Abstract

Feature selection plays an important role in pattern recognition. The better selection of a feature set usually results the better performance in a classification problem. This work tries to select the best feature set for classification of rice varieties based on image of bulk samples using imperialist competition algorithm. Imperialist competition algorithm is a new evolutionary optimization method that is inspired by imperialist competition. Results showed the feature set selected by the imperialist competition algorithm provide the better classification performance compared to that obtained by genetic algorithm technique.
Systems, vol. 24, pp. 1024-1032
- S. J. Mousavi Rad, F. Akhlaghian, K. Mollazade, 2011, Classification of rice varieties using optimal color and texture features and BP Neural Network, The 7th Iranian Conference on Machine Vision and Image Processing, Iran University of Science and Technology.

Index Terms
Computer Science Pattern Recognition

Keywords
Imperialist competition algorithm feature selection bulk rice classification support vector machine