ABSTRACT

Strawberry is a subtropical fruit that thrives in Indonesia with soil as its growing media. Soil treatment becomes important for strawberry farmers, which the soil has a saturation nature and clump due to routine watering activity, then the farmers do watering Grikulan fertilizer as a recovery step to improve soil quality. This research develops a system in the Android software or mobile application that is able to monitoring the level of soil saturation in strawberry plants with output is the information of soil saturation indication based on the results of calculations using Fuzzy Inference System Mamdani method and the application can be connected with the actuator as a device of watering Grikulan fertilizer to give an order automation. This study produces a feasibility value of 90,14% through the testing of R validation.

***Keywords:** Grikulan, Fuzzy, Android.*