



New Staff - Devraj Chalise

As a precision planning consultant, I am now working with MAPS in the GBRF funded Nutrient Management Program. Originally from the Nepal Himalayas, I came to Australia back in 2016 to pursue a PhD in agriculture. I have been in the Mackay region for almost two years working with the sugarcane growers and graziers. My expertise broadly spans sustainable agriculture; key areas being soil science, agronomy, and GIS/remote sensing.

The GBRF/MAPS' water quality project provides tailored agronomic advice on nutrient management to growers in the Mackay region. The project aims to work with 80 growers over four years to refine and improve their nutrient programs in line with the Six Easy Steps and within their N & P budgets. In turn, this can improve water quality by reducing Dissolved Inorganic Nitrogen loads reaching the Great Barrier Reef lagoon. Growers are eligible for a \$2000 incentive towards modifications or improvements to their fertiliser applicators.

Feel free to get in touch:

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A HEALTHY CROP Starts with A Clean Crop

It is that time of year again and the topic of Ratoon Stunting Disease (RSD) comes up and needs to be discussed. It is one of those discussions that ALL growers need to have with their Productivity Officer, so that we can keep the disease in check.



You could be losing anywhere up to 60% yield, depending on the susceptibility of the variety and the weather conditions. Yield losses are higher when the cane is suffering moisture stress and blocks may have to be ploughed out two years earlier.

RSD restricts the plants' ability to use water and grow. It is spread by using either infected plants, harvesters,

planters, or any other farm gear that contacts the infected sugar cane juice or soil. Plough out replant and volunteer stools can also transmit the disease through to the next crop cycle. Using a cane free fallow/break crop is the only way to get rid of RSD. No variety is truly resistant to this disease, but certain steps can be taken on farm to maintain good productivity and prevent the spread of the disease between blocks and farms.

In addition to maintaining a cane-free fallow, the number one tip to maintaining a clean and disease-free farm is to follow the three R's:

- Regular Clean Seed Uptake
- Regular Plant Source Inspections
- Regular Sterilisation & Hygiene

Now is not the time to take short cuts with the foundation of your plant cane and future crops. We all know planting is a very expensive exercise and a job you only want to do once. So start with the basics and get them right, follow the three R's and give yourself the best possible opportunity to establish a productive and profitable crop. Past trials have shown that varieties planted from a clean seed source can potentially have up to a 12 to 14% yield increase.

You can now collect clean seed at several locations throughout the Mackay Sugar region as seen in the table below. Please contact your Productivity Officer for opening dates of plots or any general queries.

Varieties Available for 2022							
Victoria Plains		Pioneer Valley		North Coast	Racecourse		
Andrew Dougan 0417 326 674		Ian Marais 0417 326 669		Brendan Rae 0417 326 393	Indiana Zarb 0439 557 839		
Whole Stick	Billets	Whole Stick (Tannalo)	Billets (Benholme)	Billets (Wagoora)	Billets (Homebush)		
SRA22	Q183	SRA22	Q240	SRA21	SRA22	SRA22	
SRA21	KQ228	SRA21	Q183	SRA9	KQ228	Q208R	
SRA9	Q208R	SRA9	KQ228	Q253		SRA21	
Q253	Q208	Q253	Q208R	Q240			
Q240	SP80			Q208R			



The MAPS team invest a great deal of time and effort and takes pride in making sure our clean seed plots are the best they can be for growers to maintain a clean seed program. Every year we go through the same process of cold-soaking all our cane for a minimum of 42 hours and then long-hot water treating for 3 hours at 50°C to control for RSD, chlorotic streak, and leaf scald before planting into our mother plots. The mother plot plant source is again cold soaked and hot water treated a second year before planting into approved clean seed plots. This is then made available to you as Clean Seed cane.

At each of these stages, plots are inspected for pest and disease before the 'out of hand' stage and rigorously tested for RSD before distribution. Plots are walked and are sampled every row at 20-meter intervals for qPCR analysing to ensure the plant is RSD free. If by any chance RSD is in our plots, then there is a very high chance that it will be detected.

The message of RSD and clean seed is not a new message, but one that is very important and is the simplest way to improve productivity long-term. Using old plant sources will eventually cost you dollars. For years we have been recommending that if a variety is over 2-3 years from being collected from a MAPS plot, it needs to be replaced as a clean seed source. With the new MAPS billet plots you now have a convenient option to collect clean seed on a regular basis.

Collecting a new clean plant source is step one in your clean seed program, it is now vital that any machinery/equipment that cuts or comes in contact with the cane juice, which spreads RSD, is sterilised This includes **cane knives, chain saws, whole-stick and billet planters, harvesters, strippers/blowers, tipper bins and haul-out vehicles. Dip planters and recirculating fungicide spray systems on planters can also spread bacteria.** Sterilization can be done by using Sterimax or a mix of 70% metho and 30% water.

Currently RSD is only found on 1% of Mackay Sugar farms. Recent communications with several of the northern milling

areas suggests RSD levels are much higher with 30- 40% of farms affected. RSD can spread quickly if unattended, hence regular plant source inspections, to keep the disease at bay.

Efficient RSD management is essential for maintaining and improving productivity and that is why MAPS regularly repeat the RSD/Clean Seed message and we strongly encourage growers to follow MAPS advice and utilise our resources and services in this regard.

