

## VARIATION OF INVERTASE ACTIVITY IN COCONUT

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Invertase activity was examined in various parts of the young coconut. Extraction was done at 0°-5°C using 0.2M Acetate buffer pH 4.5, centrifuged at 900g and the particulate fraction was used in the experiments. The Enzyme was released into solution by using 0.5%(v/v) Triton X-100 and 0.30M NaCl. Mercapto Ethanol ( $5 \times 10^{-3}$ M) was used to activate the enzyme. The Invertase activity was assayed with sucrose in Acetate buffer (13%(v/v) using dinitro salicylic acid reagent.

Distribution of Invertase in various parts of the young coconut was studied. Invertase activity was found in the nucellar tissue and the mesocarp tissue connecting the eyes and the stalk. Activity was not found in the liquid endosperm, solid endosperm, stalk, or the tissue connecting the stalk and the inflorescence axis. Enzyme concentration in the nucellar tissue (14 Invertase units/gm of fresh tissue) and the mesocarp tissue was found to be the same.

Variation of Invertase activity with the age of the fruit was studied using coconuts from each of the 14 bunches picked at different stages of maturity. Invertase activity/gm of fresh tissue was found to increase upto the 7th bunch and after that the activity decreased.

The enzyme inactivated by EDTA (Ethylene Diamine Tetra-Acetic Acid) was found to be reactivated by certain metal ions.