

(Below) The dots on this graphic represent individual farms in one region of the Australian cane industry. The colours represents groups of farms that are of a similar size (hectares) and yield. The groups such as blue and yellow are target areas for extension strategies.

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# USING MILL DATA TO IMPROVE PRODUCTIVITY

**The weather plays an important role in determining sugarcane yield and production, but a research project currently underway is helping provide the industry with valuable information to improve productivity and profitability in all different seasonal situations.**

This project, led by Dr Joanne Stringer, is using productivity data that is collected by milling companies to assist the industry to improve production, especially by developing innovative tools and methods of summarising the data.

We know there are productivity differences across most mill areas. Although some of this regional variation is explained by extreme weather events or disease incursions, this work has looked at the key drivers of productivity in different regions and is working to broaden the adoption of improved farm practices by working with local industry.

For example, the research project has looked at factors such as clean seed uptake, variety selection, ratooning length, Pachymetra sampling and levels of infection, and numerous others, while comparing these to yield and size of production.

It follows an earlier demonstration of the project in the Herbert region. The project is now moving to other regions of the Australian sugarcane industry, including most recently at regions such as the Burdekin and Tully.

A key finding was that tonnes of cane per hectare is not related to the size of the farm, or the sub-district where the farm is located.

Jo said that the research is working closely with productivity services groups in these regions to identify the best strategies for improving production, and to ensure extension strategies were targeted effectively.

"The findings have been different in different regions," she said. "One of the big factors in the Herbert was that we identified the need to increase the uptake of clean seed.

"Through the work of Lawrence Di Bella and Herbert Cane Productivity Services Ltd (HCPSSL), clean seed use went from about 800 tonne (per year) to about 2000 tonnes. HCPSSL have recently bought another farm and harvester to continue to increase clean seed use.

"We also were able to talk to growers about losses from Pachymetra, with data showing a 15 percent decrease in cane yield when they used a susceptible variety in consecutive crop cycles."

She said in the Burdekin her work with Burdekin Productivity Services identified the value of current research and extension activity into improving soil health. It also provided the local industry with valuable information about

productivity losses associated with back-to-back planting of varieties.

For example, the research found that Q183<sup>Φ</sup> followed by Q183<sup>Φ</sup> in the Burdekin maintained yield, while planting KQ228<sup>Φ</sup> after KQ228<sup>Φ</sup> or planting Q208<sup>Φ</sup> after Q208<sup>Φ</sup> was associated with lower yields.

At Tully, Jo is working with Tully Cane Productivity Services Ltd Manager, Peter Sutherland, Tully Sugar Cane Productivity and Development Manager, Greg Shannon, and Tully CANEGROWERS Manager, Peter Lucy.

The project has worked with Tully industry to develop a tool to automate farm productivity reports that will provide valuable information to growers and also help inform extension strategies.

Greg said that it was another tool in the toolbox to ensure the region was delivering effective extension programs and that extension officers were providing the right advice. ■

