

Decision Support System To Determine Disease In Guava Kristal Using The Simple Additive Weighting Method

I Gede Wiryawan, S.Kom., M.Kom. (*Supervisor*)

Fadhila Dwi Kurniawan

Study Program of Informatics Engineering
Majoring of Information Technology

ABSTRACT

Determining disease is one of the important aspects for the development of an agriculture, one of which is detecting disease early on plants on an agricultural land owned by Mr. Subagio which is a means of guava cultivation. Disease can cause problems such as crop failure, product quality, unmet market needs, and loss of capital for business actors, namely Mr. Subagio. The method for processing disease data and disease criteria on guava uses the Simple Additive Weighting method. This method was chosen because the sample data in this study was in accordance with the concept of simple additive weighting. The basic concept of Simple Additive Weighting (SAW) is to find a weighted sum of performance or criteria for each alternative on all attributes. The simple additive weighting method requires the process of normalizing the decision matrix (X) to a scale that can be compared with all existing alternative ratings. Based on these problems, a system was created which used the Simple Additive Weighting (SAW) method. The criteria used in the system are 5 and 7 diseases. From several experimental results obtained 100% of the testing between the application of the method on the system with excel, 100% of the functional testing using the black box testing method.

Key Words: Disease, Simple Additive Weighting Method, Criteria.