



Wilmar's Terry Morgan says the collaboration between SRA and Wilmar delivers beneficial outcomes for not just the Burdekin, but the entire industry.

## Plant breeding collaboration delivers industry-wide benefits

*The Burdekin breeding program continues to be enhanced by an ongoing collaboration in the region.*  
By Brad Pfeffer

A collaboration between Wilmar Sugar and SRA in the Burdekin is helping to boost the sugarcane breeding program in that region, creating flow-on benefits for the broader Australian sugarcane industry.

As is well understood in the industry, Wilmar Sugar inherited the Sucrogen breeding program when it bought Sucrogen from CSR in 2010. Prior to then, and also since, there has been increased collaboration between the SRA and Wilmar breeding programs.

Both Wilmar and SRA run independent early-stage breeding programs, where they each produce and subsequently select the best performing clones from a large number of experimental crosses of sugarcane.

These experimental crosses are a foundation of creating new varieties for the industry. Each year, thousands of them are tested to see if they have the potential to progress further through the breeding program, and perhaps one day become a new sugarcane variety.

Most of them are discarded for a range of reasons – such as disease susceptibility, or poor growth and production.

But the standout performers eventually make their way toward the Final Assessment Trial (FAT) stage, which is where the Wilmar and SRA programs formally synchronise.

According to Wilmar Sugar Technical Field Officer Terry Morgan, the collaboration boosts the performance of the overall program.

“It’s like adding an overdrive to a car. Our program is a booster to the SRA effort in the Burdekin,” he said.

With this collaboration already having occurred over a long period, Mr Morgan said its success was demonstrated by the dominance of Burdekin-bred varieties in the Australian industry.

Mr Morgan said the relatively small size of the Australian sugar industry meant different industry parties had to find ways to collaborate and be efficient.

FATs are conducted in five locations in the Burdekin – four are conducted by SRA and one by Wilmar. Within these trials, the performance of potential new varieties is tested under different soil types, management practices and micro-climates.

SRA Principal Researcher, Crossing and Selection, Xianming Wei, said that even though the first two stages of each program were independent, SRA and Wilmar still worked closely together for efficiency to allow for more crosses in the early stages, and subsequently more clones assessed in the final stages.

“This way, in the FATs in the Burdekin, with five trials sites, we can test about 350 clones, while before we would have been able to test 150 or so,” he said.

According to Brandon-based Variety Officer, Catherine Kettle, the collaboration has doubled the number of clones that are assessed, but without any extra cost to growers. “A greater number of clones through the program means there is an increased chance of receiving a good variety,” Catherine said.

Wilmar Sugar General Manager of Agriculture Ian Davies said Wilmar and SRA had a potentially promising variety called KQ08-2180 which may be released to the industry next year.

“If it makes it through the final selection process, it will be the first Wilmar bred variety to wear the new SRA variety branding codes with a WSRA prefix, replacing the more traditional KQ and MQ branding,” he said.



**Photos:** A recent BPS field day showcasing varieties developed by SRA and as part of the collaboration with Wilmar, which included SRA8 and KQ08-2180.

