



# AUTOMATIC PLANTS WATERING SYSTEM

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## **ABSTRACT**

Watering is the most importance cultural practice and most labor intensive task in daily greenhouse operation. Watering system ease the burden of getting water to plants when they need it. Knowing when and how much water is importance aspect of watering proceses. To make the gardener work easily , the automatic plants watering system is created. This project uses automatic plant that will pour in post.

This project uses Arduino board , which consists ATmega328 Microcontroller. It is program in such way that it will sense the moisture level of the plants and supply the water if required. This type of system is often used for general plants care as part of caring for small and large gardens. Normally the plants need to be watered twice daily, morning and evening. So the microcontroller has to be coded to water the plants the plants in the greenhouse about two times per day. People enjoy plants, their benefits and the feeling related naturing them. To accommodate this challenge we have develop a prototype which make plants more self-sufficients, watering itself from a large water tank and provide itself with artificial sunlight. This project was made success. It can functional as Automatic watering system and can watering the plant at pot 1 also pot 2.

## CHAPTER 1

### INTRODUCTION

#### 1.1 Background of study

Irrigation is the artificial application of water to land or soil surface. This is used to assist in the growing. The project that we design is an automatic watering system to ensure that the plant are still in good condition. We know that most people do not pour the water on plant when they go for vocation. Therefore the plant get wilt and not grow nicely. This project only use in small scale and we have pipe with water pump to pour the plant. We using servo to operate using certain angle.

Good plants can transpire a many of water, bringing about expansion in the humidity the greenhouse air. High humidity (over 80-85%) tought to be keep away from on the grounds that it can expand the occurrence of wilt and decrease plant transpiration. The utilization of cooling framework is build the greenhouse air moistness. Greenhouse found in dry, dessert situations advantage extraordinarily from dissipating cooling framework on the grounds that extensive measure of water can be dissipated into air and bringing about dropping of temperature.

Since the relative humidity alone does not let us know anything about irrefutably the water holding limit of air, an alternate estimation is at some point used to depict without a doubt the dampness of soil. The vapor weight is a measure distinctive between sum dampness the air contain at a given minute and the measure of humidity it can hold at that temperature when air soaked. This can let us know how simple it is for plant to transpire. Higher estimations of fortify transpiration can result in withering and low values restrain transpiration and can lead the buildup on leaf and nursery impact.