

Design of Control Unit for Fertilizer Decomposition

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Abstract: *The design and optimisation of a control device for tracking the decomposition of organic material into fertiliser is the main goal of this research study. The system uses temperature, moisture, and humidity sensors to control important variables in real-time with the goal of producing high-quality fertiliser, accelerating decomposition, and using less energy. By integrating sensors, developing algorithms, testing, and analysing theoretical data, the control unit is designed to improve agricultural sustainability by offering an advanced tool for composting process monitoring and control*

Keywords: control device, decomposition monitoring, organic material, fertilizer production, sustainability