

# **MAKING OF ORANGE FRUIT SEPING MACHINE WITH THE CONVEYOR BELT USING TCS230 RGB COLOR SENSOR**

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## **ABSTRACT**

In buying fruit yields from farmers, collectors determine two categories, namely category A and B. Among the collectors and farmers, category A is known for ripe citrus fruits and category B oranges that are not yet ripe or curled. Currently, collectors in determining category A or B are still using manual methods without using measuring instruments, this is what causes problems, namely there are differences of opinion in determining categories of citrus fruit between collectors and farmers and errors in counting the number of pineapple fruits that enter category A or B. To solve this problem, it is necessary to design a system to determine the category of citrus fruit using a color sensor which functions to determine the maturity of citrus fruits based on categories and displays the number of oranges to the Liquid Crystal Display (LCD) screen, which is determined on the arduino uno microcontroller. . This research is expected to be able to produce a system for determining categories and the addition of citrus fruits based on categories automatically.

**Keywords:** Machine, Category Determinant, Citrus Fruits, Collectors and Farmers