



Most of the permanent staff members at the SRA Ingham station.

SRA Ingham station delivering outcomes for growers and millers

The SRA Ingham Research Station is playing a key role in delivering productivity, profitability and sustainability outcomes for both the local region, and across the industry.

There is a buzz in the air at SRA's Ingham research station.

Farmers in the Herbert region will be familiar with the local SRA research station located near town on Fairford Road. For other farmers, though, while the site might not be familiar to you, it is an important piece of the overall investment from SRA in providing research outcomes for the Australian sugarcane industry.

Over the last two years, SRA has made a number of improvements and changes to the research station that are enhancing productivity, profitability, and sustainability outcomes for sugarcane growers and millers.

The first of these enhancements began two years ago after SRA commissioned a review of plant breeding activities in the Herbert. The review came in response to low productivity in the region as the local industry faced a long transition away from smut-susceptible varieties.

During that transition around 2006, average yields were 75 tonnes of cane per hectare – well below the costs of production and unsustainable for the local industry.

Seasonal conditions have improved since then, lifting yields as well, with a number of other enhancements to productivity also making a contribution.

The Herbert Breeding Review made several recommendations for change and improvement at the station, including additional staff within the breeding program and farming equipment.

Farm Manager, Vince Blanco, has been in this role for most of 2017 and he said that the farm continued to be improved upon, with work such as laser levelling and the investment in infrastructure such as sheds, farm machinery and specialist analytical equipment.

This includes the purchase of a near-infrared machine that allows for efficient and rapid analysis of samples and adds value to the breeding program.

This equipment is providing vital research support for local variety development and, over coming years, will continue to add value to variety development and other research activities.

Looking forward, there are further activities planned. The station is in the process of gaining Smartcane BMP accreditation and further farm renovation work will occur, building on work that has already occurred with the assistance of local farmer and contractor, Vince Russo.

As part of recent enhancements that have also been announced for the SRA breeding program, SRA is placing a greater emphasis on the use of introgression to introduce genetics from wild relatives of sugarcane to increase the productivity of new varieties.

As part of that, field evaluation will be centred around the Herbert, with the objective to supply varieties to benefit all regions as well as contributing increased genetic diversity.

On a broader scale, there has also been an expansion of other research activities that occur at Ingham.

New staff are working on projects including yellow canopy syndrome, soil health, and enhanced efficiency fertilisers. These include Technician Andrew Memory, Technician Linda DiMaggio, Technician Robert Verrall, and long-term Technician Glen Park.

The local plant breeding team consists of Variety Officer Melanie Adams, Plant Breeder Fengduo Hu and Technician Laura McIntosh.

They are all supported by the farm services team including Manager Vince Blanco, and Technician Sam Adams, with Casey Venables providing administrative support to the station and harvest losses work.

Vince also uses a pool of casual staff which are crucial to allow the large number of trial plots to be efficiently harvested and planted through the season.

There is a significant amount of planning and logistics that is required to plant and harvest research trial plots on the station. For plant breeding trials, for example, logistics include cutting plant material from propagation blocks, selections of cultivars to advance in the breeding program, labelling, field assessments and collection of stalks for CCS assessment.

Joe Bonassi joined SRA in 2016 as a mechanical engineer working on harvest losses, and he is working alongside Adoption Officer, Phil Patane, who is also based at Ingham, and technician, Jason Gunders.

The harvesting division have had a busy few months conducting trials as part of the major harvest losses Rural R&D for Profit project, as well as presenting the results to participating harvest groups. As well, they have also resurrected a research tool known as the 'chopper test rig', which had not been used for research activity for over a decade.

The machine is a stationary version of the feedtrain and chopper system of a harvester. Along with multiple sensors and a slow motion camera, it allows for another useful and visual means of understanding sucrose losses through mechanical harvesting.

Joe Bonassi and technician Jason Gunders said that the internal parts of the rig nearly had to be rebuilt from scratch, but it was now ready for operation.

"The losses from mechanical harvesting are increasingly understood and are gradually being minimised across the industry," Joe said. "But we know that the harvester remains very good at hiding the evidence. The chopper test rig is a valuable tool for providing another – and very clear – demonstrations of how the harvest may continue to be optimised."

During a recent SRA Board visit, local grower and Herbert CANEGROWERS Chairman Michael Pisano said the local industry appreciated the renewed energy and enthusiasm at SRA Ingham. He said it was clear that the SRA staff were keen to deliver for the local industry and were working well as a team.

There are also several other exciting R&D projects centred around the Herbert region. These include:

- The *Too Wet to Forget* project has field trials at Errol Cantamessa's farm. This project is looking to assess how different varieties may respond differently to water logging.
- EEF60 trials are occurring on eight farms in the region.
- Dr Jo Stringer with SRA recently completed a collaborative project that analysed mill data to deliver productivity enhancement programs, working with collaborators including Wilmar and Herbert Cane Productivity Services Limited (HCPSL).
- AgProfit and Coscer's accounting have completed a project on farm business management.
- Harvest loss trials have occurred across the region, as well as the collaborative Harvest Optimisation Week work.

Ingham farm manager, Vince Blanco.

