

**Sistem Pakar Diagnosa Hama dan Penyakit pada Jamur Tiram Metode
Forward Chaining (Studi Kasus PT Mitra Jamur Indonesia) Expert System for
Pest and Disease Diagnose in Oyster Mushroom Forward Chaining Method
(Case Study of PT Mitra Jamur Tiram Indonesia)**

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ABSTRACT

The large number of businesses managed by PT Mitra Jamur Indonesia makes business processes more complex, causing several problems. Based on the results of an interview with Mr. Andriansyah as a mushroom expert at PT Mitra Jamur Indonesia, it was found that one of the problems that farmers often consult is about pests and diseases, farmers are often confused about dealing with pests and diseases due to a lack of knowledge about oyster mushrooms. Therefore, an expert system is built that uses the Forward Chaining method which will provide a way of handling pests and diseases as well as handling and prevention based on the condition of oyster mushrooms after handling based on data that has been validated by experts. The expert system was developed using the PHP programming language with the Laravel framework and the Postgres database on the Backend and Javascript and the Next.js framework on the Frontend side. This system can display the results of a pest or disease diagnosis as well as ways to handle and prevent it in the future. The Forward Chaining method in this study produces an accuracy of 88% based on expert testing. As for the results of the blackbox test, all the functionality in the system has gone well as expected.

Keywords: *expert system, forward chaining, oyster mushroom*