



2019 HERBERT HARVESTING DEMONSTRATION PROJECT

BY PHIL PATANE, HARVESTING ADOPTION OFFICER, SRA

The 2019 season saw the industry's first month long harvest demonstration round conducted in the Herbert region. The aim of the study was to put into dollar terms to the industry the benefits of using harvesting best practice.

The concept of the harvesting field demonstration was brought about by a small group of innovative growers and contractors in the Herbert region. The group had been involved in many harvesting trials but they wanted to observe the situation on a commercial basis. The key points that the group wanted addressed through the harvesting field demonstration included:

- Yield gain is possible without a spike in extraneous matter (EM)
- Growers and contractors identified increase in revenue (anecdotal)
- The clear message from a group that travelled to the Isis region was to demonstrate fiscal advantage (Show me the money)

Two Herbert harvesting contractors took part in the demonstration that compared their standard harvesting practices to harvest best practice (HBP). This was conducted through randomised and replicated treatments (standard compared to HBP) in which at the siding a full rake was collected per treatment so the grower could be paid according to the product he delivered.

The demonstration involved a harvester alternating between current practice for that harvester and SRA harvesting best practice; altering fan speed and ground speed according to the condition of the crop. The harvester distance travelled in the paddock, tonnes of cane and CCS levels (individual fibre) were all measured to calculate the total tonnes of sugar per hectare produced for each practice.

The data collected allowed both contractors and growers to see if HBP delivered more tonnes of sugar per hectare, and therefore more revenue for the industry.

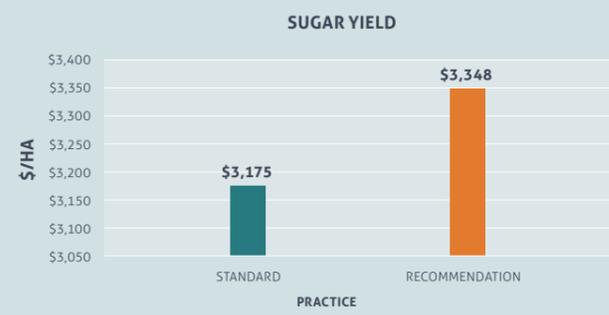
The results identified an increase in yield by 4.8 tonnes per hectare with no additional increase in extraneous matter (EM).



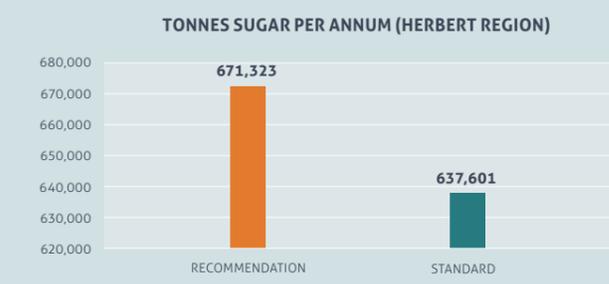
The increase in yield with no significant affect in EM in turn increased tonnes of sugar per hectare by 627/kg per hectare.



The increase in sugar per hectare resulted in an increase in grower gross revenue by \$173/ha.



Over the entire Herbert region this highlighted an extra 34,000 tonnes of sugar for the region which would result in an additional \$13 million in gross revenue.



As the demonstration was a commercial operation the results were compared to the 95 replicated trials conducted by SRA in 2017 and 2018. It is interesting to note that the results for both Herbert demonstration round and the industry wide trials follow a similar trend.

PER HECTARE	2019 HERBERT DEMONSTRATIONS		2017/2018 INDUSTRY TRIALS (95 TRIALS ACROSS THE AUSTRALIAN SUGAR CANE INDUSTRY)	
	Recommended Practice	Standard Practice	Recommended Practice	Standard Practice
Yield (Tonnes)	95.88	91.50	99.2	94.4
Sugar (Tonnes)	12.47	11.85	14.40	13.71
Grower Gross Benefit	-	\$173	-	\$181
Harvesting Costs	-	TBC	-	\$61
Grower Net Benefit	-	TBC	-	\$120

The next stage of the program is to conduct a harvesting cost analysis with both harvesting contractor groups to identify the "true cost" of harvesting. This will be reported on in a future edition of CaneConnection.

Thanks to all the people involved in delivering on this important work, the demonstration involved a significant level of investment from SRA, Herbert Cane Productivity Services Limited, the Queensland Department of Agriculture and Fisheries and Wilmar Sugar Australia.

Herbert River CANE GROWERS Chairman Michael Pisano said that while it is a difficult challenge, the increased revenue with the adoption of change was vital to the local sugar industry.

"The data shows that there is money to be made by adjusting harvesting practices. Now that we have the results growers are keen to work with industry groups to drive adoption," Mr Pisano said.

Two Herbert harvesting contractors took part in the demonstration that compared their standard harvesting practices to best practice methods. We are grateful for the extra effort these two harvesting companies provided to gather this important data. The work they have done will assist in communicating the benefits in real terms.

"These have been really interesting trials and we are pleased to provide economic information that can be used to inform better decisions on recommended harvesting practice", said Brendon Nothard, Agricultural Economist with DAF. ■

(Over page) SRA Harvesting Adoption Officer, Phil Patane with Sally Lakeman and Carrie Barclay during the trial. (Below) Ollie Rowan (front) in the harvester with Damien Morelli.

