

## **ABSTRAK**

This project, titled "Plant Health Monitoring System," is part of the requirements for a Bachelor of Science (Honours) degree in Computer Science at Management & Science University. The system assists farmers in detecting the health of corn crops using leaf image processing with the RGB (Red Green Blue) method. This method analyzes leaf color to identify whether the plants are healthy or infected with diseases like leaf rust and leaf blight.

The project addresses farmers' lack of understanding of corn plant diseases and their prevention. The system provides clear information about the diseases and their causes, along with treatment and prevention steps. This is expected to reduce crop failure losses and improve productivity and harvest quality.

Real-time data collection is achieved through a webcam that captures leaf images, which are then processed to determine plant health based on RGB values. The system not only aids in disease detection but also offers preventive measures for future issues. The main benefits include providing quick and accurate plant health information, enabling timely action by farmers, and enhancing their understanding of plant diseases and prevention methods, thus reducing losses and improving crop yield