IJARSCT





International Journal of Advanced Research in Science, Communication and Technology

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 5, Issue 6, June 2025



Plant Disease and Pests Control System

Asst. Prof. G. M.Dahane¹, Nawade Chaitanya Prakash², Nehe Harish Babasaheb³, Rushikesh Namdev Autade⁴, Sanket Mhalsakant Shelke⁵

> Asst. Prof. Department of Information Technology¹ Students, Department of Information Technology ^{2,3,4,5,6} Dr. Vithalrao Vikhe Patil College of Engineering, Ahmednagar

Abstract: India is an agricultural nation, with over 70% of the population relying on agriculture. Agriculture provides one-third of our national GDP. Numerous crop illnesses are costing farmers money, and when the cultivated area is large, it becomes tiresome for growers to frequently check the crop. Therefore, the detection of plant diseases is crucial in the sphere of agriculture. The loss resulting from crop diseases that negatively impact crop quality and output depends on timely and precise disease detection. Plant loss from illness and needless medicine use can both be decreased with early identification and action. Previously, image processing was used for automatic plant disease identification. The machine learning mechanism and image processing tools are suggested for the detection and categorization of diseases. Several phases of image processing, including picture capture, pre-processing, feature extraction, classification, illness prediction, and fertilizer suggestion, will be used to identify crop disease.

Keywords: Classification, Feature Extraction, Image Global Features, Image Processing, Machine Learning



