

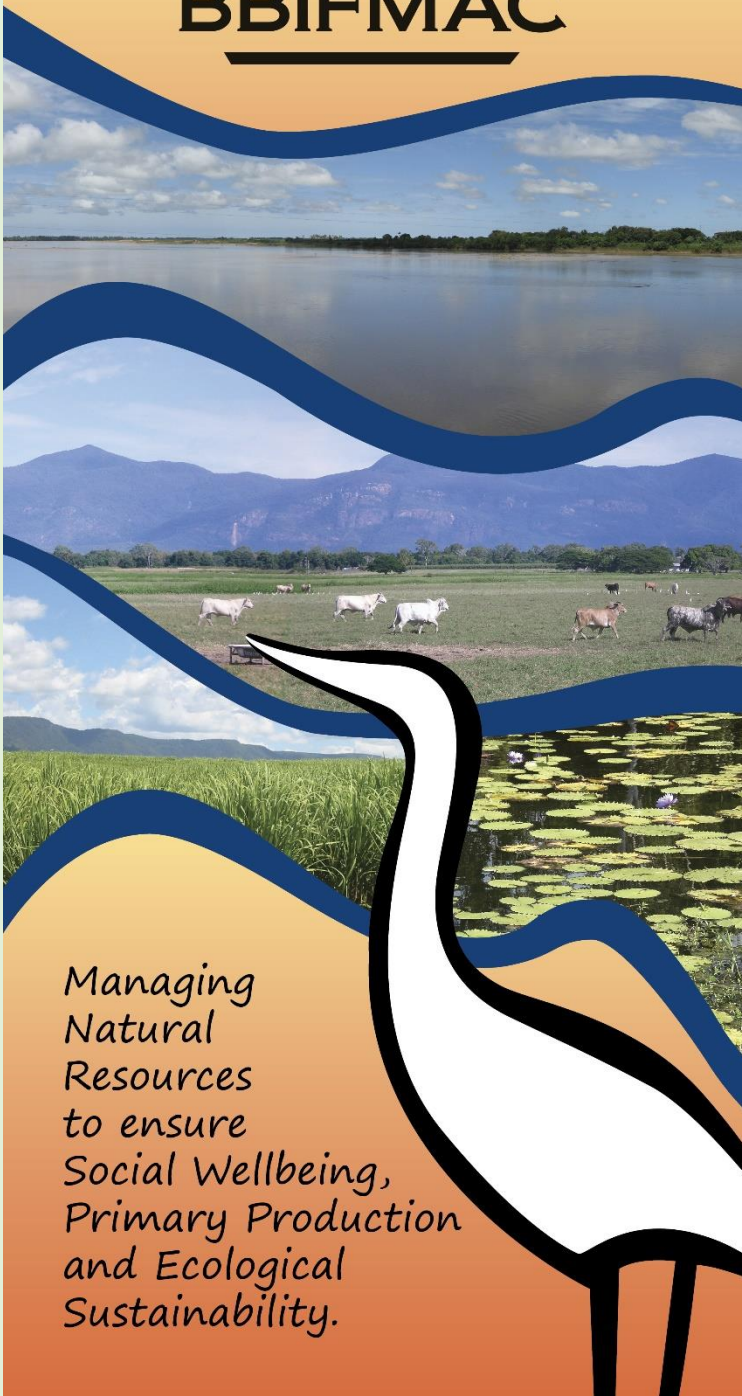
# NEWSLETTER

Issue 11

March 2021



## BBIFMAC



*Managing Natural Resources to ensure Social Wellbeing, Primary Production and Ecological Sustainability.*

## Seeking Farmers to Participate in the NQ Winter Spice Trial

BBIFMAC are seeking local farmers with a keen interest to participate in the upcoming winter trial of high-value spice crops. The 'Spicing Up the North' Project is lead by Central Queensland University (CQU), with funding from the CRC for developing Northern Australia (CRCNA) and supported by seed company AgriVentis Technologies.

The crops have demonstrated their suitability in a series of small-scale trials conducted in 2019, with the fennel crop in Ayr outcompeting the other trials in Biloela, Rockhampton, Tully, Katherine and Darwin. After success in the 2019 and 2020 summer trials, CQU is interested in trialling the black sesame over the winter.

Expressions of interest are now open for farmers in the Burdekin region who can provide up to one hectare of land to trial either fennel or black sesame. Please send your expressions of interest by email to [mackenzie@bbifmac.org.au](mailto:mackenzie@bbifmac.org.au) or phone the BBIFMAC office on (07) 4783 4344.



