# ABSTRACT

*Eggplant (Solanum melongena L) is one of the most popular crops in Indonesia. As one of the local vegetables, eggplant plants almost always appear in modern markets and traditional markets in Indonesia, in the last two years the demand for eggplant consumption has increased by 10.71%, this is an opportunity for farmers to cultivate eggplant plants. Eggplant itself is a tropical plant that has characteristics that do not like too much water, but also cannot stand excessive heat. Eggplant plants can grow optimally in the temperature range between 21°C - 28°C soil moisture in eggplant plants ranges from 80% - 90%. This research aims to enable farmers to monitor air temperature and soil moisture, and maximize soil moisture using automatic watering mist irrigation. Air temperature monitoring is carried out using a DHT22 sensor as an air temperature value reader and a YL-69 sensor as a soil moisture value reader which will be connected to the NODEMCU ESP8266 microcontroller. Based on temperature sensor testing, there is an average error of 0.058% and an accuracy rate of 99.429%, while soil moisture results in an average error of 2.482% and an accuracy of 97.518%. As for the overall test, the results obtained in the morning the temperature value was 27 ° C, in the afternoon 31 ° C, and in the afternoon 29 ° C, for the average value of soil moisture in the morning 70%, afternoon 55%, and afternoon 38%.*

***Keywords:*** *Mist Irrigation, Eggplan plant, DHT22 Sensor, YL-69 Sensor*