



# Real-time feedback to guide harvest efficiency in the cab

## A NEW TOOL IS IN DEVELOPMENT TO PUT INFORMATION ON HARVESTING PARAMETERS AND CANE LOSS INTO THE HARVESTER CAB, HELPING TO DRIVE HARVESTING EFFICIENCY.

**One of the many challenges with finding the sweet spot with harvest optimisation is getting an accurate estimate of the crop.**

In addition to yield, there are also a range of other factors that impact cane recovery – the variety, how it is standing, the time of day, and the weather.

All of these come in to play as operators seek to find the optimum spot for harvest recovery. The research arm of the industry is assisting with this challenge on a number of fronts, including by working with local groups with in-field trials that give everyone a better understanding of conditions and operating parameters.

At the same time, there has also been work on a new development that is

getting closer to commercial use, via a product that will be called SCHLOT Live.

This work is led by Norris ECT in collaboration with Agtrix and is funded by SRA and the Australian Government Department of Agriculture and Water Resources as part of the Rural R&D for Profit program.

SCHLOT (Sugarcane Harvest Logistics Optimisation Tool) Live uses sensors and a database of previous trial results to present this information to an in-cab monitor to give real-time feedback on yield and harvest losses.

Previous work by Norris ECT has seen them develop the predecessor to SCHLOT Live, which is an online version called SCHLOT (or 'SCHLOT classic').

This new version, through the Rural R&D for Profit program, takes that work to

another level for the industry by putting the information inside the cab and giving operators real-time feedback.

During the 2018 season, the Norris ECT team has been testing the system in harvesters at Rocky Point and the Herbert, and made refinements to the user interface.

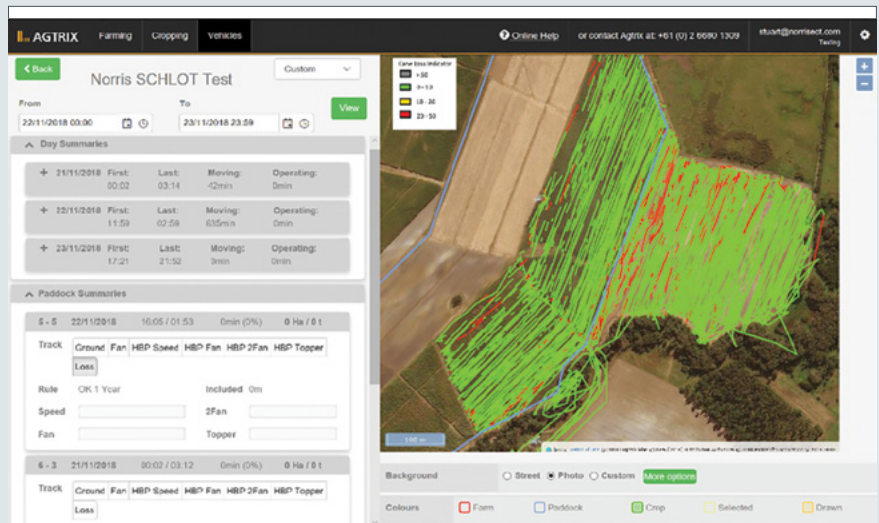
Stuart Norris from Norris ECT said they were developing a system where operators could change crop characteristics on the go.

“The operator will also be able to calibrate the system for primary and secondary extractor performance parameters in the cab, and also allow the display to show cane loss through both extractors either individually or collectively. This can be displayed as cane loss per hectare or per hour, and can also link back to the online

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For a video of SCHLOT Live in action, visit [sugarresearch.com.au](http://sugarresearch.com.au)



SCHLOT program to help find that sweet spot around cane loss versus bin weights, extraneous matter, and other factors,” he said.

“Operators, or researchers, will also be able to log performance and harvester operating parameters over a period and download a data file onto a USB stick to analyse later.

“It is not an absolutely definitive tool, but we see that it provides useful information for harvesters, millers and transporters to be able to optimise their business.”

The system also has an online interface, incorporated into Agtrix’s Agdat system, which uses the cane loss values passed to the Agtrix logger to store high frequency historical cane loss data alongside the other data already managed by Agtrix.

The Agdat system allows users to view historical cane loss performance by date and time or by paddock. Cane loss is categorised as green, amber or red with a harvester track showing the categories of cane loss.

Feedback from operators using SCHLOT Live during trials has been very positive, with both groups making changes to the way they operate since the systems have been installed.

“The system has already had an impact and has changed the way my operator drives the harvester with the varying conditions due to the instant feedback,” Rocky Point farmer, Josh Keith, said.

The system is still being fine-tuned, and more information on commercial release of SCHLOT Live will be available later this year. Please keep an eye on *CaneConnection* or the SRA e-newsletter for more information. ■



## Australian Government

(Over page) Stuart Norris, Chris Norris and Cam Whiting, Norris ECT, in the field testing SCHLOT Live at Rocky Point last year. (Above top) This online display allows the user to see, in addition to other Agdat data, the proportion of the field in which cane loss was in the green range, and to identify regions of the field that may have higher or lower cane loss than others. (Above middle) In-cab interface main page. (Above bottom) In-cab interface settings page.