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Sensing Technology for Detecting Insects in a Paddy Crop Field Using Optical Sensor

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Abstract

This paper proposed a system which is to detect insects in a paddy crop field. Today we are living in the twenty-first century where computer vision is playing important role in human life. Computer vision provides image acquisition, processing, analyzing, and understanding images and, in general, high quality image from the real world in order to produce numerical or symbolic information, in the forms of decisions. It provides not only comfort but also efficiency and time saving. Today satellites are used as computer vision https://link.springer.com/chapter/10.1007/978-981-10-3932-4_20 technology; by analyzation of the satellite images, it gives the information to the user. But this is only applicable for scientific level research laboratory because the cost of this type of devices is very high and not suitable for using in a farm field. So here we design a system, which detects insects in a farm filed and population estimation of insects in a farm field. The objectives of this paper are to control pests in a farm field and a healthy crop yielding for increased food production.

Keywords

MATLAB image-processing tool

Object detection Object extraction

Paddy field insects

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