Alat Pendeteksi Kadar Glukosa Pada Sari Buah Mangga Menggunakan Sensor Inframerah

(Detection Equipment Glucose levels in extract mangoes using infrared sensors)

Hendri Tri Cahya Leksana

Program Studi Teknik Komputer

Jurusan Teknologi Informasi

ABSTRACT

This study was conducted to produce a detector Glucose levels in the juice of mango non- invasive tool that can measure glucose levels in a mango without having to test in the laboratory but by using an infrared sensor system 2Y0A21 F Sharp 56 IR -based Arduino Uno . Then the measurement results displayed on the LCD 16x2 .

It works by sensing the level of turbidity of the object mango juice . Turbidity of the object mango juice will cause the intensity of the received infrared sensor is reduced. Decrease in light intensity that is received by this sensor systems causes the output voltage decrease. The results of measurements of glucose levels in mango juice is then compared with the results of analytical laboratory glucose levels Clinical Nutrition . The results of the measurement tool shows the average value of error of 4.9% .

Keywords : Glucose , non- invasive , Mango and infrared sensor