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GROWTH OF EXPLANTS OF COCONUT (*COCOS NUCIFERA L.*) IN VITRO

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The clonal propagation of the Coconut from tissue cultures is about the only conceivable means of vegetative propagation, since the palm otherwise possesses only a single vegetative bud at its apex (pol-bada).

In our attempts to obtain cultures of Coconut tissue we have been able to induce the formation of pustules of proliferating tissue in explants of the apical bud on media containing certain assortments of auxins and cytokinins. In no case, however, were we able to subculture the primary explant and establish an indefinite callus culture.

The use of a "nurse" tissue produced a four-fold stimulation of cotyledon explants. This points to the existence of hitherto unidentified and untried growth factors that could stimulate proliferation under proper culture conditions to give a true tissue culture eventually capable of embryogenesis "in vitro".

We have also clear evidence that polarity also plays a role in the induction of growth in primary explants.