Approved Billet Cane Availability

Before cane can be released from MAPS distribution plots, strict disease inspection protocols need to be carried out. Plots are inspected for pest and disease before the 'out of hand' stage and rigorously tested for RSD before distribution. Plots are walked and are sampled every row at 20-meter intervals for qPCR analysis to ensure that plants are RSD free. The qPCR method has replaced the ELISA method and is more reliable and sensitive in detecting RSD. If by any chance RSD is in our plots, then there is a very high chance that it will be detected.

Both varieties (SRA22 & KQ228) at the Benholme plot were recently rigorously tested with 76 samples sent for analysis by SRA using the qPCR method. All 32 samples of SRA22 returned a negative result, however 2 positive results were detected out of the 34 samples of the KQ228. The KQ228 was then resampled with 1 positive result found in a second round of testing. Although the infection levels are extremely low, MAPS very strict standards governing pest and disease control dictate that the Benholme plot cannot be opened for distribution in 2022.

The source of the positive reading remains unknown and further investigations are continuing.

Whilst the RSD finding is very unexpected considering the strict protocols followed by MAPS and the excellent cleaning and sterilisation methods carried out on the harvester and planting equipment by both MAPS staff and the plot owner, it does however demonstrate that the MAPS procedures will detect even the slightest level of RSD and the rigorous disease inspections are in place for this very reason.

Unfortunately, the Homebush plot will also not be available for billet distribution this season due to the crop being heavily lodged. As explained MAPS enforces a strict inspection protocol standard with the plots and with the cane being lodged, each row cannot be physically walked to collect samples to test for RSD. Without following the strict protocols, MAPS is not willing to open the plot as an approved distribution plot as the billet quality cannot be guaranteed because of the lodged cane.

All other approved MAPS plots have returned negative results and will be open for distribution in the upcoming weeks. For further enquiries feel free to contact, Anthony Schembri 0417 326 670.

Preparing a Nitrogen and Phosphorus (N&P) Budget

Government Reef regulations which came into effect in December last year require all growers in the Wet Tropics, Burdekin and Mackay Whitsunday catchments to have a nitrogen and phosphorous (N&P) budget. The aim is to keep nutrients on farm, so they benefit crops rather than entering surrounding waterways affecting water quality. You will need an N&P budget prepared for the 2022 season.

Growers who are fully accredited Smartcane BMP farmers are considered by the Department of the Environment and Science (DES) to be appropriate persons to prepare their own budgets (see more details below). Otherwise, growers will need to engage a third-party 'appropriate person' to do this for them.

In preparing an N&P budget, you will need to calculate the whole-farm amounts of N&P by adding up the individual block amounts that you plan to apply during 2022. This should be done by taking soil tests before you plant a new block, to ensure you are applying what is needed. Keep records of these soil tests, your subsequent fertiliser purchases and what you applied to each block. A simple way to do this is to take a photograph of the tests and receipts on your smartphone as they come in.

Under the Reef Regulations, the whole of farm N&P allocation based on your soil test recommendations must not be exceeded because of runoff and water quality concerns. However, the advantage of the N&P budget for your farming business is that with the significant cost of fertiliser you will ensure that you are not applying more than your crop needs. By having good records and comparing results year on year you will be able to adjust applications and harvest the benefits.

Who is an 'appropriate person'?

According to the Regulations, the budget must be prepared and verified by an 'appropriate person'. An appropriate person is considered one who has the professional qualifications, training, skills or years of farming experience necessary to complete a farm N&P budget.

A grower can be considered an appropriate person if they can demonstrate they have these attributes. In particular, growers accredited under the Smartcane Best Management Practice (BMP) Program, which is a recognised accreditation program under the *Environmental Protection Act 1994*, do not need to use an appropriate person to develop, update, review or verify their N&P budget. (Note: this only applies while a grower holds a current accreditation under Smartcane BMP which is independently audited every five years.)

Growers who are self-assessed or engaged in Smartcane BMP but not fully accredited will need to use a third-party appropriate person to develop and verify their first N&P budget. However, growers who then become Smartcane BMP accredited will not need to use a third-party. Unless you are a fully accredited Smartcane BMP grower, you may receive an on-farm assessment by a government officer to assess your compliance with the Reef Regulations.

For growers not on the Smartcane BMP journey, MAPS and SRA are working with the DES to establish a program of N&P budget workshops aimed at providing growers with the necessary skills to complete an N&P budget without engaging a third-party. Discussions are continuing and growers will be advised of the training program details when available.

