

**IMPLEMENTASI *DEEP LEARNING* UNTUK KLASIFIKASI TANAMAN
HIAS BERACUN MENGGUNAKAN ALGORITMA *CONVOLUTIONAL
NEURAL NETWORK* (CNN) *Implementation of Deep learning for Classification of
Toxic Ornamental Plants Using Convolutional Neural Network (CNN) Algorithm*
. Ery Setiyawan Jullev Atmadji, S.Kom, M.Cs.**

Nurico Vicyyanto
Study Program Informatics Engineering
Majoring of Information Technology
Program Studi Teknik Informatika
Jurusan Teknologi Informasi

ABSTRACT

Ornamental plants are plants that grow and are planted around the house, the number of ornamental plant enthusiasts in Indonesia is increasing in line with the statement of the Minister of Agriculture Syahrul Yasin Limpo which echoes the Gratiex program or the Triple Export Movement for all agricultural commodities. including ornamental plants. Ornamental plant production until the second quarter of 2020 based on BPS data reached 342,422,645 pcs. While the export volume reached 4,176,294 kg or the equivalent of US\$ 12,176,244, the many types of ornamental plants are an obstacle, where there are several types of ornamental plants that are poisonous, sometimes people don't really know about poisonous ornamental plants so they have special knowledge. necessary to distinguish ornamental plants. toxic and non-toxic. To overcome this problem, machine learning is needed which can study types of poisonous ornamental plants in more depth, therefore a deeper learning method, namely deep learning, is used. classification of objects in an image, namely CNN (convolutional Neural Network), based on the test results the researcher obtained a system accuracy value of 96.74% for training data 82,65% % for testing data and 92% for manual prediction results.

Keywords: *Artificial Intelligence, Machine learning, Deep learning, Convolutional Neural Network, Poisonous Ornamental Plant*