



mackay area productivity services

# NEWSLETTER

DECEMBER 2020



## Approved Seed the best investment for your crop

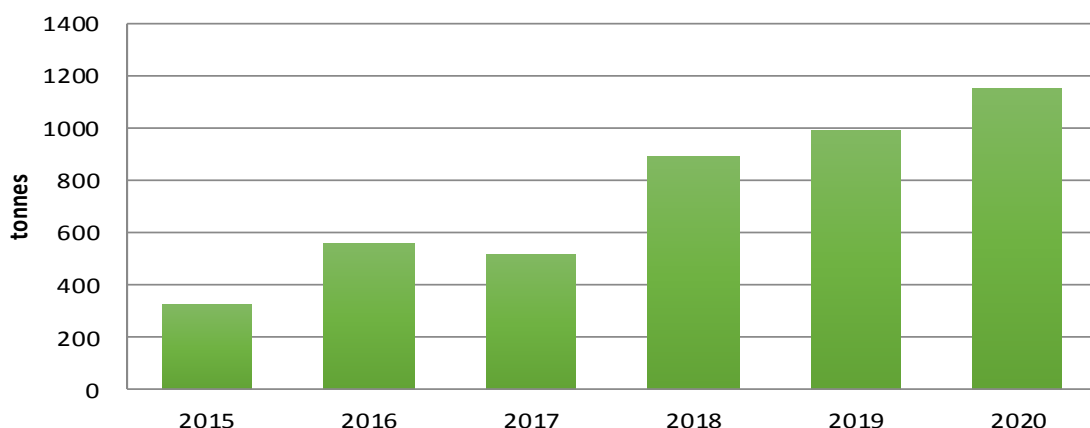
2020 has seen another increase in the uptake of clean seed cane taken from the MAPS plots, with over 1100 tonnes collected in whole stick or billet form. This is the largest uptake of clean seed the region has seen to date. A big thank you goes to Henry Barfield, Darrell McLennan, Justin Muscat and David and Anthony Galea for the work they did in cutting the plants for growers. The newly released variety SRA22 proved to be very popular along with SRA21, Q253 and Q208R.

Planting is one of the most expensive farming operations when growing cane and has a large impact on the long-term productivity of a block.

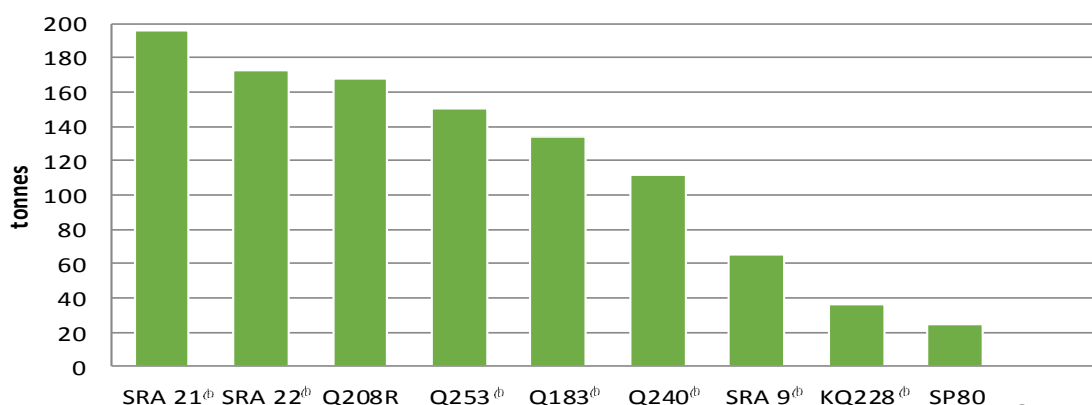
MAPS recommend that a clean seed source of each variety should be collected from an approved clean seed plot every three years. Now with the additional approved plots, growers can collect clean seed in billets on a yearly basis. Using approved seed cane is the best way to minimise major diseases such as chlorotic streak, leaf scald and ratoon stunting disease. Good-quality seed cane is critical to successful crop establishment.

For the 2021 planting season, clean seed can be sourced from three MAPS approved plots throughout the Mackay Sugar region, located at Victoria Plains, Calen and Benholme. A fourth plot in Homebush will be ready for distribution in 2022. For further details of the plots please contact your MAPS Productivity Officer.