Farm N and P Budget 2021 - Recommended									
N Budget		10665.1	Under Budget	Contact Person:		A. Farmer			
N Recommended		10634.1	-31.0	Farm Number:		1234A			
P Budget		459.4	Under Budget	Area:		123.4 ha			
P Recommended		456.8	-2.6	Date:		1/10/2021			

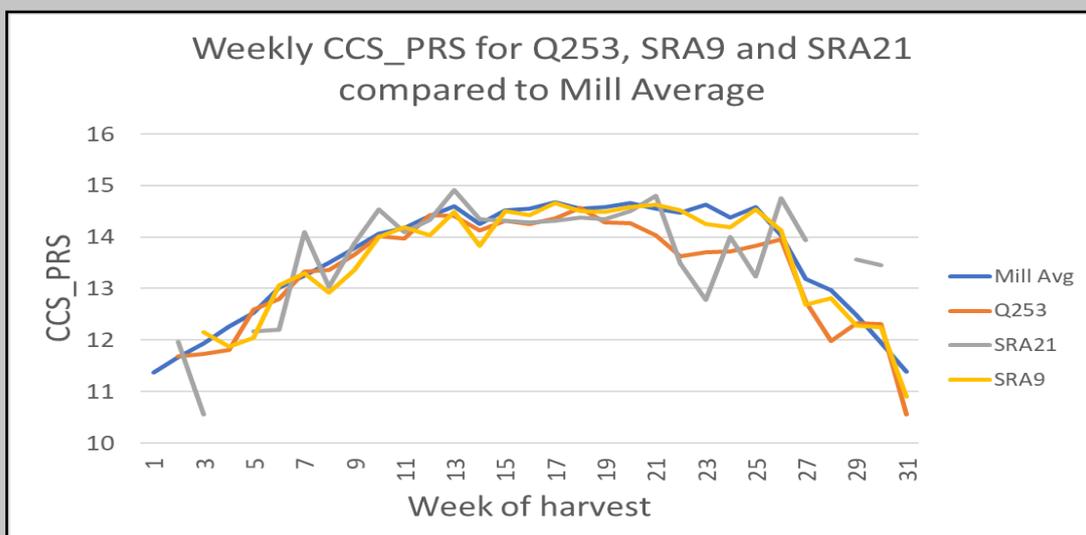
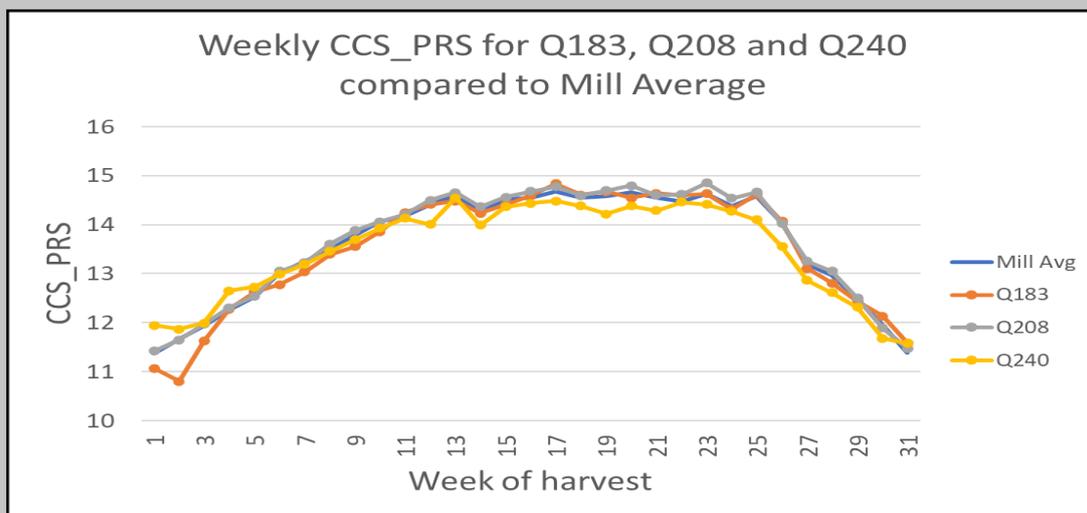
Farm Block Data		Soil Test Recommendations (kg/ha)				Product Recommendations (kg)				Nitrogen (kg)			Phosphorus (kg)										
Farm/Block	Last Season Varieties / C/ha	Area (ha)	Estimated Yield (t/ha)	Dominant Soil Type	Stage	Soil Test Sample #	N	P	K	S	Product	Rate (kg)	Total N	Total P	Total K	Total S	N Budget (6ES)	N Recommended	N Above/below Budget	P Budget (6ES)	P Recommended	P Above/below Budget	
11	1.1 Q208/1R	1.47	110	Solodic	R	ST1	160	10	100	10	ECONO LOS + P	3700.0	156.1	13.0	99.5	24.1	555.2	541.8	13.4	14.7	44.9	10.7	
12	1.2 Q240/4R	2.19	94	Solodic	R	ST3	160	10	100	10	ECONO LOS + P	3700.0	156.1	13.0	99.5	24.1	350.4	341.9	-8.5	21.9	28.4	6.5	
13	1.3 SP80/4R	4.34	94	Solodic	R	ST3	160	10	100	10	ECONO LOS + P	3700.0	156.1	13.0	99.5	24.1	694.4	677.6	-16.8	43.4	56.2	12.8	
14	1.4 FAL/1A1	4.74	0	Solodic	P	SD	140	20	80	10	DAP (Inotec)	100.0	18.0	20.0	0.0	1.6	663.6	65.3	-578.3	94.8	94.8	0.0	
15	1.5 FAL/2A1	4.74	0	Solodic	P	SD	140	20	80	10	ECONO LOS	2800.0	119.0	0.3	75.9	12.3	0.0	564.1	564.1	0.0	1.5	1.3	0.2
16	1.6 FAL/1A1	4.36	0	Solodic	P	SD	140	20	100	10	DAP (Inotec)	100.0	18.0	20.0	0.0	1.6	568.8	78.5	-488.3	87.2	87.2	0.0	
17	1.7 FAL/2A1	4.36	0	Solodic	P	SD	140	20	100	10	ECONO LOS	2800.0	119.0	0.3	75.9	12.3	0.0	518.8	518.8	0.0	1.2	1.2	0.0
18	1.8 Q240/3R	7.12	97	Solodic	R	ST2	150	20	100	10	ECONO LOS + P	3700.0	156.1	13.0	99.5	24.1	1068.0	1111.7	-53.7	142.4	92.2	-50.2	
