

عنوان مقاله:

To Present Method for Rice Variety Identification with Fuzzy- imperialist Competitive Algorithm

محل انتشار:

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خلاصه مقاله:

Digital image processing in recent decades has made considerable progress in theoretical and practical aspects. Nowadays, machine vision techniques have important application in the field of agriculture. One of these applications is detection of different varieties of rice from the bulk sample of rice image. These techniques also have high speed, accuracy and reliability. Texture feature selection is one of the important characteristics used in pattern recognition. The better feature selection of a feature set usually results in better performance in a classification problem. In This work we try to extract features by using co_occurrence matrix and select the best feature set for classification of rice varieties based on image of bulk samples using hybrid algorithm which is called fuzzy_ imperialist competition and then classify the best features using support vector machine (SVM). Results of the proposed method showed, the classification accuracy is improved to 96/79%. The feature set which is selected by the fuzzy-ica provides the better classification performance compared to that obtained by Imperialist competition algorithm.

کلمات کلیدی:

Fuzzy-Imperialist Competition Algorithm, Texture Feature, Co_Occurrence Matrix Support Vector Machine

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