

## ***ABSTRACT***

*Diagnosis of pest and diseases on melon plants made by farmers is still manually, namely by reporting the symptoms that appear on melon plants to agricultural experts. This makes it difficult for farmers to take solutions to melon plants that are attacked by pests and diseases without an expert, causing crop failure. Based on these problems, an experts system was built that could be used by farmers to diagnose. In building an expert system, a method is needed, one of which is the certainty factor method used to solve problems whose answers are uncertain such as diagnosing disease. By utilizing the development of technology in the form of an expert system , it is hoped that it can help in making solutions to existing problem.*

*Keyword : pest and disease, melon, expert system, certainty factor*