19	1.9 Q183/3R	7.12	103	Solodic	R	ST1	160	0	100	0	ECONO LOS	3700.0	157.3	0.4	100.3	16.3	371.2	371.6	-0.4	0.0	0.7	0.7	
20	2.0 Q208/5R	3.92	91	Solodic	R	ST1	160	0	100	0	ECONO LOS	3700.0	157.3	0.4	100.3	16.3	627.2	616.4	-10.8	0.0	1.5	1.5	
21	2.1 SRA9/PL	3.33	113	Solodic	R	ST1	150	0	100	5	ECONO LOS	3700.0	157.3	0.4	100.3	16.3	499.5	523.6	-24.1	0.0	1.2	1.2	
22	2.2 Q208/1P	3.56	113	Solodic	R	ST1	150	0	100	5	ECONO LOS	3700.0	157.3	0.4	100.3	16.3	534.0	559.8	-25.8	0.0	1.3	1.3	
23	2.3 Q240/2R	0.63	103	Solodic	R	ST1	160	0	100	0	ECONO LOS	3700.0	157.3	0.4	100.3	16.3	100.8	99.1	-1.7	0.0	0.2	0.2	
24	2.4 Q240/2R	8.03	103	Solodic	R	ST1	160	0	100	0	ECONO LOS	3700.0	157.3	0.4	100.3	16.3	1284.8	1262.7	-22.1	0.0	3.0	3.0	
25	2.5 Q240/3R	4.16	97	Solodic	R	ST1	160	0	100	0	ECONO LOS	3700.0	157.3	0.4	100.3	16.3	665.6	654.2	-11.4	0.0	1.5	1.5	
26	2.6 Q240/6R	1.43	85	Solodic	R	ST1	160	0	100	0	ECONO LOS	3700.0	157.3	0.4	100.3	16.3	228.8	224.9	-3.9	0.0	0.5	0.5	
27	2.7 Q208/6R	2.47	85	Solodic	R	ST1	160	0	100	0	ECONO LOS	3700.0	157.3	0.4	100.3	16.3	395.2	388.4	-6.8	0.0	0.9	0.9	
28	2.8 Q183/3R	5.73	109	Solodic	R	ST1	160	0	100	0	ECONO LOS	3700.0	157.3	0.4	100.3	16.3	916.8	901.0	-15.8	0.0	2.1	2.1	
29	2.9 Q240/4R	4.38	94	Solodic	R	ST1	160	0	100	0	ECONO LOS	3700.0	157.3	0.4	100.3	16.3	700.8	688.8	-12.0	0.0	1.6	1.6	
30	3.0 FAL/1A1	3.5	0	Solodic	P	SD	140	10	80	0	Gl Planter 5	250.0	14.5	10.0	30.3	44.5	490.0	170.8	-319.2	35.0	35.0	0.0	
31	3.1 FAL/2A1	3.5	0	Solodic	P	SD	140	10	80	0	ECONO LOS	2400.0	102.0	0.2	65.0	10.6	0.0	357.0	357.0	0.0	0.8	0.8	0.0
TOTAL																		10665.1	10634.1	-31.0	459.4	456.8	-2.6

