

Approved seed – Building for Larger Distribution

Following the large uptake of clean seed in 2018, growers have maintained the good work and improved the uptake in 2019. Over 800 assignments and 900 tonnes of approved seed was collected in 2019 (Figure 1.).

The most popular varieties in 2019 were SRA9, Q208 and SRA21 (Figure 2.)

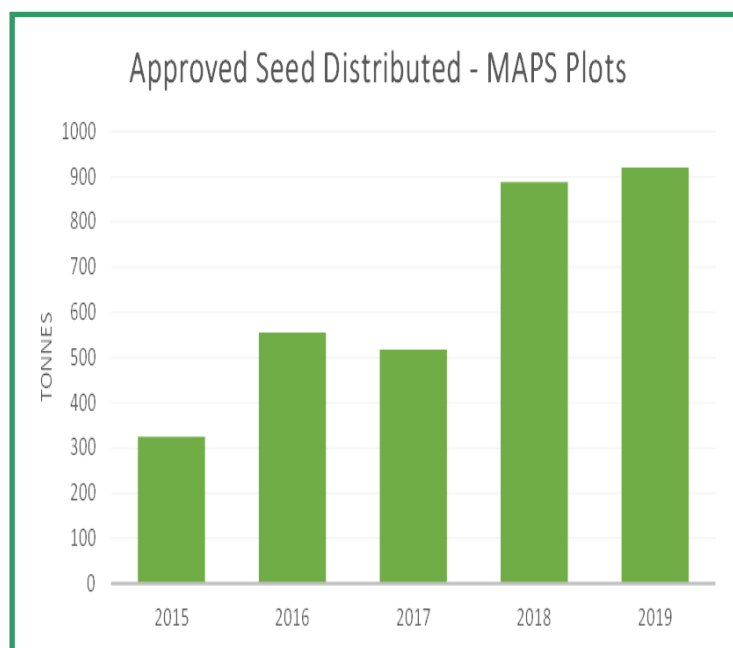


Figure 1: 2019 Clean Seed Distribution from MAPS Plots

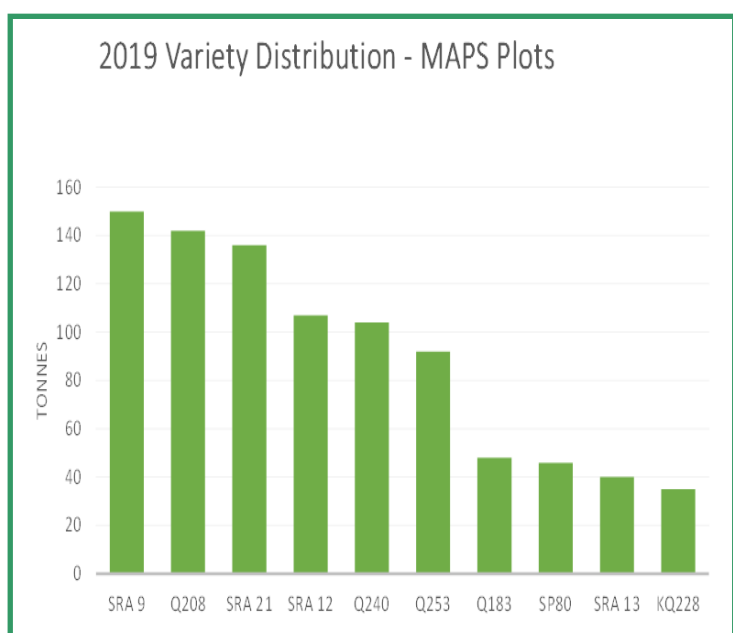


Figure 2: 2019 Variety Distribution from MAPS Plots.



A big thank you goes to Henry Barfield and Darrell McLennan for the work they did in cutting the plants for growers.

