Abstract

Orchids is genus of flower with the most number of species. Dendrobium orchids is one of the epiphytic orchid species commonly used as ornamental plants in room or garden. Most of dendrobium orchid species on the market are the results of cross-breeding between other species of orchids to produce orchid species that have characteristics of both parents so that the care for handling the orchid can also a be combination of both parents or partially. There are many subspecies of dendrobium orchids which cause difficulty in identify the subspecies of this species among orchids lover especially beginner. With development in the field of artificial intelligence and visual computing there are classification system for identifying plant species and disease on plants through plant images. However, there's only a few system developed to classify orchid species, so the author propose a classification system of orchid species based on image of orchid flowers with Mask Region-based Convolutional Neural Network method to ease the classification process.

Keywords: ConvolutionalNeuralNetwork,Orchids,Classification,MaskR-CNN