DESIGN AND CONSTRUCTION OF A SHALLOT SPRAYING DEVICE USING A PUMP SYSTEM WITH REMOTE CONTROL

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ABSTRACT

Shallots (Allium ascallonicum L.) are horticultural plants that are often used

in cooking and traditional medicine. In Indonesia, there has been a significant

increase in shallot production, one of which is in East Java as one of the main

contributors. Watering is an important element in ensuring optimal growth and

quality of shallot bulbs, which although do not require much water, must still be

done intensively 1-2 times until harvest to prevent rot. Currently, watering is still

done manually by farmers, although some have used non-manual technology such

as diesel engine pumps, batteries, and solar panels.

This study aims to design a shallot sprinkler that can be operated remotely

without the need for direct human power. As a result, this tool is able to water

without using human power, providing higher efficiency and effectiveness in

shallot cultivation for farmers.

Key word: Bawang merah, sistem penyiraman, sistem pendorong, Desain

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