

## **A texture-based approach for content based image retrieval system for plant leaves images**

### **ABSTRACT**

Image identification of plant leaves based on human vision is difficult task as well as plant identification based on keywords retrieval. It requires the domain knowledge in the botanist field. This work proposes the image texture analysis using Discrete Wavelet Transformation (DWT) and combined with an entropy measurement to identify a query image to one of seven classes that consists of 280 plant leaves images. The experimental results show that the proposed method yields higher correctness retrieval accuracy rate which reaches up to 92% compared to the Gray Level Co-occurrence Matrix (GLCM) that gives 49.28%.

**Keyword:** Content based image retrieval; Discrete wavelet transformation; Texture retrieval