

**The Feasibility of Glucose Syrup Production from
Taro (*Colocasia esculenta*)**

By	Mr. Varuch Chanrittisen
Advisor	A. Suchawadee Wiratthikowit
Faculty	Biotechnology
Academic Year	2004

Abstract

This study was concerned in the production of glucose syrup from taro (*Colocasia esculenta*). The taro corms was obtained from Pak Klong Talad Market on April as the raw material for glucose syrup production. The taro corms were produced to taro flour firstly. Some chemical properties of taro flour and the chemical properties of glucose syrup were determined.

The result from the production of taro corms to taro flour were shown that the taro type Hom Chiang Mai composed of moisture content, fiber content, ash content, protein content, fat content, fiber content, and reducing sugar content as 7.15%, 1.088%, 2.04%, 1.316%, 0.808%, and 4.842% respectively. The production of glucose syrup was prepared by 10% taro slurry, the result shown that the highest amount of dextrose equivalent (DE) which was the glucose syrup obtained for 0.25% enzyme concentration of

alpha amylase and glucoamylase. The chemical compositions of glucose syrup produced from taro flour at 0.25% enzyme containing reducing sugar, dextrose equivalent, degree Brix, dry substances and color density which were 2.49 mg/ml, 24.89, 10.66°B, 0.92%, and 27.70 respectively.

The results from this study, the production of glucose syrup could be used the taro as the raw material. The different enzyme concentrations both alpha amylase and glucoamylase had taken effect to DE value in glucose syrup. This syrup production could be added the value of taro corms in market.

