

Magnesium level

Apropos the article on the reciprocal relationship between magnesium and cerium as a common basis for coconut root (wilt) disease and a human cardiomyopathy (by Valiathan *et al.*¹), it is seen that Mg level has been presented as $\mu\text{g g}^{-1}$ wet weight in this article. It is customary to present mineral concentration in plant tissues on dry weight basis, as it is the most accurate and dependable method. By taking the dry weight/wet weight ratio of the middle leaf of palm as 0.39 in diseased and 0.44 in healthy palm (Chacko Mathew, *J. of Plantation Crops*, 1981, 9, 51-55) and converting the values as percentage on dry matter, the figures of Valiathan *et al.* become 0.065% in diseased palms, 0.059% in healthy-looking palms in Quilon and Alleppey, 0.077% in Bombay and 0.086% in Manavalakurichy, which are exceedingly low, and with such low levels, the palms would show acute Mg

deficiency symptoms like severe yellowing of foliage. The critical level of Mg (frond 14) is 0.2% on dry matter basis. The magnesium contents of healthy plantations in most of the coconut-growing countries of the world range from 0.2 to 0.4% of dry matter (Manciot *et al.*, *Oleagineux*, 1979, 34, (12), 576-580). Based on such a data the different situations were qualified as deficient or sufficient with respect to magnesium and the authors ventured to justify that the 'palms in the affected areas are either diseased or potentially diseased'. I feel that the data are too meagre for publication in your esteemed journal.

1. Valiathan, M. S., Eapen, J. T. and Mathews, C. K., *Curr. Sci.*, 1992, 63, 565-567.

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