

ABSTRACT

Mosquito Repellent Smart Vase (MR Smart Vase)

Vases/pots are identical to plants, which are usually used as the interior decoration to beautify the room. However, sometimes people do not pay adequate attention to watering plants, so it can affect the plant. Therefore, a tool was made using a soil moisture sensor and then connected to the Df-Player which can remind users to constantly maintain the viability of the plant by watering it to keep the soil moist. This tool is designed to be able to run automatically which is controlled from the microcontroller. It uses an energy source through the power supply. This tool will automatically sound when the soil moisture is insufficient and will sound again when the soil moisture is sufficient.

Due to the current transition season and the La Nina phenomenon, which results in mosquito breeding increasing rapidly, it has an impact on increasing the risk of DHF (Dengue Fever). Therefore, we innovate to combine these tools which are usually used only as home interiors, now they can be used for two functions, namely: As a reminder to protect these plants and lavender flowers as mosquito repellent plants so that the environment is free from the diseases caused by mosquitoes. The research method used is a development research method where the researcher limits the research procedure to the initial product/ prototype development stage. This product is expected to help in plant care while preventing diseases caused by mosquitoes such as dengue haemorrhagic fever.

Key words: Vase, Soil Moisture Sensor, DfPlayer, Anti-mosquito Plants