

## **ABSTRACT**

*Paludarium, a concept that presents land and water ecosystems in one glass container, or can be called a combination of terrarium and aquascape which has become popular in recent years. The plants in the paludarium consist of aquatic and land plants. Temperature, lighting and humidity are the main parameters that affect plant growth. Paludarium in this study uses Bucephalandra and land moss plants with ideal temperature values between 10-30 Celsius and humidity of growing media at 23-100% by testing the implementation of 9 Rule bases taken 5 data on each Rule base so that it becomes 45 data. The Output in this study is to adjust the duration of the Mistmaker which is used to maintain humidity in the paludarium based on this system the difference from the results of the Output value of the tool test and mathematically, which is 0.99. Paludarium. The percentage of the success value of the Fuzzy Logic system built on the paludarium is 53.33% so that it can be declared quite successful..*

**Keywords:** *Smart paludarium, Arduino Uno ATMEGA R3, Fuzzy Logic Mamdani*