

**Sistem Pakar Berbasis *Android* Untuk Deteksi Hama Dan Penyakit Pada
Tanaman Jagung Menggunakan Metode *Certainty Factor***

Pembimbing (1 orang)

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ABSTRACT

Pests and diseases on corn plants are very detrimental to farmers. An android-based expert system for pest and disease detection using the certainty factor method is used to help farmers and extension workers in overcoming problems that exist in corn plants. The certainty factor method was chosen because it is suitable for use in expert systems that contain uncertainty. The system design uses UML (Unified Modeling Language) and the design design uses a prototype. The level of user satisfaction and interest in an Android-based expert system for the detection of pests and diseases on corn plants using a pieces framework. The level of conformity of the performance domain on the system is 98.76%. The level of conformity of the information and data domain on the system is 100%. The level of conformity of the domain economy in the system is 100%. The level of conformity of the control and security domain on the system is 100%. The level of conformity of the domain efficiency on the system is 96.7%. The level of conformity of the service domain on the system is 99.2%. The results of the system accuracy test using a confusion matrix with 21 test data, resulting in a prediction accuracy of 100%.

Key words: *android, certainty factor, system*