UNIVERSITI TEKNOLOGI MARA

DAISY SPECIES CLASSIFICATION BASED ON IMAGE USING CONVOLUTIONAL NEURAL NETWORK ALGORITHM

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ABSTRACT

The daisy family is one of the largest plant families in the world. There are numerous uses for various types of daisy species. The daisy species is the main subject of this study. Traditional method of classifying daisy species can be difficult. Most herbalists and traditional healers have trouble identifying the proper species of daisy. Aside from that, the traditional classification method is costly and time-consuming. It is also important to consider the loss of traditional practices and the lack of cultural knowledge of plants. The first objective of this study is to study the Convolutional Neural Network (CNN) algorithm in the classification of daisy species based on image. Second objective is to develop the prototype of daisy species classification based on image using CNN algorithm. The last objective is to evaluate the accuracy of CNN model in the daisy species classification based on image. Daisy Species Classification Based on Image (DSC) will help to classify daisy species more quickly and accurately to solve all the issues mentioned. The result of this study is the classification model obtained 88% accuracy on the testing set. Several improvements can be made to this project which are expanding dataset using augmentation techniques, implementing multiple images classification, and expanding the model to classify more diverse species of daisy.

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