

## ABSTRAK

Nama : Resti Khairunisa  
Program Studi : Teknik informatika  
Judul : Prediksi Penyakit Pada Tanaman Cabai Berdasarkan Citra Daun  
Menggunakan Metode *Local Binary Pattern* (LBP) Dan *Support Vector Machine* (SVM)

Budidaya tanaman cabai merupakan kegiatan bertani yang berisiko sering terjadi gagal panen, akibat gangguan penyakit dan serangan hama yang menyerang tanaman saat usia tanaman 1 bulan hingga panen. Berdasarkan hal tersebut, perlu dilakukan penelitian sistem untuk mendeteksi penyakit menggunakan metode *Local Binary Pattern* dan *Support Vector Machine*. Sistem ini menyajikan 4 macam solusi dari sistem untuk mengatasi 4 macam prediksi seperti daun sehat, daun bercak, daun berlubang, dan daun keriting atau masalah mengenai tanaman cabai yang digunakan oleh para petani sebagai antisipasi dalam mengatasi penyakit pada tanaman cabai.

Kata Kunci:

Cabai, *Local Binary Pattern*, *Support Vector Machine*, Sistem, Mendeteksi

## ***ABSTRACT***

*Name* : Resti Khairunisa  
*Study Program* : Informatics Engineering  
*Title* : *Disease Prediction in Chili Plants Based on Leaf Image Using Local Binary Pattern (LBP) Method and Support Vector Machine (SVM)*

*Cultivating chili plants is a farming activity that often carries a risk of crop failure, due to disease and pest attacks that attack plants when the plants are 1 month old until harvest. Based on this, it is necessary to conduct system research to detect disease using the Local Binary Pattern and Support Vector Machine methods. This system presents 4 kinds of system solutions to overcome 4 kinds of predictions such as healthy leaves, leaf spots, hollow leaves, and curly leaves or problems regarding chili plants which are used by farmers as anticipation in overcoming diseases in chili plants.*

*Keywords:*

*Chili, Local Binary Pattern, Support Vector Machine, System, Detecting*