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In Collaboration with

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Image Processing Based Classification of Pest Damage and Low Fertilizer Deficiencies in Scotch Bonnet

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ABSTRACT

The author was aimed to detect difference between scotch bonnet leave structure which are having symptoms that can occur from chili thrips damage and low fertilizer deficiency. The reason is to classify this symptom is to prevent humanized wrong decision which can damage the plant. The system specification design and prototype for the chili thrips damage and low fertilizer deficiencies detection in Scotch Bonnet pepper plants has been successfully implemented. The implementation has covered the core components and is functional as evident from the successful testing of the Scotch Bonnet leaves. The model results can be improved by increasing the number of data set the author will enhance this multi class classification model by applying rest of the diseased classed which can affect scotch bonnet plant.

The proposed Ml classification model is tested with sample of inseam data set and gained 0.94 for F1 score for precision gained 0.95 and 0.94 for recall. Considering these results proven the reliability of the proposed model.