2021 Weekly Mackay Sugar CCS Data

New varieties are important to maintain the productivity and profitability of the industry. Just as important is the need to provide growers with the best information to get the most out of the new varieties, including the best time to harvest to achieve the best CCS. Over the last five years with the introduction of new varieties within the central region, a common question asked is how they compare to the current commercial varieties with regards to CCS.

The graphs below were generated using data provided by Mackay Sugar. The first graph is a plot of CCS throughout the 2021 season for the current major commercial varieties Q183, Q208^A & Q240^A, compared to the Mill average. The second graph is the same but using the newer commercial varieties Q253^A, SRA9^A & SRA21^A. It's important to note that these graphs were generated using plant and first ratoon data across all districts, and for the newer varieties is from limited tonnages.

The CCS curve is very similar for the two groups of varieties for the 2021 season. The early indication is that Q253^A performed well early to mid season, however dropped away significantly towards the end of the crush. Interestingly, the SRA9^A CCS curve is very similar to the mill average curve throughout the whole season. The unevenness of the SRA21^A curve is a reflection of the very low tonnages processed compared to the other varieties.



2021

CENTRAL DISTRICT MATURITY TESTING

Dylan Wedel – District Manager, Central Region (Te Kowai Office)



OBSERVATION PLOT MATURITY TESTING RESULTS

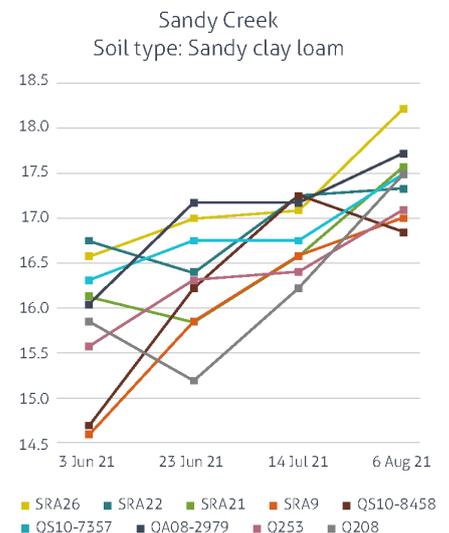
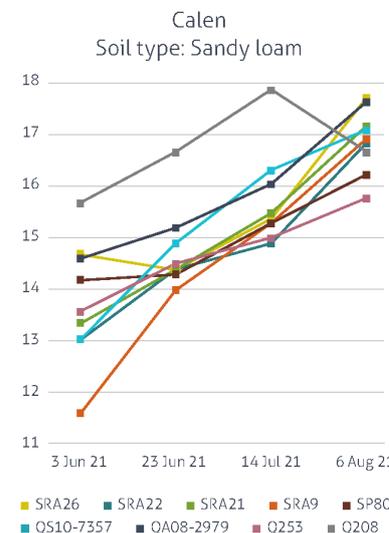
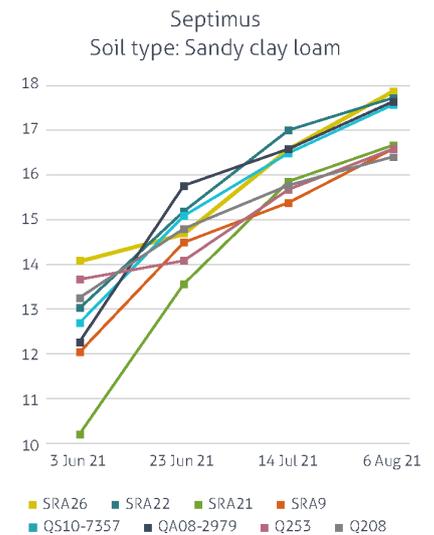
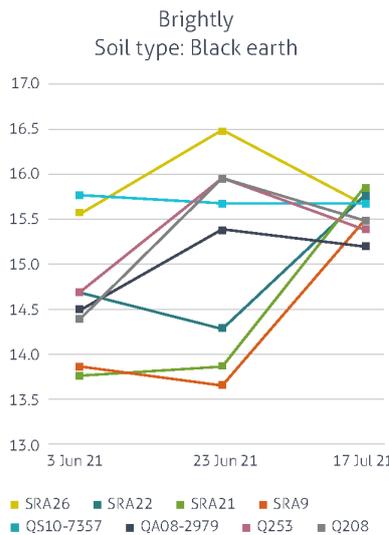
The maturity testing at the Mackay Area Productivity Services (MAPS) observation plots is now complete for the season. In collaboration with MAPS, and using the SRA mobile maturity trailer, sampling commenced on 3 June 2021 and were sampled every 3 weeks at each plot. The last samples for the season were taken on 6 August 2021.

The purpose of the sampling is to estimate Commercial cane sugar (CCS) of pre-release and newly released varieties to see how the sugar content is progressing, particularly earlier in the season. It provides valuable information to growers as to which variety is more likely to have higher sugar content and when is the optimum time of the season to harvest that variety.

CSS sampling was conducted in four areas in the Central region; Brightly, Septimus, Calen and Sandy Creek. This allowed us to capture how each variety is performing and testing on various soil types, locations and age. More information collected has allowed us to build a more detailed profile on each variety.

MAPS had introduced new seedlings (QA08-2979 and QS10-7357) to the observation plots to monitor. This allows us to compare up and coming varieties to existing ones.

For more information regarding maturity testing or results, please contact:
Dylan Wedel (District Manager - Central) on 0490 029 387 or
Stephanie Duncan (District Delivery Officer - Central) on 0459 863 298.



Going Mobile to Record Nutrients and Chemicals applied on farm

Keeping records of chemical and nutrient applications has become a requirement of farming and there are many ways to do it. From notepads to farm maps and now with the latest Agtrix mobile app you can record your chemical and nutrient applications from the palm of your hand.

MAPS have been working with software developers at Agtrix to develop a program that allows growers and MAPS staff to record electronically to a farm mapping system. This has certain advantages and benefits over traditional pen on paper.

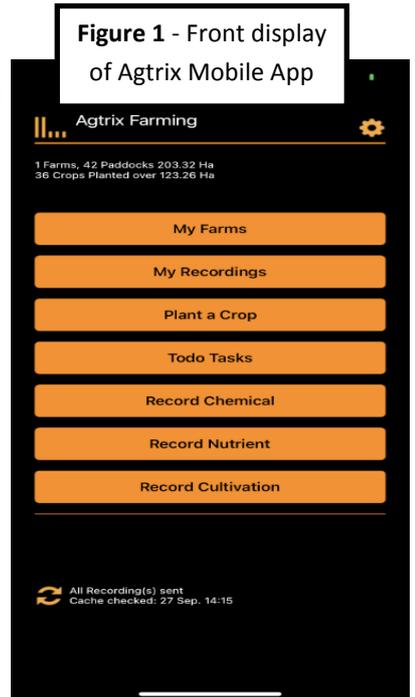
- ✓ Electronic records cannot be lost when saved in a cloud storage database.
- ✓ Growers farm records can be protected by a password encrypted account.
- ✓ The program is designed around the legislative requirements ensuring that all the necessary details are recorded for chemical and nutrient applications.
- ✓ Record retrieval is quicker in computer programs with the option to filter by paddocks and print reports.
- ✓ Records can be edited if mistakes are ever made.

