

ABSTRACT

Honeydew is one of the fruits which has a special charm in the community, consequently, it gives prospects to farmers. However, besides promising prospects, it causes problems with pest or disease. With the problem of disease in honeydew, an expert is needed to overcome these problems, however, not all experts can reach all honeydew farmers to overcome various diseases in honeydew plants, thus, it needs a system to bridge experts to honeydew farmers. The purpose of this study is to find out how to create an expert system for early detection of disease in web-based Fruit Honeydew plants using Naive Bayes Classifier. Naive Bayes Classifier is a classic method with a simple concept of probability. However, Naive Bayes Classifier provides quite good performance for many modern cases with large data. The Naive Bayes Classifier method states how far the degree of subjective trust must change rationally when there are new clues. In systematic interpretation, this theorem explains inverse representation of probability of two events. The results of the research on the diagnosis of honeydew plant disease using the Naive Bayes Classifier method explain that the system can provide recommendations to farmers regarding diseases of the honeydew plant based on the symptoms included in the system. The process of applying the Naive Bayes Classifier method for classification of honeydew plant diseases uses the calculation of data text. The classification test uses 120 training data and 8 test data which results a percentage of truth value of 75%, therefore, the application can be used to diagnose honeydew plant disease.

Keywords: Naive Bayes Classifier, Diagnosis, Melon Plant.