### Approved Seed Distributed - MAPS Plots



### 2020 Variety Distribution - MAPS Plots

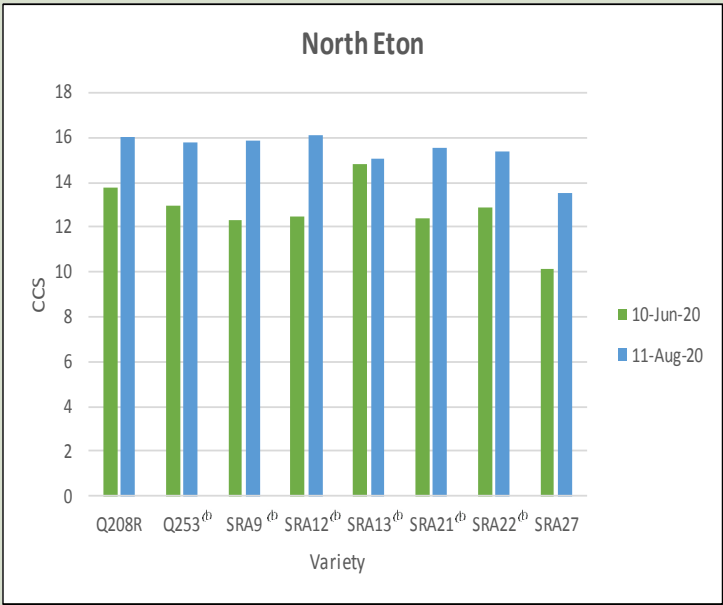
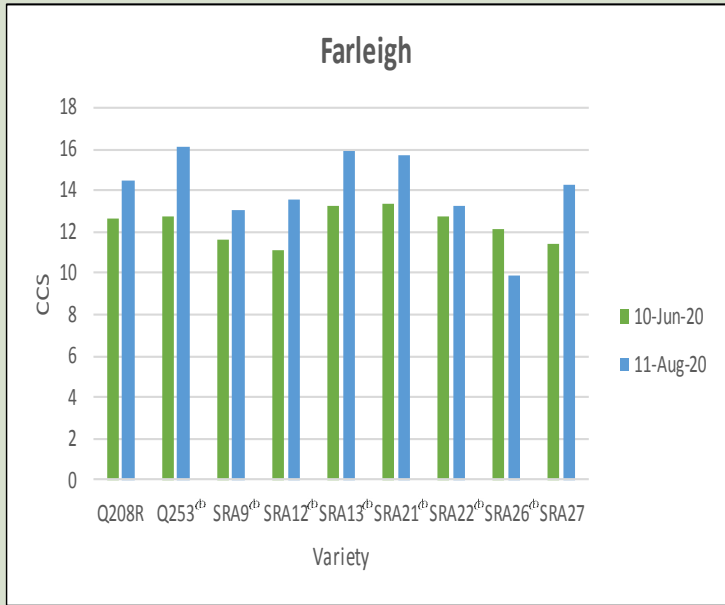
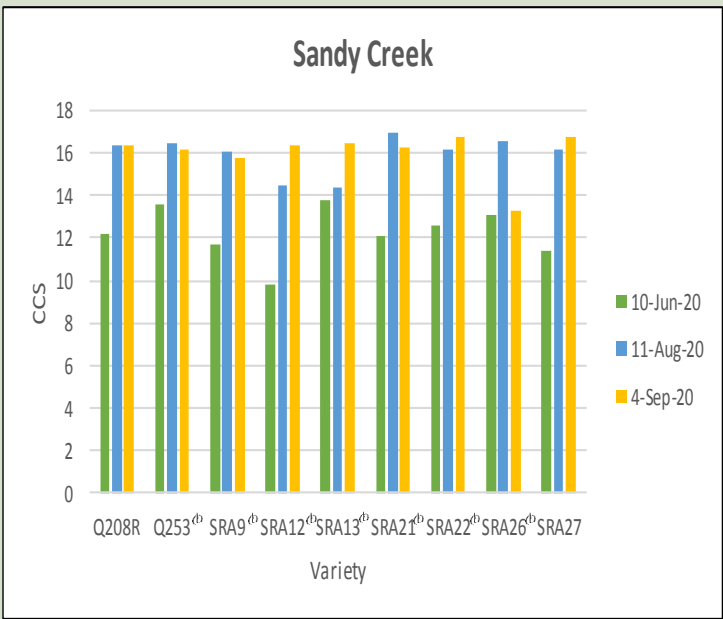
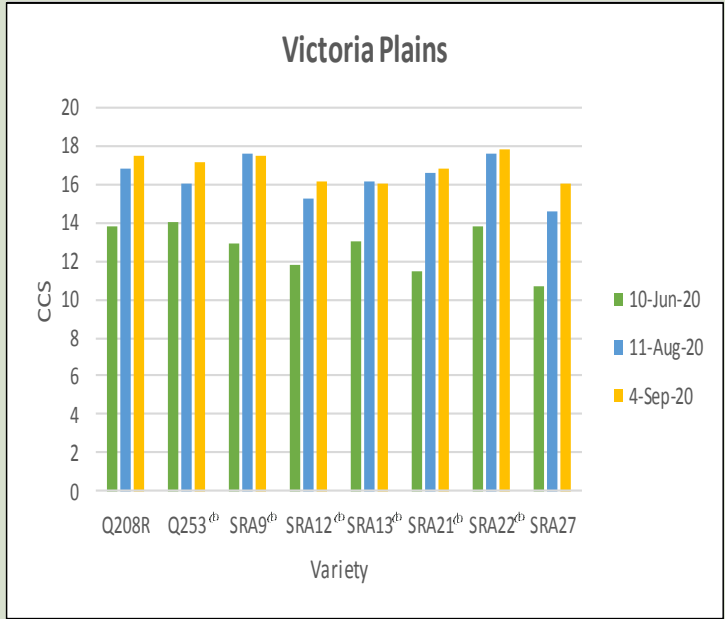


