

MAURITIUS SUGAR INDUSTRY RESEARCH INSTITUTE

RECOMMENDATION SHEET NO, 62 (June 1991)

FERTILIZATION OF PLANT AND RATCON CANE

The inherent capacity of soils in Mauritius to satisfy all or part of the phosphorus (P) and potassium (K) requirements of sugar cane was not previously considered in formulating P and K recommendation rates.

Acknowledgement of the soil P and K reserves as nutrient sources to sugar cane means that less P and K fertilizers may henceforth be used, their rates depending on soil analysis (see Recommendation Sheet No. 57). Also, existing fertilizer formulations e.g. 17-8-25, 17-2-27 and 13-20-20 are no longer appropriate. They have accordingly been replaced by 2 new formulations, 20-0-20 and 18-0-8, differing mainly in their K content.

If soil analysis shows more than 0.35 meK/100g soil, 18-0-8 may be used, otherwise 20-0-20 should be preferred. With nitrogen (N) rates remaining unchanged, recommendations for using the 2 formulations are as follows:

	Formulation	Short season plant cane & ratoons	Long season plant cane
Soils of HIGH response to N (e,g, LHL, HL, and LRP)	20-0-20	600-700 kg/ha	700-800 kg/ha
	18-0-8	700-800 kg/ha	800-900 kg/ha
Sails of LOW response to N (e,g, LBF, HFL)	20-0-20 or	500-600 kg/ha	600-700 kg/ha
	18-0-8	600-700 kg/ha	700-800 kg/ha

It is assumed that scums (an average of 12 tonnes/ha) will continue to be applied at planting as a source of P (1 tonne scums \equiv about 5 kg P_2O_5). In the event that they are not available when soil analysis indicates that P fertilization is necessary at planting, rock phosphate (in acid soils) or triple superphosphate should be used instead.