

FULLY AUTOMATED PESTICIDE SPRAYER FOR ARECANUT TREES USING IMAGE PROCESSING AND MICROCONTROLLER

(Sponsored by KSCST, Bangalore)

PROJECT REPORT

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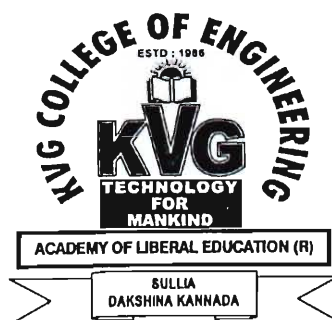
ELECTRONICS AND COMMUNICATION ENGINEERING

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ABSTRACT

Pest and weed control are invariably some of the most important techniques which offer a farmer with high yield and increased productivity. Spraying pesticides to areca nut trees has become a difficult task these days as it requires skilled manpower.

This project is aimed at increasing areca nut productivity by automatically spraying pesticides and thereby reducing the requirement of manpower. The system captures the image of the areca nut bunch processed to define the boundaries of the bunch. The pesticides are sprayed only to these areas. It is a solution for the requirement of skilled manpower.

This project brings out a new prototype in which the bunch of areca nut is detected using image processing in MATLAB and pesticide is sprayed automatically under the control of microcontroller.