Klasifikasi Tanaman Liar sebagai Tanaman Obat menggunakan Metode *Convolutional Neural Network* dengan Arsitektur Resnet-50*

(Classification of Wild Plants as Medicinal Plants using Convolutional Neural
Network Method with ResNet-50 Architecture)
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ABSTRACT

Wild plants are often an underutilized natural resource in the health sector. Many wild plants have potential as medicinal plants, but the identification and classification of these wild plant species can be a complicated and time-consuming task. The use of technology in wild plant identification, especially in the context of their use as medicinal plants, can provide an efficient and effective solution. The results of this experiment using CNN method with Resnet-50 architecture show consistency and superiority over others. A total of 1,200 leaf images from six types of medicinal plants, namely gotu kola, brotowali, minjangan grass, sembung rambat, rambusa, and tumpang air, were used as datasets. The training results showed that the model achieved an accuracy of 97.91% and a continuously decreasing error rate, indicating a stable and accurate model performance.

Keywords: Wild plants, Medicinal herbs, Classification, Convolutional Neural Network, Identification, Pattern recognition.