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BORON DEFICIENCY IN COCONUT *(COCOS NUCIFERA* L.) IN SRI LANKA. I. SYMPTOMS AND CORRECTIVE MEASURES

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Apart from N, P, K and Mg deficiencies in coconut so far observed in Sri Lanka, another type of nutritional deficiency symptom was found in a few young coconut palms at Poojapitiya in Kandy district. Unsplit, crinkled nature of leaflets and stunted, withered apical leaves of these palms showed the symptoms similar to that of boron deficiency in coconut reported from Ivory Coast and this has led to the present study.

Affected palms, were grouped into three categories depending on the intensity. Leaf analysis revealed that only the boron levels were low compared to the healthy palms in the vicinity. Palms were selected randomly in each group and the soils were treated with sodium tetraborate at the rates of 0, 28 and 56 g/palm. Response and recovery were observed periodically by taking leaf samples and coloured photographs. Both low and high levels of sodium tetraborate application improved the condition of the affected palms after 4–5 months and became normal at the end of the 8th month. But the untreated palms showed acute deficiency symptoms with time and ultimately died after about 8 months.

Results indicated that the symptoms observed in young coconut palms at Poojapitiya were due to boron deficiency where the critical level of 7.5 ppm was recorded and could be corrected at the early stages by low levels of soil application of sodium tetraborate.