



**INFORMATICS
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**In Collaboration with UNIVERSITY OF
WESTMINSTER**

**ORCHID PLANT DISEASE DETECTION USING
DEEPLARNING**

Luwis Fernando

Supervised by Mr. Sriyan Fernando

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Abstract

The Orchid Plant Disease Identification System is an advanced solution that combines disease detection, stage identification, and fertilizer recommendation for orchid plants. Machine learning algorithms, the system enables growers to accurately identify diseases in orchids, determine the stage of the disease, and receive personalized fertilizer recommendations.

Using deep learning models, the system analyzes images of orchid plants to identify common diseases such as fungal infections, viral diseases, bacterial infections, and nutrient deficiencies. Additionally, it assesses the severity and progression of the detected diseases, categorizing them into early, moderate, or advanced stages. This information allows growers to take timely action and apply appropriate treatments.

Furthermore, the system provides customized fertilizer recommendations based on the specific disease, its stage, and the nutritional requirements of the orchid plant. Tailoring the fertilization plan promotes optimal recovery and prevents nutrient imbalances.

With its user-friendly interface accessible through mobile, the Orchid Plant Disease Identification System offers a good experience for growers. By integrating disease detection, stage identification, and fertilizer recommendation, this system empowers orchid growers to effectively manage plant health and improve overall yields.