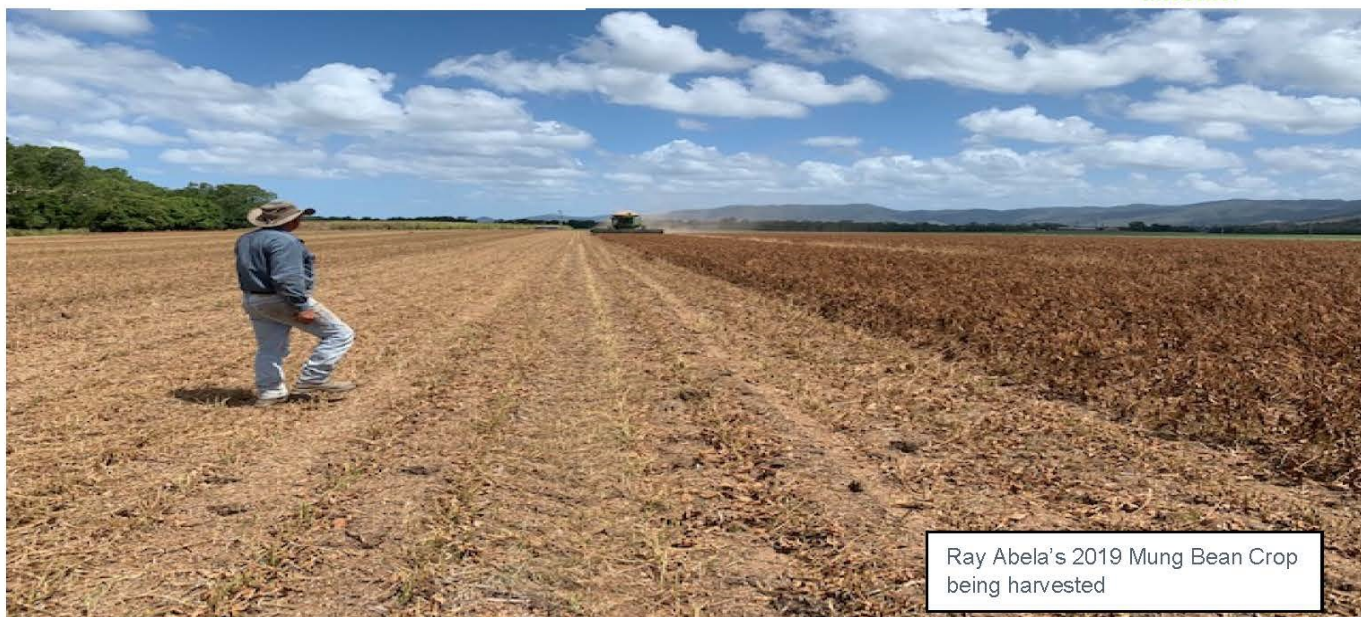
To continue the great uptake of clean seed, MAPS have established two larger clean seed plots for billet distribution next year.

The two plots are located at Mt Pelion and Gargett. Three varieties are planted on each plot and will be available for growers to collect as billets.

Contact your Productivity Officer for any further information.

THIS ISSUE

- ◇ **CLEAN SEED DISTRIBUTION**
- ◇ **BMP**
- ◇ **SOIL TESTING**
- ◇ **AGTRIX**
- ◇ **WEATHER STATIONS**
- ◇ **MACHINERY MOVEMENT**
- ◇ **RAT PERMIT**



Ray Abela's 2019 Mung Bean Crop
being harvested

“LET’S SET THE RECORD STRAIGHT”

New Reef Protection Regulations commence December 1, 2019.

As of the 1st December 2019, changes to the Reef Protection Regulations commence for sugarcane growers in the Wet Tropics, Burdekin and Mackay Whitsunday areas. However some standards remain the same; prescribed method of soil testing and calculating the rate of nitrogen and phosphorous to be applied and keeping records of soil tests, nitrogen, phosphorous, mill mud, soil conditioners and agriculture chemical applications.

The requirement of an Environmental Risk Management Plan (ERMP) for sugarcane properties greater than 70 hectares in the Wet Tropics has been removed.

What has been introduced is as followed;

1. No ground-based broadcast application of fertilisers except for mill mud/ash and phosphorous-only fertiliser incorporated into the fallow prior to planting
2. Measures must be in place to minimise soil loss and run-off
3. Fallow blocks must have some form of surface cover.

From 1st June 2020, new/expanding cropping activities including sugarcane on more than five hectares without a cropping history will require an environmental authority (Permit) and need to:

- Meet requirements about farm design to manage water quality risks
- Meet minimum practice agricultural standards.

