Expert System for Diagnosing Pests and Diseases of Oyster Mushrooms Using Certainty Factor

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ABSTRACT

The inspection of oyster mushroom pests and diseases is currently less considered by mushroom farmers, which makes oyster mushrooms in sacks easily affected by diseases. The thing that makes farmers and mushroom producers and the community difficult to deal with is the lack of knowledge and understanding of pests and diseases of oyster mushrooms and do not know what to do without an expert. The diagnostic process for diseases and pests in oyster mushrooms cannot be done by random people. Based on the farmers' problems, the researchers want to build an expert system to diagnose diseases and pests in oyster mushroom plants on the Internet. The method used is to use certainty factor, which uses the confidence factor of an expert as the basis for inference or calculation in making decisions. The variables used by the researchers are 4 types of diseases and 4 types of pests that commonly attack oyster mushroom plants based on research from several existing journals and previously conducted. Expert systems are widely used in the world of health to diagnose diseases or pests that attack, one of which is diseases and pests in oyster mushrooms. By using algorithms and programming languages on computers and a knowledge base of symptoms of pests and diseases in oyster mushroom plants by oyster mushroom experts, the system will be able to work which is able to diagnose diseases and pests in oyster mushrooms.

Keywords : oyster mushroom pests, oyster mushroom diseases, expert system, certainty factor