

**EXPERT SYSTEM TO DIAGNOSE DISEASES  
IN ACACIA PLANTS USING  
FORWARD CHAINING METHOD  
(CASE STUDY: PT. BUKIT BATU HUTANI ALAM)**

*Name of student* : Nursila Marlinda  
*Student Id Number* : 6304201231  
*Supervisor* : Ryci Rahmatil Fiska, M.Kom

***ABSTRACT***

*Acacia is one of the plants that is susceptible to disease, therefore fast and precise handling is very important to maintain the quality of this plant. The lack of understanding of workers to be able to diagnose plant diseases without the help of an expert is a major problem in finding alternative solutions. Therefore the author wants to build an expert system that can be a solution to this problem. Through an expert system, the knowledge possessed by an expert is poured and utilized in the form of a diagnostic system so that it can help workers to find out what types of diseases attack acacia plants, without having to wait and expect an answer directly from the expert or experts. In this research, the author uses the Forward Chaining method. The Forward Chaining method is a search method or forward tracking technique that starts with existing information and combines rules to produce a conclusion or goal. So that workers who see symptoms experienced by acacia plants can immediately take action. From this system, an expert system is produced that is able to imitate the work of experts to diagnose acacia plant diseases and provide solutions to these diseases.*

***Keywords*** : *Acacia, Forward Chaining, Expert system, Plant Diseases.*