On December 1, 2021 the requirement for a farm nitrogen and phosphorous budget will commence. For more information go to www.qld.gov.au/environment/agriculture/sustainable-farming/reef/reef-regulations/strengthening-regulations

Mackay Smartcane BMP Progress

Mackay District has 519 Businesses registered in the BMP program covering an area of 63,979 ha with 60 Businesses BMP Accredited.

Another 47 growers are actively progressing through the BMP program. Now with the end of the harvest, growers have stepped up their commitment to complete the program.

Congratulations to the 31 Business Entities who successfully obtained their Smartcane BMP Accreditation in 2019. This has been an exceptional effort for our region with a 100% increase for the year. It's encouraging to see more growers progressing towards accreditation in 2020, however Mackay still has a long way to go.

Indiana Zarb has been busy assisting growers with the registering and benchmarking component of the BMP Program. We are here to work with you every step of the process and work to accreditation.

The Smartcane BMP Program is grower driven and not compulsory, so your participation is essential to help reduce the risk of ongoing interventions on how we farm. It's all about you, and 'setting the record straight' by showing our farming practices and records are at or above industry level.

Smartcane BMP Contacts:
Audra Allan- 0427 542 204
Indiana Zarb – 0439 557 839
John Eden- 49 442 605

Soil Sampling

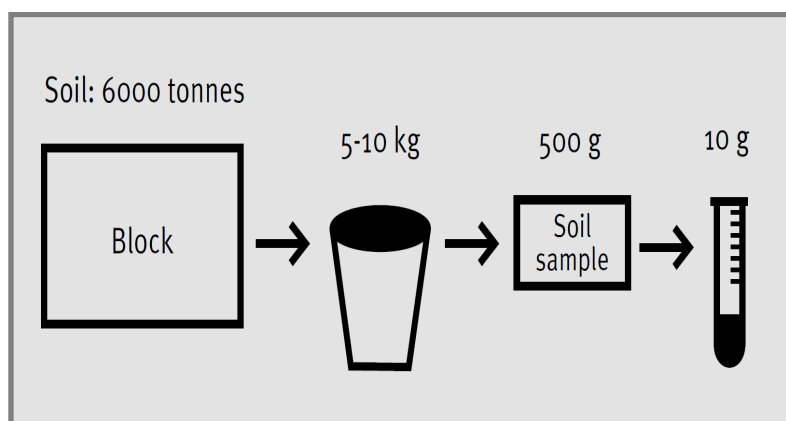
Sampling should be conducted at a time that allows for analysis of the sample and interpretation in good time for recommended treatment. If you suspect acidity, salinity (salt) or sodicity (poor soil structure) to be a problem then soil analysis is recommended at least 3-4 months prior to planting so that lime and/or gypsum can be applied in time to take effect.

Timing is the critical key for an accurate soil test analysis, along with collecting a representative sample and ensuring that the samples are kept cool once taken. So when is the best time to take soil samples?

- The best time to take a soil sample is at the end of your cropping cycle.

Important considerations;

- Account for soil types – only one soil test needs to be taken for each soil type.
- Identify paddocks/block management practices– i.e. tillage, fertiliser, mill mud/ash and other ameliorant applications.
- Select a sampling pattern that provides a representative sample, is repeatable and efficient.
- Avoid working ground and burning off any trash before soil samples are taken, as this can have an effect on the end soil test results (trash in the samples can raise organic carbon levels which could give a false impression that the soil health is way better than it actually is and this will reduce 'N' inputs). Ash could also increase 'K' levels.



- Avoid areas that are not representative of the area being sampled e.g. old fertiliser bands, old headlands, fence lines etc.
- Rake the trash away from the sampling site and take the sample between the old fertiliser band and the middle of the row (usually this is just to the side of the cane row).