The fennel and black sesame crops in the 2019 small scale trials at Rita Island in the Burdekin.

## Meet the BBIFMAC Committee



We would like to take this opportunity to introduce one of our great BBIFMAC Committee members with each newsletter. In this issue we introduce Merv Mohr.

Merv Mohr is the Treasurer on the BBIFMAC Management Committee, and has been a member of BBIFMAC since 2017. Merv has worked in the Burdekin for 44 years within the agriculture industry, including 11 years teaching horticulture at Burdekin Agriculture College, and 15 years at Farmer's Agencies as a Regional Agronomist. Merv has worked as a Horticulture Advisor for Rapisarda Enterprises since 2005, and continues in this capacity part-time, as well as pursuing his woodworking interests and travelling the countryside in his semi-retirement.

# Fine Scale Water Quality Monitoring in High Priority Catchments

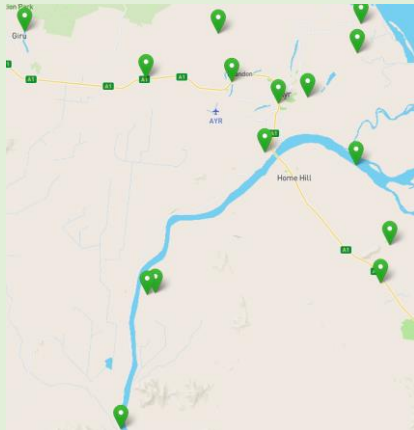


The installation of fine scale water quality monitoring sites has been ongoing since the end of last year in both the Lower Burdekin and Lower Herbert regions.

The project is funded by the Queensland Government's Water Quality Investigations team, and delivered in partnership with BBIFMAC. It is in response to the ongoing call from farmers and industry stakeholders to increase the number of water quality monitoring sites which will enable a more adequate representation of the entire district.

The monitoring will provide valuable data for agricultural communities, landholders, industry, extension staff, and the wider community through the ability to access local, real-time water quality results.

A total of 29 of the intended 40 sites across the Burdekin and Herbert regions have already been instrumented, and the site installations are going well despite a few teething issues.



A map of the fifteen water quality monitoring sites in the Burdekin that BBIFMAC have installed and continue to maintain as part of the Fine Scale Water Quality Monitoring project.

The data being presented consists of nitrate-nitrogen (NO<sub>3</sub>-N) concentrations in milligrams per litre (mg/L) and stream level in metres (m). The long-term aim is to be able to further develop the dataset to include stream discharge (as cubic metres/second), and calculate loads (in tonnes) and yields (in kilograms per hectare) of nitrate-nitrogen.

The data is now being uploaded to the CSIRO 1622™ portal in real time, and is available for public viewing. New data sets are being added and updated as the project progresses and new sites are installed. To access the data, visit <https://wq.1622.farm/>

It is important to note that the data is being recorded and presented in real time, which brings with it several limitations.

The data is uploaded to the portal without being checked by a person, and hence, processes must be implemented to ensure that the data presented is accurate and of high quality.

The Department of Environment and Science Water Quality Investigations team are working to ensure this by running the data through CSIRO's automated filters, which are designed to capture and eliminate data that is considered low quality. They detect and remove data that is flagged as uncertain by the water quality probe's internal check, values that are outside the detection limits of the probe, and unrealistic elevations.

As more data is obtained, and manual checks are undertaken to ensure that these filters are working as expected, it is likely that updates and refinements will be made to ensure the delivery of the highest quality data possible. This is unfortunately one of the limitations of providing real time data directly to stakeholders without delay.



The water quality monitoring equipment at each site consists of a nitrate-nitrogen sensor which is powered by a solar head unit to power the electronics and transmit the data in real time.

BBIFMAC's role within the project is to assist with the water quality equipment installations for the sites within the Burdekin and Herbert regions, as well as undertaking regular maintenance and troubleshooting. Technical Officer, Luke Buono is the main contact for the project.

We look forward to updating you as the remainder of the sites are implemented and more data is made available via the CSIRO 1622™ platform.

## Become a BBIFMAC member!

JOIN NOW FOR JUST \$20 PER YEAR.

BBIFMAC members receive:

- ❖ Free or discounted water quality tests.
- ❖ Discounted water quality monitoring equipment.



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