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STUDY ON THE ANNUAL EXHAUST OF SOIL NUTRIENTS BY THE TYPICA X PUMILA HYBRID PALM

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High yielding hybrid varieties, the crosses between the tall x dwarf (typica x pumila) are being supplied to the industry as suitable for planting in the Wet Zone. It is also envisaged that in all replanting schemes the existing stands will be replaced by these hybrids. The position being so and in view of the lack of systematic field fertilizer trials on hybrids, the interim recommendations of fertilizers have been based solely on those being presently recommended for the typica. A study was therefore carried out in order to see the adequacy of the fertilizer added.

Estimates of the annual removal of the major nutrients (N, P, K, Ca & Mg) by the selected hybrid palms, were done covering the period June 1973 to April 1974, by sampling fallen fronds, fallen nuts and the nuts of the 1st and 2nd clusters. From the results of analyses the total amount of nutrients removed by both fronds and nuts of hybrids were 51, 7, 93, 27 and 14 Kg/ha for N, P, K, Ca and Mg respectively. The amount of N, P and K made available annually by the addition of fertilizer were 74, 17 and 107 Kg/ha respectively. It appears from the data that the amount of fertilizer added as K is just sufficient to offset the annual removal of this element by foliage and nuts and the amounts for N and P appear sufficient to meet the losses.

The data show that there is adequate evidence to review the fertilizer requirements of hybrids and to initiate further field fertilizer trials.