

**IDENTIFIKASI MUTU BAWANG MERAH MENGGUNAKAN IMAGE
PROCESSING DAN JARINGAN SYARAF TIRUAN**

*(Identification Of Onion Quality Using Image Processing And Neural Network
Method)* Aji Seto Arifianto S.ST, M.T, as a counselor

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ABSTRACT

The technology applied can help onion farmers to minimize losses. To apply computer vision science in identifying shallots. The new research that will be applied is to make a computer vision application to identify the quality of shallots based on visual characteristics. Parameters of visual characteristics used include texture, and color according to the Indonesian National Standard (SNI). For the parameters used are 19, namely, Red, Green, Blue, and GLCM textures (ASM, IDM, Contrast, and Correlation) angles taken 00, 450, 900, 1350. The training data used are 100 data with 50 onion data good red onions and 50 rotten red onions, for the test data there are 14 data with 8 good red onions and 6 rotten red onions. The results of the average accuracy of system identification with epochs (100, 200, 300, 400, 500, 1000) and learning rates (0.1, 0.2, 0.3, 0.4, 0.5) get an accuracy of 96 % on training, while the accuracy of the test is 100%.

Key Words : Shallots, RGB Color, GLCM, Neural Networks, Backpropagation