Medicinal Plant Identification using Machine Learning Algorithm

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Abstract*: The identification of medicinal plants plays a crucial role in various fields including pharmacology, traditional medicine, and biodiversity conservation. Traditional methods of plant identification are often time-consuming, labor-intensive, and require expertise in botanical taxonomy. In recent years, the application of Convolutional Neural Networks (CNNs) has shown promising results in automating the process of plant species recognition. This paper provides a comprehensive review of recent advances in medicinal plant identification using CNNs. This study discuss the methodology, challenges, and opportunities associated with CNN-based approaches, as well as their potential applications in pharmacological research and healthcare. Furthermore, we highlight key datasets, architectures, and performance metrics used in CNN-based plant identification systems. Finally, we identify future research directions and potential areas for improvement in this rapidly evolving field*

Keywords: Medicinal plants, Convolutional Neural Networks, Plant identification, Image classification, Pharmacology, Traditional medicine

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