

A Portable and User Friendly Plants Recognition System

TECHNOLOGY DESCRIPTION

This technology is an automated plant recognition system using combination of two image processing methods based on shapes and colour.

TECHNOLOGY FEATURES

This technology is beneficial to agricultural and medicine industries; and coleus plants which functions as tranquilizer. A combination of two methods will form feature vectors which then, will be classified using various Neural Network (NN) methods and Support Vector Machine (SVM). This method overcomes limitations faced by botanists in plant recognition. This technology is also developed into apps in smart phone.

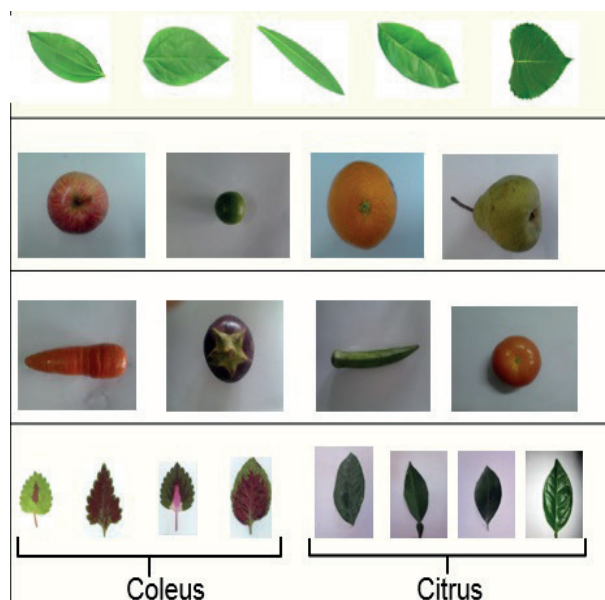
ADVANTAGES

- Overcomes limitations faced by botanists
- Portable
- User friendly
- Mobile Application in Smart Phone (Android/iPhone)

INDUSTRY OVERVIEW

Prospect: Herbal Supplements and Remedies Producers, Functional Food Manufacturers

The potential customers would be producers or manufacturers of herbal supplements and remedies; as well as functional food. The global herbal supplements and remedies market is projected to reach US\$115 billion by 2020 driven by growing adoption of preventive care as a safe and effective strategy to improve health and wellbeing. Factors such as increasing health awareness, exposure to health and beauty, studies supporting positive effects of herbal remedies are some of the factors driving growth in this market. The global herbal medicine market is also on the growth due to consumers demand for herbal and botanical products in multi-formula, combo packs and chewable tablets & capsules. Increased consumption of functional foods fortified with herbal ingredients, usage of herbs in the prevention of health issues, and the guidelines commissioned related to Current Good Manufacturing Practices (CGMP) for dietary supplements by FDA are anticipated to augment the herbal medicine demand in the future.



Assoc. Prof. Dr. Siti Anom Bt. Ahmad
Faculty of Engineering