

Universiti Teknologi MARA

**Classification of Flower Plant Diseases
by using Rule Based Technique**

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**Thesis submitted in fulfilment of the requirements
for
Bachelor of Information Technology (Hons.)
Information Systems Engineering
Faculty of Computer and Mathematical Sciences**

January 2017

STUDENT DECLARATION

I certify that this report and the project to which it refers is the product of my own work and that any idea or quotation from the work of other people, published or otherwise are fully acknowledged in accordance with the standard referring practices of the discipline.

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FEBRUARY 10, 2017

ABSTRACT

The objective this research was to classify flower plant diseases by implementing Rule Based technique. There were several types of flower plants and diseases were conducted for this research which were six types of flower plants and seven types of diseases. Orchid, Hibiscus, Sunflower, Roses, Daylily and Jasmine were the six types of flower plant while black spot, insects, leaf spot, mildew, microorganism, rust and sooty mold were the diseases that are covered in this research. This system consisted of two users or actors which interact within it which were the owner of Rumpun Damai Nursery itself and the staff. Currently, the management of the nursery regarding the diseases infected to the plant are unorganized. This was because of some factors such as lack of knowledge regarding the flower plant diseases among the owner and staff at the nursery. Therefore, in order to solved those problem, the objective have been identified that lead to the conducting of this research. This classification system can help the owner and staff at Rumpun Damai Nursery to identify flower plant diseases. In order to apply Rule Based technique in this research, the data regarding the flower plant and diseases need to gathered first and undergo preprocessing method. The picture of flower plants that infected to diseases from the Nursery also undergo the image processing method by using Matlab tools to identify the attribute symptoms. This system applied Waterfall Model methodology as the framework to supervise all the process. The result of this research was a prototype system that can identified the diseases been infected by the flower plants with the list of symptoms showed the diseases.

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