

ABSTRACT

DESIGN AND DESIGN OF A SOIL PH AND MOISTURE MONITORING SYSTEM IN CALIFORNIA PAPAYA ORGANIZATIONS BASED ON THE INTERNET OF THINGS (IOT)

By
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Agriculture is the main sector of the Indonesian economy, meaning that agriculture is the main sector which contributes almost half of the economy.

Papaya is a plant that has properties and benefits for every part of the plant.

Humans use everything from roots to leaves, fruit, seeds, and juice.

Papaya roots can be used as an anthelmintic and prevent the risk of kidney stones, high blood pressure and rheumatism. Papaya leaves are used as a blood pressure regulator, a medicine for dengue fever, stomach ache during menstruation, anemia, and a medicine for colds. Papaya fruit contains many vitamins such as vitamins A, B1, and C, and papaya fruit also contains dietary fiber and minerals.

Papaya seeds can be used as a treatment for parasites. The juice can be used as a medicine for burns and itching on the skin, as well as a meat tenderizer.

10 Generally papaya grows best at an altitude of 200 to 500 m and a temperature of 25 to 30°C. Therefore, the researchers are interested in further developing the research entitled "Design of a Monitoring System for pH and Soil Moisture in California Papaya Plantations Based on the Internet of Things (IoT).

” The entire system can be identified from the test results. If the soil humidity is 60%, the pump will turn off while the pH sensor is above pH 6.0 and pH 3.5.

Keywords : application, Ph, Humidity, Pawpaw