B -07

EFFECT OF A SUPPLEMENTARY SOURCE OF MICRONUTRIENTS ON GERMINATION AND GROWTH OF COCONUT SEEDLINGS.

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Solutions of Fe, Mn, Cu, Zn, B and Mo were injected into the husks of seasoned coconut seednuts of uniform size and maturity. The quantity of each nutrient injected was equivalent to about 10 times the total quantity normally present in the kernel and coconut water. A "plus-all" treatment and a "minus all" treatment served as controls.

Zinc and copper treatments not only appeared to shorten the period of sprouting, but also increased the percentage of successful germinations. Boron on the other hand progressively reduced the rate of sprouting.

These treatments also had a significant effect on growth of seedlings. With respect to height of seedlings six months after planting, the treatment effects were in the order of Cu> Mo> Mn> Fe> Zn> B> "plus all" ⇌ "minus all". The adverse effects of boron on both germination and subsequent growth of seedlings may possibly be due to toxic effects.

This study basically shows that a supplementary source of copper, zinc and possibly molybdenum to seednuts may not only help to hasten the process of sprouting but also promote better growth of seedlings.