Plant Health Monitoring with Photos based on Deep Learning

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***Abstract*—The quality and output of agricultural products can be affected by plant diseases. To safeguard the well-being of everyone on the planet, it is crucial to identify plant diseases as soon as possible. One of the most active research areas is autonomous plant disease detection. Large agricultural fields may be monitored with its help, and it aids in spotting disease signs when they appear on leaves. Finding plant diseases that cause reduced crop loss and, as a result, increase production efficiency is the major objective of this study. With the use of a Deep Learning (DL) approach, our suggested study can identify the first signs of plant diseases and classify them based on those signs. We hope to at most attain a 97percent accuracy in the disease detection with a deep CNN technique in this approach. The model's performance as a warm-up or early advisory tool will be validated by this accuracy rate. (abstract will be updated after the conclusion of the paper)**

***Index Terms*—Plant health monitoring, plant diseases, crop, crop products, deep learning, CNN**

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