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| Abstract |  |
| Agriculture is a cornerstone of Bangladesh's economy, with tomatoes being one of the most widely cultivated vegetables, producing approximately 368,000 tons annually. However, tomato plants are vulnerable to various diseases and pest infestations that can significantly reduce crop yield, posing a threat to farmers’ livelihoods. Early detection of these diseases, often visible through symptoms on the leaves, is critical for effective management. In this work, we present a dataset of 731 high-resolution images of tomato leaves affected by six common diseases, along with healthy samples, aimed at facilitating automated disease diagnosis using computer vision. The dataset is categorized into disease types such as Early Blight, Black Spot, Late Blight, Leaf Mold, Bacterial Spot, and Target Spot. This structured dataset offers a valuable resource for researchers developing machine learning models for disease classification and early detection. By making the dataset publicly available, we aim to accelerate research in precision agriculture and empower the development of AI-driven tools that can enhance tomato disease management, ultimately improving crop yields and supporting sustainable farming practices. | |