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Plant Height Automation

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Abstract: Plant height plays a crucial role in the growth and development of plants, and maintaining optimal plant height is essential for maximizing crop yields and quality. Automation technologies offer a promising solution to efficiently monitor and control plant height, particularly in hydroponic or soilless cultivation systems. This abstract presents a methodology for plant height automation that focuses on the supply of nutrient solution based on real-time height measurements. The methodology involves selecting and installing appropriate sensors, calibrating the sensors, defining height thresholds, connecting the sensors to an automation system, programming the system to trigger nutrient supply adjustments, and continuously monitoring and fine-tuning the process. By automating the nutrient supply based on plant height measurements, growers can create an optimized growth environment, promoting consistent plant growth and improving overall crop productivity. The abstract highlights the significance of plant height automation and provides a roadmap for implementing an effective automation system for precise nutrient management in plant cultivation

Keywords: Plant Height, Raspberry pi3, Water Pump

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