

# **FERTILIZER DRONE**

A Project report submitted

In partial fulfillment of the requirements for the award of the degree of

**BACHELOR OF TECHNOLOGY**

**IN**

**ELECTRONICS AND COMMUNICATION ENGINEERING**

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2015-2019

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**CERTIFICATE**

This is to certify that project work is entitled “**FERTILIZER DRONE**” in partial fulfillment for the degree of bachelor of technology in ELECTRONICS AND COMMUNICATION ENGINEERING, at AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY, MAKAVARAPALEM, VISAKHAPATNAM is an benefited work carried out by K.HYMAVATHI, K.BHAVANI, M.RITHWIK ADITYA MANOJ, CH.PUNNARAO under the guidance and supervision during 2015-2019.

**PROJECT GUIDE**

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## ABSTRACT

Indian agriculture needed production and protection materials to achieve high productivity. Agriculture fertilizer and chemical frequently needed to kill insects and growth of crops. The WHO (World Health Organization) estimates there are more than 1 million pesticide cases in every year. In that more than one lakh deaths in each year, especially in developing countries due to the pesticides sprayed by human being. The pesticide affects the nervous system of humans and also leads to disorders in body. A remote controlled UAV (Unmanned Aerial Vehicle) is used to spray the Pesticide as well as fertilizer to avoid the humans from pesticide poison.

The UAV is operated by manual flight plans and the Sprayer is manually triggered by RF controlled Nozzle. The vertical take-off and landing quadcopter is used to spray the low volume pesticide in a small area. This project describes the development of quadcopter UAV and the sprayer module. And also discusses the integration of sprayer module to quadcopter system. This model is used to spray the pesticide content to the areas that can't easily accessible by humans. The Universal Sprayer system is used to spray the liquid as well as solid contents which are done by the universal nozzle.