

**Klasifikasi Tanaman Liar Sebagai Tanaman Obat Menggunakan Metode
Artificial Neural Network (Classification of Wild Plants as Medicinal Plants
Using the Artificial Neural Network Method)
Supervised by Zilvanhisna Emka Fitri, ST.MT.**

Maulana Sultan Ragil Wahyu Syahputra
**Study Program of Informatics Engineering Majoring of Information
Technology**
Program Studi Teknik Informatika
Jurusan Teknologi Informasi

ABSTRACT

Around the community there are wild plants which have the same benefits as physic garden plant but are not used properly by the community. There are 6 types of wild leaves that have the same benefits as physic garden plant, namely, gotu kola (Centella asiatica (L.) Urban), heart-leaved moonseed (Tinospora cordifolia), siam weed (Chromolaena odorata (L.)), Zehneria japonica, bitter vines (Mikania micrantha), and bush passion fruit (Passifora foetida L.). The artificial neural network method is used to classify leaf types into 6 types of leaves, namely gotu kola leaves, heart-leaved moonseed leaves, bush passion fruit leaves, siam weed leaves, bitter vines leaves, and Zehneria japonica leaves. This research uses the shape features of the leaves, namely Area, Perimeter, Convex Area, Compactity, Eccentricity, Aspect Ratio, and Solidity as input parameters from the artificial neural network. This research uses 600 leaf data where 480 are used as training data and 120 as test data. By using this method the accuracy obtained is 91.2% in the training data and 92,5% in the test data.

Key words : Artificial Neural Network, Backpropagation, Biner Image, Shape Features, Confusion Matrix