

Abstrack

One solution to the problem of limited land in cultivation is to apply the hydroponic Nutrient Film Technique (NFT) method. This method has the advantage of utilizing water as a planting medium to obtain water, nutrients and oxygen so as to accelerate plant growth. A smart system for hydroponic plants has been built by applying the Fuzzy Logic method. The microcontroller used is the Arduino Uno with a TDS Meter sensor as input. The device used contains the ppm value obtained from the TDS Meter sensor. The next step is transforming the data, sorting the values, forming fuzzy sets (fuzzification), determining the rules and defining the values of the variables. The test results show that the peristaltic pump will turn on and flow nutrient A and nutrient B into the reservoir according to the conditions; If it is very insufficient, the addition of nutrients is 2.7 ml - 3.6 ml and if the condition is lacking, the addition of nutrients is 1.5 ml - 2.5 ml.

Keywords : *Hydroponic, Fuzzy Logic, Nutrient Film Technique (NFT).*