

TRIALS TO INFORM FERTILISER OPTIONS



When Kevin Mann first began sugarcane farming in 1980 with his brother, David, one of the first things that they did was get soil tests, leaf tests and water tests.

They wanted to understand the limiting factors on the farm at Osborne in the Burdekin, and Kevin knew that it wasn't going to be a pretty picture.

"The water tests showed we had high rock salt in our underground water supply and it wasn't suitable for growing cane. The soils showed salt as well, while the leaf tests showed that we were doing the best we could with the conditions," he explained.

"So we set about improving things by lasering everything to the right levels, and improving the layout where we could."

Their water is sourced from mostly underground, along with two pumps that can access some surface water, which he blends with the groundwater to bring the salinity down as best he can.

Kevin said he had made changes to irrigate with high inflow volumes of water to keep the water flowing, as well as shortening runs where he could, except in situations where he is restricted by deep gullies or a council easement on the property.

Kevin now farms with his son, Max, and they grow about 15,000 tonne each year on their 140-hectare farm. Max recently returned to the farm after working seven years overseas, as a fitter and turner and hydraulic specialist. This now comes in handy and allows the Mann family to do all their own on-farm maintenance.

Kevin said they faced a limited water situation in some years, which meant

they had reduced ability to grow legume crops for grain on their fallow, although they have in the past grown cover crops such as dolichos lablab.

"We've made the decision to utilise our water for the cane," he said. "The surface water is mostly being used for blending with the underground water to make it more usable. At the same time, there have been years when we have had limited water for the cane.

"This year, we had floodwater across the farm at the beginning of the year and it only lifted the underground table by about eight feet (240cm), and now in October after a dry year it is back to where we were last year.

"There is enough for the cane for two or three years, but we don't want to be pushing things too hard."

The Manns grow the popular local varieties KQ228[®], Q183[®], Q208[®] and Q240[®] and aim for an even split between these four. Crops are typically grown as plant and three ratoons, with a short fallow before planting in April or May.

For the last two years, the Manns have been involved in a project called EEF60, which is assessing enhanced efficiency fertilisers at different application rates compared to standard urea treatments.

Kevin said he had used slow-release fertilisers in the past, particularly on his sandy soils early in the season, as well as trialling different blends, all with the aim of improving production.

Results from the EEF60 project will be communicated throughout 2020 and 2021, as more data is collated

from project sites across the industry, collecting information from different regions, local conditions, and seasons.

These trials will provide information on the effect of EEFs in terms of TCH, CCS, and NUE effect on grower profitability. Environmental losses (run-off and deep drainage) are being assessed at six of the 60 sites.

As well as being a keen trial collaborator, Kevin is also a strong advocate of the Smartcane BMP program and was among the first growers in the Burdekin to achieve accreditation. He now has a system where he records all his farm practices in a notebook during the week, and works with his wife, Amanda, who enters his notes into the computer.

"It's a simple system but it works well," he said. "I was doing it anyway, so the accreditation makes sense. We as farmers know what we are doing on our farms, but the BMP process shows we are doing the right thing and now it's all recorded." ■

(Above) Kevin Mann is looking forward to learning more about enhanced efficiency fertilisers through the EEF60 project.

The EEF60 project is a collaboration between CANEGROWERS, SRA, Burdekin Productivity Services, Herbert Cane Productivity Services Limited and Mackay Area Productivity Services. It is funded by the Australian Government Reef Trust and Queensland Government Great Barrier Reef Innovation Fund.