## ABSTRACT

*White oyster mushroom (Pleurotus ostreatus) is one of the horticultural food ingredients that are in great demand and consumed by the people of Indonesia. Besides being effective and efficient, oyster mushrooms also contain many nutrients such as carbohydrates and proteins that are needed by the body. Oyster mushroom cultivation has a very high level of market demand and the amount of oyster mushroom production has not been able to meet market demand. This classification system aims to model the quality of temperature and humidity of oyster mushroom kumbung so that it can help farmers in the production process and fulfill market demand. This classification system uses the Neural Network method with Backpropagation algorithm and Fuzzy Logic. The final result of this research is the determination of air quality with input of temperature and humidity with good and bad air quality. The results of this study have a MAPE value of 0.57% with a system accuracy of 99.43% and the results of the groundtruth approach with experts resulting in an error rate of 3% and an accuracy rate of 97%.*



*Keywords: Classification, Oyster Mushroom, Neural Network, Bacpropagation, Fuzzy*