- Ensure sampling equipment is clean (no soil) from previous sampling and use tools that cannot contaminate the soil sample. Galvanised augers must not be used.
- Sample depth is crucial for proper representation of the block/soil type being sampled. For Sugarcane the correct depth is from 0-20cm with a 25mm core.
- Ensure enough samples are taken to fully represent the block, preferably at least 10 samples. One core is not sufficient to provide a true representation.
- Record geo-coordinates of sample patterns, type of sampling pattern, sampling equipment used, depth, date and field conditions
- Protect collected soil samples from, heat, sun and contamination
- Store samples briefly in a refrigerator 3^o – 5^oC prior to dispatch
- Ensure the Laboratory is certified for particular test analyses if their results meet qualifying criteria, with their annual certification status updated on the ASPAC website. Send to laboratory shortly after collection
- Correctly fill out all details on the sample submission forms
- Follow relevant biosecurity requirements with respect to movement of samples within and across borders, and within and between farms



**This information was an abstract from Fertcare 'A guide for "fit for purpose" Soil sampling '.*

AGTRIX FARMING

Agtrix Farming is a web based recording program that records a range of farming activities such as plantings, cultivations, irrigations, chemical and nutrient applications as well as pest and disease events.

It can be used in-field or from home using any device that has internet access, giving users the option to enter records from a computer or a tablet in the tractor or shed. There is also a phone app being developed that works in hand with the web program allowing nutrient and chemical applications to be entered from the palm of your hand.

Byron Nicholson who has been using Agtrix from early development stages has seen the time-saving benefits of being able to record in the field. "We can make planned events ahead of time and then commit them on the phone app with one button press when doing the job" said Byron.

The benefits of recording into an electronic program;

- Less chance of losing data compared to using paper records.
- It's easier to sort through your records electronically than through filed paper records.
- You can print nutrient and chemical reports in the event of BMP accreditation or Government Audit.
- Keeping a history of your records enables better farm management decisions in the future.

- The web program and phone app are supported and used by MAPS staff.

MAPS field officers will be using Agtrix Farming in the field as of 2020 to capture pest and disease observations as they occur and will be able to demonstrate the programs functionality one on one with growers. MAPS will also be showcasing the platform at shed meetings as we move forward to its full release to our growers. For more information please contact your MAPS Officer.



Photo: Father and son, Ross and Byron Nicholson recording their nutrient applications on ratoons directly into Agtrix Farming program using a touch pad tablet.

MAPS Weather Stations Update

MAPS have now installed a new weather station at Tannalo (near Finch Hatton), as well as upgrading the three existing stations at Balberra, Pindi Pindi and Victoria Plains. The funding for this work has been granted by the Qld Government RWUE-IF program, which is administered by Canegrowers.

All four stations now have the following gauges and graphs –

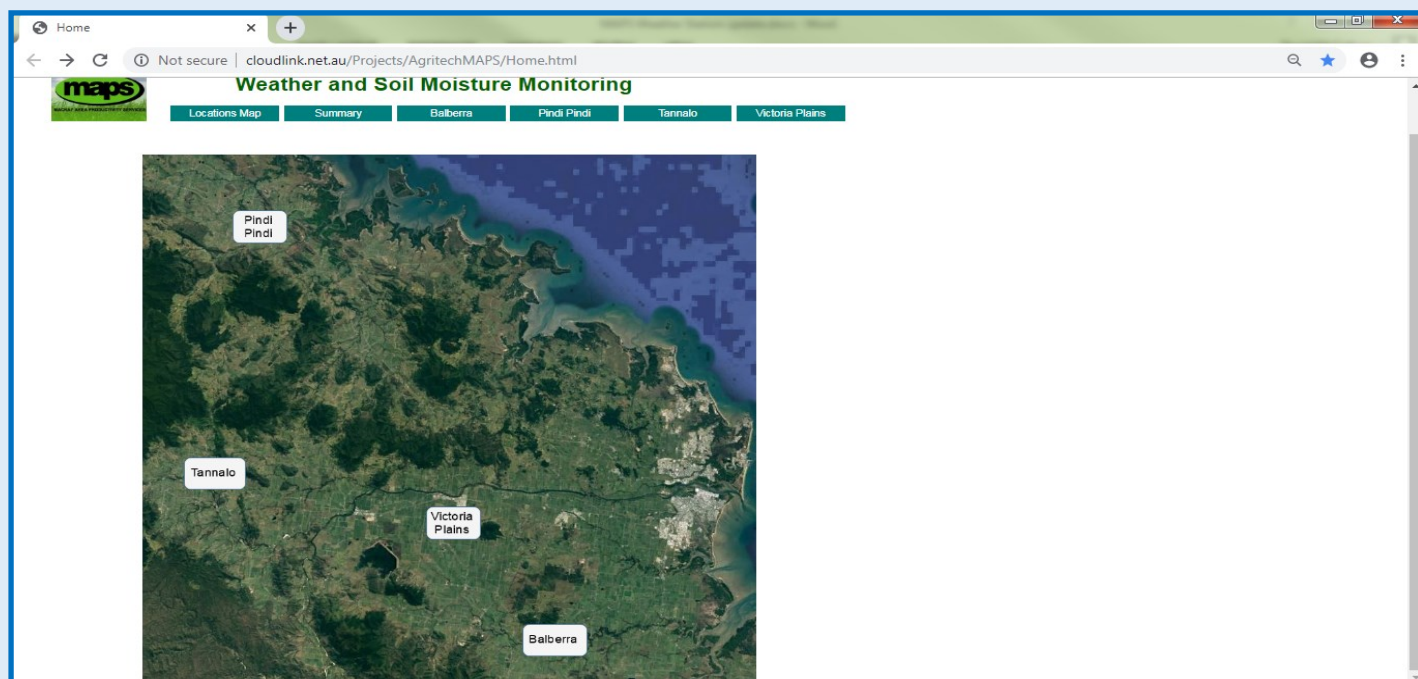
- Rain (since 6 am)
- Air Temperature
- Relative Humidity
- Wind speed & direction
- Barometric pressure
- Soil moisture profiles
- Weather history

