

# Crop Health Monitoring Workflow: Disease & Pest Detection For Agriculture



▷ **Start**

Start of the Workflow/Process.

 **1. Get Field Scouting Report**

Retrieve existing scouting reports for a specific field.

 **2. Get Crop Growth Stage Data**

Retrieve current growth stage metrics for the monitored crop.

 **3. Get Weather Forecast Data**

Fetch localized, real-time weather data (humidity, temperature, rainfall).

 **4. Log Observed Pest/Disease**

Record detailed findings from field scouting (e.g., visible symptoms, affected area).

 **5. Generate Action Plan Entry**

Create a structured record detailing necessary interventions (e.g., pesticide application, manual removal).

## 📌 6. Assign Technician Follow-up Task

Automatically create a task for a farm technician to verify or treat a detected issue.

## ⚙️ 7. Calculate Risk Score

Execute formula based on moisture, temperature, and observed symptoms to generate a quantitative risk score.

## ⚙️ 8. Determine Intervention Timing

Calculate the optimal window for treatment based on disease lifecycle and weather patterns.

## 📄 9. Generate Weekly Crop Health Report

Compile all collected data, tasks, and calculations into a summary report for farm managers.

## ✉️ 10. Alert Stakeholders on Critical Findings

Send immediate email alerts to agronomists and owners when a high-risk pest or disease is identified.

## 📌 11. Notify Responsible Personnel

Issue immediate task notifications via SMS or platform alert to the assigned team member.

## ✍️ 12. Update Field Status

Update the master field record with the latest health assessment and action taken.

## 🏁 End

Start of the Workflow/Process.