient stress during the season, and calibrating this with soil testing would provide another tool for growers to make timely and accurate nutrient assessments of their crops.</p>				
Expected project outputs and outcomes:				
The project will:				
<ol style="list-style-type: none"> 1. Assess current critical values for soil tests and their suitability for decision making around fertiliser decisions 2. Examine the difference in total plant uptake between current industry standard varieties and historical varieties. 				
Project Investment:				
Year	2022-23	2023-24	2024-25	TOTAL
Indicative budget (up to)	\$150,000	\$200,000	\$200,000	\$550,000

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.

1. 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.

2. Project methodology.

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

3. 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.

4. 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.

5. 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.

6. 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. Max 2,000 character limit including spaces)

For information on how to apply, please refer to: www.crdc.com.au/for-researchers

This EOI is not a guarantee of funding.