Tannalo (pictured right) also has Delta T (preferred conditions for spraying) and solar radiation gauges and graphs.



Not only do the weather stations provide up to date weather information, they can also be a useful sources of data for growers' record keeping purposes. If there is a station in reasonably close proximity to your farm, this data will be more accurate than that of a BOM station some distance away. All graph weather data is able to be accessed back in time. If you need help to obtain this data, please get hold of your productivity officer or Dave McCallum on 0427 326 665.

To view the weather sites, go to the MAPS web site – www.maps.org.au – click on “Weather Stations”, then click on the tabs at the top of the page, or on the place names on the map, to access a particular station's data. Remember new data is uploaded every 15 mins, so the pages need to be refreshed if you stay on the sites for some time.



Machinery Movement

To protect the sugar industry from the spread of pests and diseases, biosecurity zones are in place (see map). If you are selling any machinery or farming equipment that is moving between these zones, a machinery permit is required. MAPS staff are able to issue permits for the movement of machinery.

Any machinery/equipment moving out of Mackay that has been in contact with sugarcane plants or soil needs to be inspected by a MAPS officer before a permit is issued.

Permits will only be issued when the machine/equipment has been thoroughly inspected and found to be clean of dirt and trash. All equipment coming from other biosecurity zones should also have a permit that travels with the equipment.

If inspections are needed, contact your local Productivity Officer. Please contact your officer several days before the equipment is due to be transported.

Cane harvesters in particular are difficult to clean and generally they need to be inspected twice before a permit is issued. Visit the MAPS website and follow the Machinery Inspections link for further details.





Sugar Research
Australia

Sugarcane Biosecurity Zone Map



- All appliances (harvesters and other sugarcane machinery) moving between sugarcane biosecurity zones must:
 - > be free of cane trash and soil
 - > be inspected by an authorised inspection person who will issue a Plant Health Assurance Certificate (PHAC)
 - > be accompanied during transportation by the PHAC.
- Machinery inspections can be arranged by contacting the local Productivity Service organisation.
- To move sugarcane plants (stalks, leaves, potted plants, etc) between biosecurity zones contact Biosecurity Queensland (13 25 23).

Rat Baiting **MUST** be recorded



Failure to report your baiting and the use of non-registered baits will spell the end of our Mackay Sugar wide Permit. It will then be up to each and every Mackay grower to deal with government when they want to bait for rats.

Good in-crop weed/grass control and keeping non-crop grass/weed patches around the farm mowed or grazed will reduce rat breeding and rat damage. Some of the common findings of rat damage currently being reported can be seen here.



If you have baited for rats or plan to bait, please let your Productivity Officer know the details straight away! If you are going to bait, you can record your baiting on the MAPS website by following the links.

MAPS must have this information, so we can report to government every three months in line with our Permit.

Only use Ratoff, ZP Rat, Surefire Couma or Racumen for baiting of rats on farm.



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.