

Thesis Title	Study of Free Cyanide Released from Rased Cassava Root Using Enzymes
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Abstract

Generally, cassava root comprises of cyanogenic glycoside, linamarase and hydroxynitrile lyase enzymes however the substrate and enzymes store in different locations. When the root was rasped or destroyed, the cyanogenic glycoside and enzymes met each other and the cyanogenic glycoside began to react and convert to hydrocyanic acid and ketone. The objective of this study was to determine the digesting condition of cyanogenic glycoside by using enzymes and the substrate in the rasped cassava root. The cassava root, KU50 of 10-12th month age, was used in experiments. The digesting conditions such as temperature, pH and solid content of rasped cassava root were investigated. Each experiment was analysed for free cyanide. It found that the maximum free cyanide released was at the temperature of 50°C and the pH of 5 for 30 minutes. The solid content of rasped cassava root did not relate to the free cyanide released because of the ratio between cyanogenic glycoside and enzyme was equaled.