

Abstract

Chili is a highly sought after commodity in Indonesia, data from Indonesia Bureau of Statistic state that in 2020 Indonesia consumes 490,083 tons of chili whilst its domestic farm produce only 177,91 tons could not fulfill the demand of chili. One of the way to increase chili production is to implement smart farming on the farmland, lately there is an increase in smart farming popularity mainly the technology of IOT, GIS, and Image Processing. Image Processing can be used to increase the production of chili by diffrenciate the image of ripe chili and unripe chili and using software image processing can be used to create a chili maturity classification system using K-Nearest Neighbor algorithm and Euclidean Distance as a way to calculate the distance, after testing tbe system have accuracy of 93%, precision value of 93,87% and recall of 92% as the system can generally diffrenciate ripe chilli and unripe chilli effectively.

Keyword: Chili, Smart Farming, Image P, K-NN, Euclidean Distance