



**INFORMATICS
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INFORMATICS INSTITUTE OF TECHNOLOGY

In Collaboration with

UNIVERSITY OF WESTMINSTER

**Identify Diseases Of Coconut Trees Using Images Processing
And Deep Learning
(Coconut_Doc)**

Final Project Report By

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ABSTRACT

Weligama Coconut Leaf Wilt disease (WCLWD) is a phytoplasma disease that affects coconut trees in Sri Lanka but is only found there, in the Southern Province, far from the country's main coconut production region. It might seriously harm Sri Lanka's coconut sector if it spreads to the main coconut growing region. To remove the illness and, more crucially, stop its spread to vital coconut-growing regions, the government launched a disease control campaign. Lack of a precise and dependable approach for detecting damaged palms is the program's main limitation. Although farmers are often not convinced of the strategy for resisting palm removal, visual symptoms are employed to identify the damaged palms for removal.

The goal of this work is to create an automated way to identify this disease using techniques for image processing that may be used to determine whether or not a disease is affected. The use of a convolutional neural network to take data from leaves and the technique selection, together with the prediction of illness degree, are the main components of this study.

Keywords : Phytoplasma , weligama coconut leaf wilt disease ,CNN, image processing