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# **Applications of Image Processing in Agriculture: A Survey**

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Abstract: Image processing has been shown to be a helpful tool for analysis in a variety of domains and applications. From the perspective of the farmers, metrics such as canopy, yield, and product quality were essential measures in the agriculture industry. Many times, professional counsel is not inexpensive, and the bulk of the time, the availability of experts and their services takes time. Since image processing was an excellent instrument for parameter analysis, the availability of a communication network might change the scenario of receiving expert advice in a timely and cost-efficient manner. The purpose of this study is to provide an overview of image processing applications in agriculture, such as imaging methods, weed identification, and fruit grading. When compared to traditional approaches, the parameter analysis has proven to be more accurate and less time consuming. Image processing may help enhance decision making in areas such as vegetation assessment, irrigation, fruit sorting, and so on.

Keywords: Genetic algorithm, fruit grading, fuzzy, Artificial Intelligence, Weeds Detection

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