

## ABSTRACT

In Indonesia, corn is one of the crops that is used in many ways including for food consumed, processed into animal feed, oil, corn flour, sugar and its derivatives. So that industries engaged in food processing will continue to grow and the demand for corn will also increase. However, there are obstacles in increasing corn production, namely biological disorders that cause an increase in the number of corn affected by the disease. par

One way to see diseased corn is to look at the leaves. That way a system is needed that can detect diseases in corn through the leaves, so that early treatment can be carried out.

In this final project, we designed a classification system for 4 conditions on corn leaves including healthy leaves, blight leaves, rusty leaves, and leaf spot. The system on this final project uses the GLCM cir ecstasy method and the SVM classification method. In this system, it utilizes corn leaf imagery as much as 3,853 image data From the amount of data, it is further divided into two, namely for training data used as much as 2,696 data and 1,157 for test data. From the classification system using the SVM method, the highest accuracy value of 93.08% was generated and the computation time was at 16.51 s using utilizing a 4th order polynomial type kernel and an OAO SVM class type.

Keywords: *Corn, Gray Level Occurrence Matrix (GLCM, customer experience, RGB (Red, Green, Blue).*