

Mill Mud

- Mill mud is a great resource for sugar cane production as it not only provides nutrients for crop growth but can also have a positive impact on soil structure.
- Mill Mud can be spread at plant and on ratoons where the recommendation is to apply directly on top of the Stool, not in the interspace.

Photo 1 Example of Mill mud applied directly on top of stool for ratoons.



- ✓ Mill mud consists of water, fibre, soil or mud solids and soluble sugars and proteins.
- ✓ Mill mud is a source of nitrogen, phosphorus, potassium, calcium, magnesium and sulphur.
- ✓ Not all of the nutrients supplied are immediately plant available.
- ✓ The indicative amounts of nutrients available from an average mill rate of 150t/ha is outlined in Table 1.

Table 1 Indicative amounts of Nutrient available 150t/ha mill mud.

Nutrients	Amount (kg)
Nitrogen	300
Phosphorous	360
Potassium	195
Calcium	600
Magnesium	165
Sulfur	50
Copper	4
Zinc	17
Manganese	180

- ✓ The question is how much of these nutrients from Table1 are available for the next cane crop?

Table 2 SRA guidelines for reducing nutrients following 150t/ha mill mud.

Table 2 New SRA guidelines for accounting for Nutrient from Mill Mud 100-150t/ha

Nutrient	Recommendation
Nitrogen	Reduce recommendation by 80 kg N/ha in year 1, 40 kg N/ha in year 2 and 20 kg N/ha in year 3.
Phosphorous	Sufficient for 2 crop cycles
Potassium	Reduce by 40kg for year 1
Sulphur	Reduce by 10kg in year 1, year 2, year 3
Calcium*	Reduce next lime application by 2t/ha
Magnesium	Sufficient for one crop cycle

*One such application of Mill mud is therefore equivalent to 1.9 t/ha Blend 5 or 1.2 t/ha Blend 3.

- Frequent use of mud can lead to very high levels of available phosphorus in the soil, which may reduce the availability of other nutrients and adversely impact on water quality.
Therefore, application frequency needs to take into account the nutrient and heavy metal loadings on the soil.
- Treatment of cane blocks every 5 to 10 years would be an appropriate frequency and this should be confirmed by routine soil analysis.

For further advice please call Greg Shannon on 0400586968

Source Dr D Skocaj SRA