POSTER SUMMARY

SOIL MONITORING AND NUTRIENT BUDGETING FOR EFFICIENT USE OF FERTILISER IN SUGARCANE PRODUCTION IN KWAZULU-NATAL

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Abstract

Soil sampling in the sugarcane industry has traditionally been done before the plant crop with a nutrition strategy being formulated for future ratoon crops from this single soil sample. Through the collection and analysis of historical data from a number of growers in Kwazulu-Natal, it has become clear that trying to manage nutrition efficiently and establishing trends will require more frequent sampling. The most cost effective approach would be to split a farm into a number of management units which could be sampled more frequently, allowing for closer monitoring and more efficient nutrient budgeting. Two fundamental shifts in the sugar industry, namely top-dressing of lime on ratoon fields and fertiliser recommendations based on yield, will also require more frequent sampling and monitoring of acid saturation and pH. This poster presents results from historical soil data from two farms and proposes a new soil sampling strategy and nutrient budgeting system.

Keywords: fertiliser, efficiency, monitoring, soil sampling, nutrition