

## **Silk Synergy**

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**Abstract:** *Mulberry is one of the most important agricultural commodities in the world with a number of cuisines scattered across the globe, which are incomplete without it. In developing countries like India, Mulberry has spurred agriculture driven growth in the past century, when export of agricultural produce was the major source of foreign exchange. At times, the prices face a blow from the demand side, while at times facing drastic conditions on the supply side, owing to which, the prices of the commodity have seen a drastic fall. In such years, farmers often cannot afford the services of agricultural consultants for tasks such as detection of leaf diseases and addressing them at the earliest. The solution we have proposed, is a low cost system that uses image processing to detect leaf diseases in the leaves of Mulberry plants to make things easier for both the farmers as well as consumers, since this would balance the prices at a median price, which is both profit-earning for farmers as well as affordable to the consumers at all times of the year.*

*In this project, the affected leaves are captured as images using a camera. These images are then processed further using various methods and the dominant features are extracted from them using various methods. Comparison of the features is done using various algorithms that detect the variance in color and its dominance in the recorded samples. This will help in faster and cost effective addressing of such diseases.*

**Keywords:** *Mulberry*