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***Khaya ivorensis* A. Chev - Early Response to Nutrient Deficiencies in Forest Plantation Nursery**

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*Macronutrients are essential elements for the growth and development of forest tree species. The lack of sufficient nutrients may adversely affect the growth and quality of the plants. The objective of this study was to observe and determine the initial macronutrient deficiency symptoms on the growth and vigour of *Khaya ivorensis* seedlings. One-month-old *K. ivorensis* seedlings were transplanted into 15 cm diameter and 23 cm tall plastic pots filled with acid washed sand. The treatments assigned were T1: Control (Complete Hoagland No. 2 solution), T2: Hoagland No. 2 solution lacking in nitrogen, T3: Hoagland No. 2 solution lacking in phosphorus, T4: Hoagland No. 2 solution lacking in potassium, T5: Hoagland No. 2 solution lacking in calcium, and T6: Hoagland No. 2 solution lacking in magnesium. Irrigation was done according to treatments with 100 mL of the specified nutrient solution or distilled water every alternate day. On other days, 100 mL of distilled water was added. There were eight replications for each treatment. All pots were laid out in a complete randomised design (CRD). The visual deficiency symptoms and seedling growth were recorded monthly and the plant tissue nutrient contents were analysed for the initial three months after transplanting. All treatments except for control induced deficiency symptoms. Observations showed that seedling growth was reduced due to K, Ca and Mg deficiencies compared with control. The effects of N, K and Mg on the tissue content were also significantly reduced.*

Keywords: *Nutrient deficiency, seedling establishment, forest plantation, poor growth.*