

**E2-40: Kinetic properties of partially purified Invertase from *Madhuca longifolia***

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In Sri Lanka, the principal sources of Invertase at present are Bakers, Distillers and Brewers yeast. However, there is adequate literature evidence to show that for the fermentation processes in the manufacture of Arishta (a drug used in Ayurveda) *Madhuca longifolia* (Mi mal, Sapotaceae) flowers are used as an invertase source. In this paper kinetic properties of partially purified endogenous invertase from *Madhuca longifolia* are presented.

*Madhuca longifolia* flowers were sterilized using 4% H<sub>2</sub>O<sub>2</sub> (v/v) in sterilized distilled water. Inoculum obtained from sterilized flowers were cultured and examined for the presence of any microflora. Invertase was extracted from sterilized flowers. Ammonium sulphate (50 - 75%) pellet was obtained and desalted. The enzyme was partially purified by batch-wise absorption technique using DEAE Cellulose.

Formation of the product by the enzyme was linear for an initial period of 4 min. Optimum pH for enzyme assay is pH 5.0. Optimum incubation temperature is 35°C. Above this temperature enzyme activity slowly declined and was almost inactivated above 80°C. The Km of the enzyme as determined by Lineweaver-burk plot is 40 mM.