# Observation Plots Maturity Testing

Four MAPS observation plots were sampled with the SRA cane maturity testing trailer throughout the 2020 harvest season. The trailer is a big time-saver in the field and by regularly measuring the maturity of the new varieties in the different plots allows us to determine which varieties can be harvested early, mid or late. The Victoria Plains plot and the Sandy Creek plot were sampled on three different dates, however the Farleigh plot and the North Eton plot were only sampled twice due to the fact that both plots had been harvested by the last sampling date.

The results from all plots indicate that Q208R, Q253 and SRA22 are the varieties that should be targeted at the start of the harvest, while SRA9 and SRA21 should be harvested from mid to late. The more data collected from these plots helps build a better maturity profile of the new varieties in the observation plots.

SRA26 and SRA27 are two northern varieties that are not released in Mackay but are being trialed and sampled in the observation plots. SRA27 is waiting for the final red rot rating before a decision can be made for a possible 2021 release. SRA26 will be monitored in SRA trials and MAPS observation plots with yield data collected to determine a possible release date.



# Fallow blocks in 2020/2021

In December 2019, the Qld State Government implemented new regulations covering sugarcane cultivation in the GBR catchment. One of the regulations relates to sugarcane blocks that are being fallowed after harvest; ***“all fallow blocks on the agricultural property must have a cover crop (which may include grass) established, or sugarcane trash in place, that maintains adequate surface cover”***. The government definition of fallow is an area of land that is typically used to grow sugarcane and is left with a cover crop for a period of at least 6 months.

Points to consider –

- Most fallow blocks would be out of sugarcane for at least 6 months (Dec -May). However, in some years, early plant cane would be established in April/May.
- The regulations state that if no cover crop is planted, sugarcane trash must be in place to maintain adequate surface cover. How much trash cover? A disc offsetting to remove the cane stool will still leave some cane trash on the surface as cover.
- A “grassy” cover crop is not a best management practice in the fallow. This is a good opportunity to plant a legume crop and control those difficult grass weeds with the use of different herbicides. At the very least, this is a good time to reduce the weed seed bank with the use of glyphosate.
- If you plan to plant a legume crop (soya, cowpea, lablab, mixed species), you are allowed to work your ground in order to get a reasonable soil tilth for your seed drill to operate in or to cover your broadcasted seed with harrows. Remember, legumes do not like “wet feet”, so planting into some sort of bed/mound is preferable.
- Take your soil samples now, not just before planting your next sugarcane crop. It gives you time to apply lime if you need to correct pH issues. As lime is slow acting, applying it early will give it time to neutralize the soil, increasing the availability of nutrients for the following crop. It will also help with the nodulation process if planting a legume crop.



