



BSc (Hons) in Business Information Systems
6BUIS020C – Final Year Project Report

**FloraGo – A solution to facilitate early-stage detection of
diseases and export quality validation for export floriculture**

A dissertation by

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Abstract

This research aims to develop an automated system for early-stage disease detection and export quality identification of export floriculture in Sri Lanka. The floriculture industry is one of the major sources of foreign exchange earnings for Sri Lanka, and it is essential to ensure the quality and disease-free nature of the flowers to maintain the country's reputation in the international market. The proposed system uses machine learning algorithms and computer vision techniques to detect and identify diseases at an early stage and to sort the flowers based on their quality.

The research involved collecting a dataset of images of different types of flowers at various stages of growth, with and without diseases. Various machine learning models were trained using this dataset to identify the diseases and classify the flowers based on their quality. The system was tested on a large dataset of images, and the results showed that it can accurately detect diseases and identify the quality of the flowers.

The proposed system has the potential to reduce the labor-intensive manual inspection process and provide an objective and accurate assessment of the quality and disease status of the flowers. This research could significantly benefit the floriculture industry in Sri Lanka, and the proposed system could be extended to other countries with similar agricultural practices.

Keywords: Export horticulture, Revenue generated by exports, Recommendations, Machine learning, Improvement Export income, Sri Lankan exports , Solution