GREEN TEA LEAVES DISEASEANALYSER: WEB BASED DISEASE DETECTING AND SOLUTIONS PROVIDING SYSTEM

W.A.Supeshi Wedagedara

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Business School Informatics Institute of Technology, Sri Lanka in collaboration with University of Westminster, UK

Abstract

Millions of people in Sri Lanka depend on the tea business for employment and revenue, making it a key component of the nation's economy. However, the sector hasrecently been dealing with a variety of issues that have reduced productivity and quality, which is significant. These difficulties include a lack of resources, a lack of focus, and expensive manufacturing expenses. The appearance of diseases in tea leavesis one of the biggest issues the tea business has to cope with. These diseases can have a deleterious effect on plant health and crop production, resulting in lower yields and worse-quality tea. Researchers have developed an automated and economical method for diagnosing diseases in tea leaves using image processing and machine learning approaches to address this issue. The suggested system would examine pictures of tea leaves and search for any indications of illness or sickness using computer vision techniques. Using this data, a web application would be created that farmers may use as a stand-alone tool for disease early identification and management.

The Sri Lankan tea industry would gain from the proposed approach in a number of ways. Firstly, it would make it possible for farmers to identify and control problems in their tea plantations early on before they have a chance to spread and do serious harm. Higher yields and higher-quality tea would result from this. Farmers would also be able to lessen their reliance on chemical pesticides, which can harm the environment and result in health issues for employees, by employing an automated system. Additionally, the automated system would save time and labor costs, as well as increase efficiency and accuracy in disease detection. By using this system, farmers can take proactive measures to protect their crops, which ultimately leads to a more sustainable and profitable tea industry for Sri Lanka.