Abstract

Segmentation is a main process in the object recognition. Many times success of object recognition process depends on the precision of segmentation. The application of image processing technology, in the agricultural research, has made significant development [1]. With the advance processing capacity, soft computing and computer has attracted it as an alternative to human work [2]. In this paper, application of BPNN is plaid for segmenting gerbera flowers
from offline Polyhouse images. Image segmentation is the foundation of many image analysis problems; any segmentation method with precision can positively influence the analysis process. [3] The agriculture images are subject to more complexities to process as they contain different size; shape objects and suffers from illumination, noise making segmentation more erroneous. The current study uses offline images captured from the natural scene of Polyhouse at arbitrary time. The flowers are segmented using Back propagation neural network. Total 30 images are used in the experiment where 10 images are used as training set and 20 images are used for testing data set. The input vector for the BPNN consist the color feature vector in form of R, G, B values extracted from every pixel, and BPNN classification divides the pixels into non flower pixel or flower pixel regions, giving segmentation.

References

- F. Mendoza, P. Dejmek, and J. M. Aguilera, &quot;Predicting Ripening Stages of Bananas (Musa cavendish) by Computer Vision,&quot; no. 1, 1997.
- M. Soltani and M. Omid, &quot;A New Mathematical Modeling of Banana Fruit and Comparison with Actual Values of Dimensional Properties,&quot; vol. 4, no. 8, pp. 104–113, 2010.
- F. Cointault and P. Gouton, &quot;Texture or Color Analysis in Agronomic Images for

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