

Classification of Myanmar Rice using Back Propagation Neural Network

Thu Zar Win, Wint Aye Khaing

Computer University (Taungoo)

thuzarwin.cu@gmail.com, wintayekhaing5@gmail.com

Abstract

Neural networks(NN) are a very popular data mining, classification, and image-processing tool. In this paper, neural network model is used to classify the specific features of rice. The purpose of rice grading is to ensure that the rice produced for the market meets the quality requirements of consumer and to help the experts whose decision process will benefit for grading of the product. The grading of rice is important in the rice production industry because rice quality affects the price and market demand. The purpose of this paper is to design a NN model for rice grading based on the type of rice (Emata, Zeera, Ngasein) and to show the accuracy of NN based on mean square error. Rules are extracted from trained datasets and these rules are used for grading of rice. There are 300 data in the dataset. These data are the features of rice that are received from the Department of Consumer Affairs, Ministry of Commerce.