# Reef Program Update

The Great Barrier Reef Foundation water quality program is underway and available for cane growers in the Mackay region. Funding provided by the Australian government is assisting growers to better understand the impact their farming practices have on the environment, combined with financial grants.

The program includes four areas of support for a grower:

1. It includes funding for an agronomist working with the grower to look at soil tests, general farming practices and prepare nutrient management plans.
2. Access to data management program- Agtrix Farming support and workshops.
3. A \$2 000 grant that assists growers with improving their nutrient program, specifically upgrades to nutrient application equipment and options for additional soil testing.
4. There is the potential to apply for a major grant, which pays for a proportion of a capital expenditure project that demonstrates practice change in nutrient or herbicide management.



Currently MAPS are working with growers in the district, helping to improve their specific farming practices for productivity and environmental benefits. The program is still open for new entrants for growers who meet GBRF eligibility criteria.

**For more information interested growers contact:**

Andy Humphreys  
0407 334 141  
ahumphreys@maps.org.au



**Great Barrier  
Reef Foundation**

## Audra Allan Farewell

After two and a half years at MAPS as the Smartcane BMP Officer Audra Allan has moved on and has accepted a new role with Nutrien Ag Solutions.

During her time at MAPS Audra worked tirelessly in the BMP role and supported countless growers to accreditation, fine tuning their nutrient requirements and weed management along the way. We will miss her and wish her the best of luck in her new career.

Indiana Zarb who has worked alongside Audra for the last 18 months will continue to service the Mackay Sugar growers in their BMP endeavours. For all your BMP requirements, Indiana can be contacted on 0439 557 839.





## The Agtrix Farming recording

**program** is in its second year of release and has seen 20% of growers around the Mackay district take the challenge of adopting the new recording software and technology into their everyday farm routines.

The software enables growers to record chemical and nutrient applications to their own farm blocks and paddocks in a variety of different ways. It can be done in the field using a tablet, at home in front of the tv, sitting in an office shed on a pc or even on a mobile phone while topping up the herbicide tank.

The versatility of the program and ease of use once the user becomes familiar with it is what is appealing to growers who are looking to move away from piles and piles of paperwork and books.

One such grower that has seen the benefits of the program is Albert De Boni of Deveraux Creek who has been farming for over 38 years now.



While Albert like many growers would rather be fishing than recording their nutrient and chemical activities, he understands that putting our heads in the sand and hoping legislation goes away is not a realistic option.

So he has decided to implement Agtrix farming into his daily routine in a way that best suits his way of farming and lifestyle. That is by entering the day's events on his touch pad in his office

shed while having a cold refreshing beer.

Albert said he likes that the records can be stored conveniently on a portable device with no mass of paperwork to sift through or get lost.

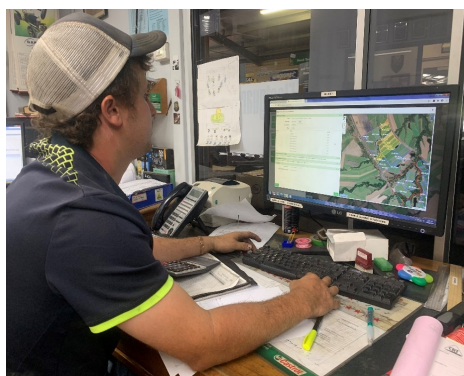
Albert admitted like with anything new there was a bit of learning curve at the start but he found by watching the tutorial videos on the MAPS website and by playing around with it enough times that it has become second nature to him and hasn't looked back.

"Even for someone like myself who isn't very computer savvy I would recommend other growers not be scared to have a go." said Albert.

MAPS staff also use the program to update plant and fallow areas each season and are there to offer one-on-one support when first logging in and learning how the program works.

