



Sugar Research  
Australia®

31 October 2019

Committee Secretary  
Senate Rural and Regional Affairs and  
Transport References Committee  
PO Box 6100  
Parliament House  
CANBERRA ACT 2600

Dear Committee Secretary

**RE: Inquiry into the identification of leading practices in ensuring evidence-based regulation of farm practices that impact water quality outcomes in the Great Barrier Reef**

Sugar Research Australia Limited (SRA) welcomes the opportunity to provide comment to the Senate's Rural and Regional Affairs and Transport References Committee inquiry into the *Identification of leading practices in ensuring evidence-based regulation of farm practices that impact water quality outcomes in the Great Barrier Reef*.

SRA is committed to assisting the Australian sugarcane industry maintain productivity and improve water quality through logical and robust evidence-based research, development and adoption of industry best management practices.

As the lead research organisation for the Australian sugarcane industry, SRA plays a pivotal role in investing in and researching activities related to nitrogen use and the interaction between farming systems and water quality.

SRA provides robust and independent research and adoption services in this field and assists Australia's sugarcane growers to optimise productivity and profitability while also moving towards meeting water quality targets.

To achieve these objectives, SRA partners with a range of credible research agencies and co-investors, including the University of Southern Queensland, CSIRO, University of Queensland, James Cook University, Queensland Government departments, as well as productivity services organisations, private sector companies and others.

In 2014, SRA brokered and managed the production of a review of nitrogen use efficiency in sugarcane which was funded by the Commonwealth's Department of Environment. The report found that there is significant potential for the industry to refine nitrogen application rates through continued use and evolution of the SRA SIX EASY STEPS<sup>®1</sup> guidelines, to

---

<sup>1</sup> SIX EASY STEPS is a science-based nutrient management tool that enables the adoption of best practice nutrient management on-farm. It is acknowledged as industry best-practice for nutrient management to optimise productivity and profitability without adversely influencing soil fertility and minimising off-farm effects.

Sugar Research Australia Limited  
ABN 16 163 670 068

Head Office  
50 Meiers Road  
Indooroopilly QLD 4068  
Australia

Postal Address  
PO Box 86  
Indooroopilly QLD 4068  
Australia

Tel 07 3331 3333  
Fax 07 3871 0383  
Email [sra@sugarresearch.com.au](mailto:sra@sugarresearch.com.au)  
Web [sugarresearch.com.au](http://sugarresearch.com.au)

better match nitrogen application to the crop requirements via precision agriculture farming techniques, and to evaluate enhanced-efficiency fertilisers that will reduce nitrogen losses from the farm.

There is also potential to look at how different sugarcane varieties perform in relation to nitrogen use efficiency and to benchmark new varieties as they progress through the SRA sugarcane plant breeding program, as well as to undertake more research on validating SIX EASY STEPS across a range of soil types, farming systems and climatic conditions.

SRA supports a sound and scientific-based approach to any industry change in farming practices. Prospects identified include refining tools such as SIX EASY STEPS and SafeGauge, better accounting for all available nitrogen sources to the crop and the development and use of enhanced-efficiency fertiliser technologies.

SRA is currently investing in a suite of research projects to address these practice change opportunities.

In addition, SRA continues to undertake water quality monitoring and analysis to demonstrate the off-farm impact of the industry's adoption of improved farm management practices. SRA recently secured funding through the Great Barrier Reef Foundation to continue and expand the water quality monitoring demonstration program *Cane to Creek 2.0*.

Funding to-date from reef programs has focused on adoption of better practices. While important, SRA also believes there is a need for greater support for research activities that will guide on-farm practice change over the longer term.

Targeted evidence-based research can help the Australian sugarcane industry increase productivity and profitability, optimise nitrogen application and make progress toward water quality targets. SRA does however advocate for a systems approach to be taken with respect to research and water quality monitoring programs, i.e. the focus should be on the whole system and not just single elements such as nitrogen and dissolved inorganic nitrogen.

SRA looks forward to the Committee's Report and would be pleased to provide additional information if required.

Yours sincerely

**Neil Fisher**  
**Chief Executive Officer**