

## **Abstract**

Srikaya fruit is a fruit that has a high nutritional content so it is good for the human body. Srikaya fruit contains flavonoids, terpenes, borneol, and many other ingredients. When the fruit is ripe fruit tastes sweet and has a soft texture. This fruit is a fruit that has a delicious taste and high nutritional content. Due to its soft texture, this fruit is easily crushed when stored. This causes this fruit to be a fruit that is quite rare to find in fruit shops so this fruit is lacking in demand. with its nutritional content it has and sweet taste with a unique texture, this fruit can become one of the people's favorite fruits.

Based on these problems, a way is needed to make the storage process more optimal so that the number of damaged fruits when stored will be reduced. By classifying the maturity level of the fruit, storage can be more optimal. The maturity of the srikaya fruit can be seen by checking the color of the fruit skin so that the tool to be made will use the TCS 3200 color sensor component, and assisted by a Micro SD card to record harvest data. The tool was tested on 12 samples consisting of levels 1 to 4 and obtained an accuracy value of 87.5%, then a precision value of 87,5%, a recall value of 89,3%, and an f-measure value of 88,3%.

**Keywords:** Srikaya, fruit maturity, classification