

**PAPER TITLE :-** ARDUINO BASED AUTOMATIC PLANT IRRIGATION SYSTEM WITH MESSAGE ALERT

**DATE:-**

**JOURNAL/CONFERENCE:-**

**AUTHOR:-**

**PROBLEM MENTIONED/SOLUTION OBTAINED:-** Whenever we go out of town for few days, we always used to worry about our plants as they need water on regular basis. So here we are making Automatic Plant Irrigation System using Arduino, which automatically provides water to your plants and keep you updated by sending message to your cell phone. In This Plant Watering System, Soil Moisture Sensor checks the moisture level in the soil and if moisture level is low then Arduino switches On a water pump to provide water to the plant. Water pump gets automatically off when system finds enough moisture in the soil. Whenever system switched On or off the pump, a message is sent to the user via GSM module, updating the status of water pump and soil moisture. This system is very useful in Farms, gardens, home etc. This system is completely automated and there is no need for any human intervention. The main concept behind the project is receiving the sent sms and Processing it further as required to perform several operations. The type of the operation to be performed depends on the nature of the SMS sent

**ALGORITHM USED:-**

Agromate is just like a mobile phone  
Will support GSM SIM from any provider  
Users can choose the provider that gives better signal  
Agromate can be operated from any mobile phone  
Supports GSM, CDMA and Land line  
Android application for smart phones

**TOOLS USED/IMPLEMENTED:-**

SOIL MOISTURE SENSOR

WATER COOLER PUMP

LCD 16X2

TRANSISTOR BC547

GSM MODULE

### **RESULTS AND DISCUSSION:-**

Low power consumption.

Global range

Easy to operate

Flexible to run at specific intervals

### **KNOWLEDGE AQUIRED:-**

### **IMPORTANT REFERENCE:-**