

Maturity Prediction Of Bitter Gourd Using bitter-net Dataset Documentation

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Introduction

The Bitter Gourd Classification Dataset is a collection of images used for classifying bitter gourd into three distinct maturity stages: Matured, Immature, and Partially matured. The dataset serves as a valuable resource for training and evaluating deep learning models for agricultural automation and crop management.

Dataset Description

The dataset is divided into three main folders: Train, Validation, and Test. Each folder contains subfolders corresponding to the three maturity stages: Matured, Immature, and Partially matured. The images in each subfolder represent bitter gourd samples at different stages of development.

Data Fields

The dataset includes the following subfolders:

- Train:
 - Matured: 335 images
 - Immature: 186 images
 - Partially matured: 324 images
- Validation:
 - Matured: 94 images
 - Immature: 46 images
 - Partially matured: 127 images
- Test:
 - Matured: 94 images
 - Immature: 46 images
 - Partially matured: 128 images

Data Samples



Figure 1: Sample image from the dataset

Dataset Statistics

- Total number of images: 1380
- Number of classes: 3 (Matured, Immature, Partially matured)

Conclusion

The Bitter Gourd Classification Dataset provides a valuable resource for developing and evaluating deep learning models for the automated classification of bitter gourd maturity stages. By utilizing this dataset, I contributed to the advancement of automation and management in agriculture.