Figure 1 shows the front display of the mobile phone app with big orange buttons for each type of recording event.

The advantages of going mobile are numerous. Most importantly it allows growers to record from their sheds or tractors at the time or application instead of leaving it for the end of the day or even the end of the working week when it's not so fresh in their memory.

Also, if your favourite chemical brews, spray equipment and applicators are created in the computer version of Agtrix, then these will carry over into the mobile app each time you login. This saves time drastically by having all your common brews and equipment (like boom sprays and stool splitters) readily available to select in the phone app.

When recording any application the mobile app allows you to select one or more paddocks from your own farm map as shown in the pictures below. Once your blocks are highlighted by tapping on them with your finger you choose the nutrient blend or chemical brew, the equipment used, the application rate and method and then save that immediately. This record will then be immediately visible in the computer version of Agtrix where your records are stored and can be edited or printed as reports when you need them.



The mobile phone app makes farm recording as simple and as quick as possible and is completely free to download today. If you want to give the Agtrix mobile app a try please contact your local MAPS advisor who can help you to create your free account and give you a run through on how it all works.

Step 1 - Highlight blocks by tapping on map

Step 2 - Choose Nutrient Blend

Step 3 - Enter Application Rate

Step 4 - Confirm and Press Record

HAVE YOU VISITED THE NEW AND IMPROVED MAPS WEBSITE YET?

www.maps.org.au



Welcome to MAPS

MAPS is the main provider of sugarcane advice and extension for Mackay Sugar farmers. We work on most issues including: pests, diseases, weeds, varieties, nutrition, irrigation and harvesting.

Our mission is to enhance the profitability and sustainability of the sugar industry through innovative productivity programs and plant protection services.

Notice board that displays the current industry hot topics

NOTICE BOARD

Managing the end of the crush

Latest on Product Restrictions & Record Keeping

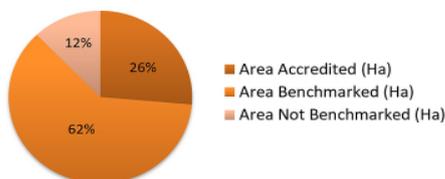
- [Product Restrictions](#)
- [Record Keeping Requirements](#)
- [What is a Water Course?](#)

SRA/MAPS Maturity Testing Results 2021

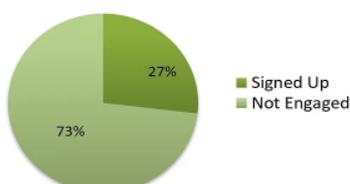
Quick Links to Variety guides, Agtrix login page, the local MAPS weather stations etc..

- [AGTRIX FARMING](#)
- [WEATHER STATIONS](#)
- [NEWSLETTER - DEC](#)
- [2021/22 VARIETY GUIDE](#)
- [MAPS LEGUME PLANTER](#)
- [SMARTCANE BMP](#)

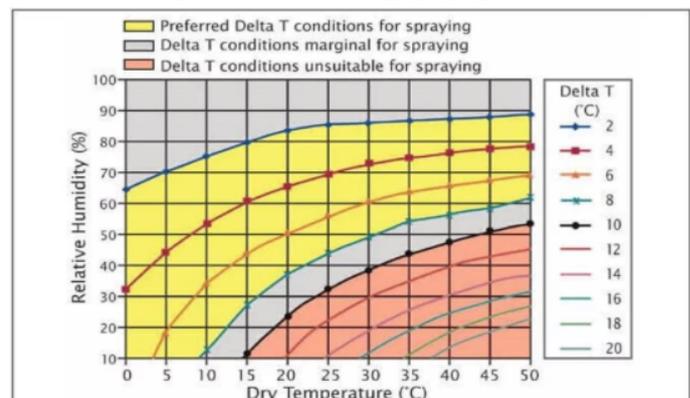
BMP Uptake in the Mackay Region



Adoption of Agtrix in Mackay Region



Using Delta T for Assessing Spraying Conditions



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 five 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 a nutrient management plan and a N&P budget.
2. Access to data management program- Agtrix Farming support and workshops.
3. Access to MAPS zero-tillage soybean planter.
4. A \$2 000 grant that assists growers with improving their nutrient efficiency, specifically upgrades to nutrient application equipment and options for additional soil testing.
5. There is the potential to apply for a major grant, which pays for up to 50% 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 the 2022 growing season.

For more information interested growers contact:

- **Andy Humphreys** - 0407 334 141
- **Dev Chalise** - 0417 326 667





Farm Development Incentive



Long-Term Sustainability

The Farm Development Incentive is aimed at securing a long-term profitable and sustainable future for Mackay Sugar mills and Mackay's sugar cane growers.

Increased Productivity

The Farm Development Incentive will support increased productivity by providing an extra \$5/t for each additional tonne of cane produced over five-years.