Other growers that haven't been scared to give Agtrix Farming a crack are Adrian and Brendan Zarb of Mt Ossa. Brendan Zarb has been using both the web and mobile versions to record their farming practices for the past year and has seen the time saving benefits that it has to offer.

One feature that appeals to Brendan and Adrian is being able to create their own applicators (boom spray equipment/stool splitter), chemical brews and custom fertilizer blends in the system that remain there for later



applications. "This saves us a lot of time in not having to repeat the same information over and over again like we had to do on our paper records."

Another useful function of the program is its ability to auto calculate how much N P K and S has been applied in kg/ha in the chosen fertiliser blend and rate of application. Brendan says "this helps keep us in check when making sure we are meeting our soil test recommendations and crop needs."



Adrian Zarb commented that "The end goal for us to store our records in a secure place where it can't be lost and if in the event we ever get audited we can print out our reports and show the government we are doing the right things."

MAPS encourage all farmers of varying levels of computer skills not be scared to try the Agtrix recording program for themselves to see if it suits them. It is free and will continue to receive developmental and technical support from our staff.

# SRA Water Quality Project

Installation works have commenced of paddock scale, water quality samplers as part of SRA's *Mackay-Whitsunday Cane to Creek* project. The samplers will collect run-off water (from the paddock) to be measured for nutrients and pesticides.

Why do this work? SRA and growers will collect information and data to add to our understanding of farming practices, production and water quality. We need to continually build our knowledge regarding how we should farm to be profitable (production) and sustainable (environment).

For the trials in the paddocks, the run-off from several inter rows are directed into flumes where flow rate is recorded, and water samples collected at pre-determined intervals. Pressure transducers in the flumes recognize when run-off is occurring and trigger the samplers to collect samples. To date just the flumes have been installed as the water samplers are in transit from the US.

Flumes were recently installed at the demonstration sites in the Pioneer Main Channel and Rocky Dam Creek sub-catchments. Flumes will also be installed at the demonstration site in the Alligator Creek sub-catchment soon.

The Pioneer Main Channel sub catchment trial site is located on Andre Camilleri's Balnagowan farm. The trial involves three treatments:

- Surface applied Biodunder and sub surface applied granular fertilizer.
- Residual herbicide comparison – imazapic (Spark) and isoxaflutole (Palmero).
- Two different application depths for liquid imidacloprid.

The Alligator Creek sub catchment trial site is located on Mal Langdon's Homebush Road farm. The trial involves two treatments:

- Residual herbicide comparisons – imazapic (Spark), flumioxazin (Valor 500 WG) and imazapic/hexazinone (Bobcat i-MAXX).
- Two different application depths for liquid imidacloprid.

SRA will be holding information sessions at the Homebush Road and Balnagowan sites in mid-December. Further information on dates times and locations will be out soon. These sessions will allow for questions and a view of the flumes.

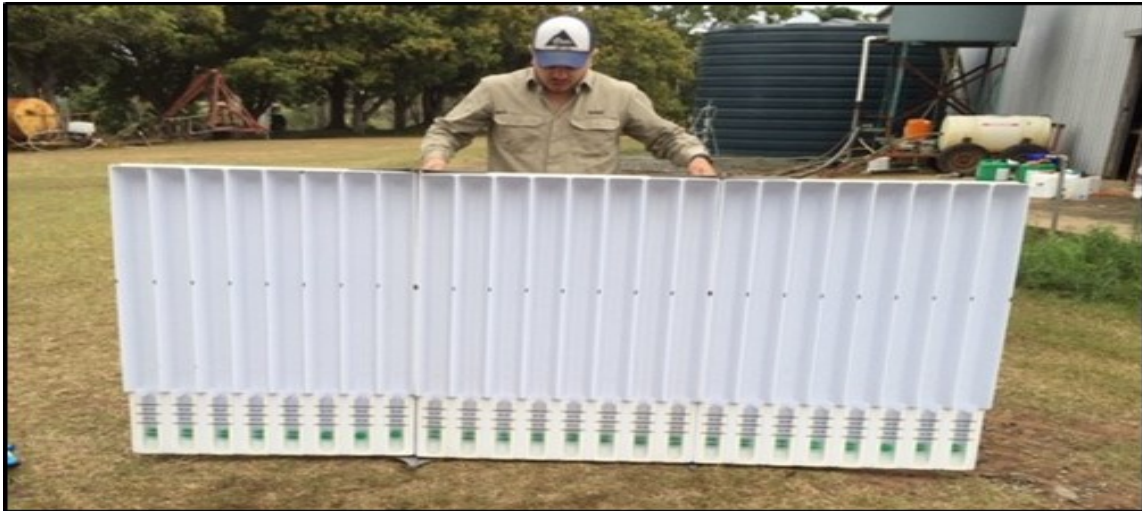
The *Mackay-Whitsunday Cane to Creek* project is funded by the partnership between the Australian Government's Reef Trust and the Great Barrier Reef Foundation (GBRF), with support from SRA.



