Empowering Farmers with Artificial Intelligence

ImagoAI

Empowering agriculture with Artificial Intelligence!

#startupindia

NVIDIA
PESTOZ – Crop Disease Diagnosis

Infected crop found

Click photo & Upload on Pestoz

Identify disease Using PESTOZ AI engine

Get your recommendation in seconds

Select Crop                   Click Photo   Check solution

PESTOZ – Crop Disease Diagnosis

Early Blight

Cultural Control
• Use resistant or tolerant cultivars.
• Change the nursery beds location every season, eradicate weeds and volunteer tomato plants, fertilize properly.
• Avoid planting overlapping crops in adjacent area.

Chemical Control
• Spray azoxystrobin 23% SC @ 200 ml in 200 l of water/acre or
• captan 50% WP @ 1000 g in 300-400 l of water/acre or
• captan 75% WP @ 666.8 g in 400 l of water/acre or
• copper oxy chloride 50% WP @ 1000 g in 300-400 l of water/acre or
Salient Features

- **Computer vision technology** – Using computer vision, it scans the input diseases image of crop and predict the disease.

- **Single input parameter** - It doesn't require any other input parameter like temperature, soil conditions etc to detect the disease other than the image

- **Robust** – It can detect diseases in different external environment conditions.

- **Disease disambiguation** - It reduces the human bias in detecting similar looking diseases by detecting them precisely.

- **Automated process** - It is completely automated process without any human intervention.

- **Location invariant** - It can easily detect diseases across all over the world, independent of the location.

- **Scalable technology** - It is easily scalable to millions of end users without losing on accuracy.
PHENOX – Digital Phenotyping

Phenotypic Traits:
- Chilli Seed Count
- Chilli Length
- Pericarp thickness, Width, Girth
- Color Intensity

Chilli Length
Seed Count
Diameter, Girth, Pericarp

Chili Diameter = 0.82 cm

Multiple fruits in one go!
Anthracnose Severity Scoring

• Just click an image of chilli and get the severity score within seconds.
• No manual measurements required.

* Can be done for other crops & diseases.
Showing disease severity of 17.94% on Rice Blast.
Yellow shades are diseased area.
There is a bounding box in aqua color marking the boundary of the leaf in focus.
• Every phenotypic trait is linked to a seed variety, plot number, location & any other unique parameter.
• Captured data can be easily exported in an Excel format with an option to email.
Product for plot identification and plant counting in plots using UAV (Unmanned Aerial Vehicles Imagery).