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*(Cover page) Farmacist Extension Agronomist John Turner and Mackay farmer Shane Petersen discussing nutrient management.*

*Design: Catherine Jorissen, SRA.*

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# WELCOME TO THE SPRING 2019 EDITION OF *CaneConnection*

Welcome to the Spring 2019 edition of CaneConnection. We've prepared another comprehensive edition for you that takes a look at the research, development and adoption activities occurring at SRA.

This edition includes a feature on key messages and findings from the *Protecting our Chemicals for the Future* project. We meet with growers involved in the project and look at data produced from on-farm trials and rainfall simulation work.

In the same theme of sustainable farming, we also meet with growers who have achieved positive outcomes through their involvement in the RP161 project, *Complete Nutrient Management for Cane Farming*. Continuing the stewardship and sustainability theme, SRA Senior Researcher Emilie Filolls also discusses current research occurring into imidacloprid.

For irrigated regions, electricity prices remain a key topic and challenge, so it is timely that we look at some of the outcomes of a project underway looking at renewable energy options in the sugarcane industry, and in particular via the perspective of Burdekin growers Michael Pironne and Denis Pozzebon.

Other hot topics this edition include the role of Pachymetra sampling in managing this soil-borne disease; GM sugarcane; and the amazing contribution of women in science and technology roles in the Australian sugarcane industry.

Thanks for reading and we hope the harvest is going well in your region. If you have any questions or comments about this edition, you can email us at [sra@sugarresearch.com.au](mailto:sra@sugarresearch.com.au)

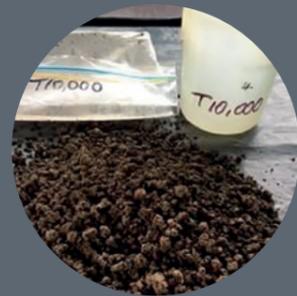
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**\$0**  
GROWER DENIS POZZEBON'S ELECTRICITY BILL AT ONE PUMP SITE, WHICH OPERATES ABOUT 250 DAYS PER YEAR, ON HIS FARM WHERE HE HAS INSTALLED SOLAR ELECTRICITY. **PAGE 6**



**10,000**  
THE NUMBER OF SAMPLES TO PASS THROUGH THE TULLY ASSAY LABORATORY TO ANALYSE FOR NEMATODES AND PACHYMETRA. **PAGE 14**

BY THE NUMBERS



**2500**  
THE NUMBER OF TREES THAT CASEY JONES HAS PLANTED ALONG A SECTION OF CREEK ON HIS PROPERTY TO DELIVER IMPROVED ENVIRONMENTAL OUTCOMES. **PAGE 22**



**11**  
THE NUMBER OF NEW SUGARCANE VARIETIES THAT HAVE BEEN APPROVED FOR RELEASE BY REGIONAL VARIETY COMMITTEES THIS YEAR. **PAGE 8**



**2000**  
THE NUMBER OF INDEPENDENT (SUGARCANE TRANSFORMATION LINES) DEVELOPED AS PART OF THE HERBICIDE-TOLERANT SUGARCANE JOINT VENTURE. **PAGE 16**

## YCS SYMPTOMS GENERALLY LOW – AND RESEARCH CONTINUES

**Yellow canopy syndrome (YCS) research at SRA is continuing via three major projects, two led by SRA and one led by the University of Queensland, and also involving national and international collaboration with other partners.**

These projects are conducting field trials throughout the industry, as well as laboratory work primarily at SRA's Indooroopilly research facilities in Brisbane.

SRA Executive Manager, Strategic Initiatives, Dr Frikkie Botha, said that YCS in the northern part of the industry had been relatively low this year, when compared to the previous five years since YCS was first identified.

"In contrast, YCS expression had been higher in the Southern Region than in

previous years and this coincided with the extremely dry conditions. A very significant portion of the yellowing observed in the South was due to water stress and not YCS," Dr Botha said.

"We have now reached a stage in the season where it is no longer possible to differentiate between YCS expression and all the other biotic and abiotic stresses that cause leaf yellowing.

"This is the time of year when the research teams are analysing data from the recent season's trials, and defining the critical research activity for 2019/20.

"Our research program continues to be driven by the industry requirements of defining and diagnosing YCS and determining management options."

Major focus points of the work will include:

- Determining the best way to estimate the yield impact of YCS on infected blocks and the industry more broadly.
- Continuation of investigation into insects via work led by Dr Kevin Powell, SRA, Meringa.
- Continuing with work to determine a biomarker test for YCS, which would be a significant step forward from the existing in-field diagnostic.
- Investigating variety differences with YCS.
- Continuing to define potential management strategies for YCS. ■