## IDENTIFICATION OF RIPENESS IN TOMATOES USING THE OBJECT RECOGNITION METHOD

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## ABSTRACT

The agricultural sector is one of the important sectors in Indonesia. Fruit is an important agricultural commodity that has high economic value. Fruit maturity is one of the factors that determines fruit quality. The crisis of young farmers in the agricultural sector and the dominance of old farmers has consequences for the sustainable development of the agricultural sector, especially for agricultural productivity, market competitiveness, rural economic capacity, and more. Therefore, identification of fruit maturity needs to be done to ensure good fruit quality. Identification of fruit ripeness can be done using various methods, one of which is using digital images. Digital images can be used to identify fruit ripeness by analyzing the color, texture and shape of the fruit. Also to help farmers to be efficient in their time and energy because farmers can be helped more post-harvest, because farmers just have to instruct the robots to harvest the tomatoes they want, for example only red ones or all of them.

Keywords: Agriculture, Identification of Maturity, Quality, Efficiency