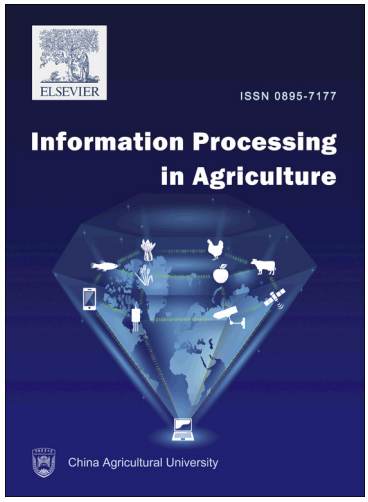
Accepted Manuscript



Detection of Plant Leaf Diseases Using Image Segmentation and Soft Computing Techniques

Vijai Singh, A.K. Misra

PII: S2214-3173(16)30015-4
DOI: http://dx.doi.org/10.1016/j.inpa.2016.10.005
Reference: INPA 67

To appear in: *Information Processing in Agriculture*

Received Date: 2 March 2016
Revised Date: 1 October 2016
Accepted Date: 31 October 2016

Please cite this article as: V. Singh, A.K. Misra, Detection of Plant Leaf Diseases Using Image Segmentation and Soft Computing Techniques, *Information Processing in Agriculture* (2016), doi: http://dx.doi.org/10.1016/j.inpa.2016.10.005

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

ACCEPTED MANUSCRIPT

Detection of Plant Leaf Diseases Using Image Segmentation and Soft Computing Techniques

Vijai Singh[1], Prof A. K. Misra[2]

[1]*Computer Science Department,*

IMS Engineering College, Ghaziabad, U.P., India

E- mail : vijai.cs@gmail.com

[2]*Professor Computer Science & Engg. Department*

MNNIT Allahabad UP, India

Abstract

Agricultural productivity is something on which Economy highly depends. This is the one of the reasons that disease detection in plants plays an important role in agriculture field, as having disease in plants are quite natural. If proper care is not taken in this area then it causes serious effects on plants and due to which respective product quality, quantity or productivity is affected. For instance a disease named little leaf disease is a hazardous disease found in pine trees in United States. Detection of plant disease through some automatic technique is beneficial as it reduces a large work of monitoring in big farms of crops, and at very early stage itself it detects the symptoms of diseases i.e. when they appear on plant leaves. This paper presents an algorithm for image segmentation technique which is used for automatic detection and classification of plant leaf diseases .It also covers survey on different diseases classification techniques that can be used for plant leaf disease detection. Image segmentation, which is an important aspect for disease detection in plant leaf disease, is done by using genetic algorithm.

Keywords: Image processing; Genetic algorithm; plant disease detection; classification

Download English Version:

https://daneshyari.com/en/article/8875394

Download Persian Version:

https://daneshyari.com/article/8875394

Daneshyari.com