The Farm Development Incentive is available to...



Reactivate

Growers who reactivate land that's been out of cane productivity for least 3 years.



Enhance

Growers who acquire an existing farm and increase it's current productivity.



Start

New growers who are looking to make a start in the sugar cane industry.



07 4953 8366



caneproductivity@mkysugar.com.au

Frequently Asked Questions

Who is eligible for the Mackay Sugar Farm Development Incentive?

To be eligible for the Farm Development Incentive, growers must commit to supplying cane for at least five years and meet the following criteria;

- Be BMP accredited (or become BMP accredited within two years)
- Be purchasing, leasing or reactivating a minimum of 15ha within the Mackay Sugar Rail Network and is;
 - New ground to be brought into cane production, or;
 - Previous cane land that has been out of production for at least 3 years, or;
 - Existing farm/s currently performing below the productivity zone average t/ha and increase the farms' productivity.

How do I apply for a Farm Development Incentive?

Growers must get in contact with Mackay Sugar's Cane Productivity team by calling on 07 4953 8366 within six months of purchasing or leasing an existing farm or, in the case of new or reactivated ground, prior to when planting begins.

How are applications assessed?

The assessment process involves Mackay Sugar conducting a physical inspection of the farm, reviewing five-year averages, and calculating basic projections for the contract. If necessary, a farm map will be created including GPS measurements. If the application is accepted, growers will be required to sign a five-year contract to supply cane to Mackay Sugar in accordance with the Farm Development Incentive's terms and conditions.

Your feedback is important to us. Please help us secure a sustainable future for our industry by working together to increase the productivity and production of Mackay's sugar cane farms.





Plant Loan Program



High yields and a sustainable cane area are one of the key drivers for a successful sugar industry in Mackay.

To improve yields and help increase the volume of land under cane, Mackay Sugar offers loans to growers for the purpose of planting cane in a defined area, provided eligibility criteria is met.

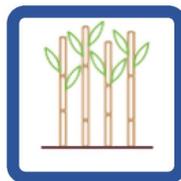
- ✓ Up to \$30,000 per year (\$1500/ha)
- ✓ 0% interest rate
- ✓ Equally deducted repayments from cane pay over three crop seasons.

Mackay Sugar's Plant Loan Program is available to growers who intend to:



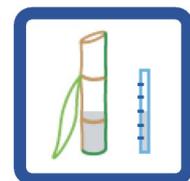
Start

Plant on new land that has not been previously used for cane production.



Reactivate

Plant on land that has been out of production for at least two years.



Enhance

Plant on land yielding below three-year productivity zone average and has not been part of applicant's landholding. Where the land is under new management, the land currently farmed by that manager must not be below zone average.



Cane Productivity - 07 4953 8366



caneproductivity@mkysugar.com.au



Cane Loss Reduction Incentive



The Cane Loss Reduction Incentive is available to Harvest Groups who harvest cane for Mackay Sugar growers.

The incentive aims to secure a long-term **profitable and sustainable future** for Mackay Sugar mills and Mackay's sugar cane growers.

- ✓ Purchase a Cane Loss Monitor at a subsidised price.
- ✓ Share your data with Mackay Sugar to receive \$0.03/t for five years.



Who is eligible?

Harvesters who:

- Harvest cane for Mackay Sugar growers.
- Use harvesters that are equipped with a SCHLOT Harvest Loss monitor.
- Transfer harvesting data to Mackay Sugar.



How do I apply?

Contact Mackay Sugar's Cane Productivity team and sign a five-year contract to secure the incentive.



How does it work?

Loss Monitor data is transferred to a portal that Mackay Sugar can access. The harvest group is responsible for the data transfer, including the proper set up and installation of the Loss Monitor.

Mackay Sugar will publish data anonymously to build industry awareness of understanding of factors impacting harvest losses and quality.



Cane Productivity - 07 4953 8549



caneproductivity@mkysugar.com.au



mackay area productivity services



Variety Information

Disease, Harvest & Management Ratings									
Variety	First Year Supplied from MAPS	Parentage	Pachymetra	Red Rot	Smut	Germination	Sugar		
							Early	Mid	Late
SRA22	2020	QS91-7179 x CP72-2086	Resist	Inter	Resist	Good	Ave	Good	Ave
SRA21	2019	QC82-668 x Q205	Inter	Inter	Inter-Res	Good	Ave	Good	Ave
SRA13	2018	QC88-284 x QC90-289	Resist	Inter-Res	Inter	Good	Ave	Ave	Poor
SRA12	2018	Q233 x QC90-289	Resist	Inter	Resist	Slow	Poor	Ave	Ave
SRA9	2017	QN81-289 x Q166	Resist	Inter-Res	Inter-Sus	Good	Poor	Ave	Good
Q253	2017	QN80-3425 x Q209	Resist	Inter	Resist	Very Good	Good	Good	Ave
Q252	2013	Q208 x Q96	Inter	Resist	Inter	Good	Good	Good	Ave
Q250	2017	QN79-183 x QN89-1043	Inter	Inter	Resist	Good	Good	Good	Ave
Q242	2012	Q170 x Q150	Resist	Inter-Res	Inter	Good	Ave	Ave	Ave
Q240	2012	QN81-289 x SP78-3137	Inter	Resist	Resist	Good	Good	Good	Ave
Q238	2009	Q138 x Q155	Resist	Inter-Res	Resist	Good	Ave	Good	Good
Q232	2009	QN80-3425 x QS72-732	Inter	Inter-Res	Inter-Res	Ave	Ave	Ave	Ave
KQ228	2007	QN80-3425 x CP74-2005	Inter	Resist	Inter	Good	Good	Good	Poor
Q208R	2016		Inter	Resist	Inter-Res	Ave	Good	Good	Good
Q208	2005	Q135 x QN61-1232	Inter	Resist	Inter-Res	Ave	Good	Good	Good
Q190	2000	Q107 x H56-752	Resist	Resist	Resist	Good	Poor	Ave	Ave
Q183	2007	Q124 x H56-752	Resist	Inter	Resist	Good	Ave	Good	Good
Q138	1991	QN58-829 x QN66-2008	Resist	Inter-Sus	Suscept	Ave	Poor	Ave	Ave
Q135	1986	NCo310 x QN54-7096	Suscept	Suscept	Inter	Ave	Poor	Ave	Good
SP80	2015	SP71-1088 x H57-5028	Resist	Resist	Inter-Sus	Ave	Ave	Ave	Ave

