Abstract

Human has a duty to preserve the nature. One of the examples is preserving the ornamental plant. Huge economic value of plant trading, escalating esthetical value of one space, and medicine efficacy that contained in a plant are some positive values from this plant. However, only few people know about its medicine efficacy. Considering the easiness to obtain and the medicine efficacy, this plant should be an initial treatment of a simple disease or option towards chemical based medicines. In order to let people get acquaint, a system that can proper identify this plant is needed. Therefore, this work proposes to build a system based on Redundant Discrete Wavelet Transformation (RDWT) through its leaf. Since its character is translation invariant that able to produce some robust features to identify ornamental plant. This system was successfully resulting 95.83% of correct classification rate.

References

- Park Jinkyu, Hwang Eenjun, Yunyoung Nam, "Utilizing venation features for
- Sweldens Wim, "Wavelet and the lifting scheme: a 5 minute tour”.
- Hsu Chih-Wei, Chang Chih-Chuang, Lin, Chih-Jen, "A practical guide to support vector classification”, Department of Computer Science National Taiwan University, Taiwan, 2010.

Index Terms

Computer Science  Pattern Recognition

Keywords

Wavelet Transform  SVM  Leaf Identification  Redundant Wavelet