Image: SRA staff Molly O'Dea and Matt Schembri installing one of the six flumes at the Balnagowan demonstration site.



## AAMS-SALVARANI'S horizontal patternator: From Belgium to Mackay!



*Dan Gonzalez during a demonstration at Marian*

This new piece of equipment from the Coastal Farming Systems team (Agri-Science, DAF) is mainly used to measure the liquid distribution under a spray boom, supplying the most effective and economic solution for its verification and calibration. It has recently been demonstrated to a number of growers around the region and Daniel Gonzalez is in the search for more interested growers! Daniel will be at the coming MAPS field day next year doing a demonstration. So, make sure you come, have a look and, if interested, put down your name to get your spray rig tested!

### **Is Fall Armyworm (FAW) a threat to our Alternative crops?**

“It certainly is, but only working together we can put up a good fight and do not let it scare us”.



*Field walk held at Marian, Mackay with growers and industry reps.*

Since FAW arrived in the district last April, Daniel has been out there learning with and supporting growers to find a way to sustainably manage FAW, without negatively compromising our on-farm Integrated Pest Management (IPM) approaches.

From his learnings, Daniel has been encouraging growers to:

1. **Regularly and more importantly, RANDOMLY monitor their crops**, emphasizing that “if they look for damage, all they will find is damage”. Therefore, doing a random scout is key as to be able to have a much clearer and real understanding of what is truly happening in the paddock.
2. **Keep records of their scouts**. By doing so, larvae numbers and growth can be tracked, and better decisions made. For example, Daniel has explained to growers that first and second instars become cannibalistic (before they “balloon” into other plants) to reduce competition for food sources. “That is something we need to take advantage of and if conditions allow (e.g. weather) we need to let them have their own fight”.
3. **Adhere to the rule of thumb threshold of 20% of plants inspected with 2 or more larvae and 70% of plants inspected with 1 larva each**, before spraying. Again, if conditions such as weather allow.
4. **Keep an eye out for beneficials** (parasites and predators of pests) when scouting their crops. There are not only “bad guys” (pests) out there. Look out for spiders, predatory bugs, ladybirds, parasitic wasps, parasitic flies, cockroaches, amongst others. They do a lot of hard work “behind the scenes”
5. **Pay particular attention at the areas where most larvae are feeding on or in the plant**. That way they can decide whether they need a contact pesticide or whether they need a product that has more residual activity and/or translaminar movement to reach larvae feeding in sheltered locations, e.g. inside a cob husk.
6. Also **be aware that some insecticides have a greater impact on beneficials**.
7. **Stay in touch!** Don’t think that your farm will be quarantined. Speak out and seek assistance. That way we all learn and keep building invaluable knowledge that can be put to the best use possible within our varied agricultural industries and passed on to other states where FAW has just arrived or will arrive.

**Acknowledgements:** Special thanks to Wayne Vickers, Chook Deguara, Joe and Steve Muscat, Zac Woolston, Mick Vella, and Sam Deguara for allowing very damage-intensive scouting and other testing activities to take place at their farms for the benefit of us all.

**For more information about the Patternator or FAW, please do not hesitate to contact**

Daniel Gonzalez on 0459 875 911.

Department of Agriculture and Fisheries 2018

**As the year draws to a close, on behalf of staff and the Board, MAPS wishes you a  
Merry Christmas and a safe and happy New Year.  
Our office will be closed from 4pm Thursday, 24<sup>th</sup> December  
and will re-open Monday 4<sup>th</sup> January.**