The information in this table is reproduced from the SRA Variety Guide with permission from SRA.

Ratoon Stunting Disease

Please note RSD ratings have not been included. No sugar cane varieties are resistant to RSD. All varieties can become infected and suffer yield loss. Some varieties such as KQ228, Q242 and Q253 are more susceptible to RSD. The following measures will help reduce the risk of introducing RSD to your farm and help contain the spread of RSD:

- Source clean seed from a MAPS approved clean seed plot
- Refresh your source for all varieties every 2-3 years
- Have MAPS staff inspect all cane plant sources you intend to use
- Plant into volunteer-free fallow
- Sterilize planting and harvesting equipment that comes into contact with cane juice

MAPS Field Observations

Variety	Release date	General Comments		Soil Preference
SRA22	2020	- Compact stool size - Good canopy, closes in well - Slow grower - Early to mid-season maturing	- Avoid late harvest - Responds well to irrigation - Heavy trash blanket	Better
SRA21	2019	- Upright cane - Reliable germination (can be slow) - Ratoons reliably	- Can tolerate waterlogged - Prone to suckering	Better
SRA13	2018	- Prone to lodging - Average sugar	- Poor yields in ratoons - Prone to smut	Average to better
SRA12	2018	- Slow to germinate & ratoon - Compact stool	- Prone to smut	Heavier
SRA9	2017	- Slow but reliable ratooner, fills in well - Good tonnes sugar / hectare - Wet feet and thick trash cover reduce yields (consider removing trash in low, heavy country)	- Good/heavy soils may produce lower CCS (consider adjusting nitrogen rates) - Heavy crops can challenge harvesting - Crops yields holding up well in later ratoons - Does not show as much smut as it's rating would suggest	Wide range
Q253	2017	- Fast, reliable germination - Susceptible to brown rust - More prone to RSD than most varieties	- Good option for poorer soils - Heavy/good soils may produce lower CCS (consider adjusting nitrogen rates)	Wide range
Q252	2013	- Good early sugar	- Ratooning concerns, fades in ratoons	Better
Q250	2017	- Very little commercial data	- Heavy to good soil preferred	Heavy to good soil
Q242	2012	- Prone to smut, chlorotic streak and RSD - Prone to suckering	- Superior pachymetra resistant varieties now available	Good to average
Q240	2012	- Good germination - Early sugar, deteriorates late with suckering	- Handles some waterlogging - May tolerate soldier fly better than other varieties	Average to heavy
KQ228	2007	- Early sugar, deteriorates late with suckering - Fast germination - More prone to RSD than other varieties	- More prone to RSD than other varieties - Can tolerate heavy soil	Good to heavy
Q208R Q208	2016 2005	- Reliable allrounder, good ratoonability - Handles wet feet	- Slow in dry conditions & if plant material is mature - Good CCS	Wide range
Q183	2007	- Fast germination and ratooning	- Susceptible to Chlorotic Streak	Wide range
SP80	2015	- Brittle in windy conditions - Variable sugar	- Resilient in poor harvest conditions	All soils

The information in this table is from observations made by MAPS staff. It should be used as a guide only as varying conditions can impact variety performance.

Clean seed from the MAPS plots is cold soaked and long hot water treated (CSLHWT) the year before distribution. It is recommended growers collect clean planting material for each variety every 2-3 years. After this time the benefits of CSLHWT will be diminished. This will ensure planting material is not more than 4 years past the initial treatment date. Cane sourced elsewhere may already be outside this treatment.

Varieties Available for 2022							
Victoria Plains				Pioneer Valley		North Coast	Race-course
				Tannalo	Benholme	Wagoora	Homebush
Whole Stick		Billets		Whole Stick	Billets	Billets	Billets
SRA22	Q183	SRA22	Q240	SRA21	SRA22	SRA22	SRA22
SRA21	KQ228	SRA21	Q183	SRA9	KQ228	Q208R	SRA21
SRA9	Q208R	SRA9	KQ228	Q253			
Q253	Q208	Q253	Q208R	Q240			
Q240	SP80			Q208R			