

Abstract

Orchids have many families and species that are well known throughout the archipelago. It is not uncommon for new cultivators to find it difficult to make the types of orchids they come across. So in this case, cultivators need to be accompanied by orchid experts for the more various types of orchids they encounter. Therefore, to make it easier for people who want to cultivate orchids, researchers conduct research in classifying types of orchids based on the image of flowers in orchids, especially on the *Oncidium* species using the Convolutional Neural Network (CNN) method to classify 4 types of orchid species, namely bathing. gold, Croesus, shary baby, white fairy. In this study using the K-Fold Cross Validation method to check the performance of the model. From the total models that have been made, the best model is obtained that does not use Padding, Dropout, or Augmentation data. The model achieves an accuracy of 98.91% with an f1-score Accuracy of 0.99.

Keywords: *Paper Image processing, Convolution Neural Network, Orchid Oncidium, K-Fold Cross Validation.*