

# Pest & Disease Pressure Mapping Checklist

#### **Planning & Preparation**

Activities to define scope, resources, and methodology before field work begins.

Project Name	
Write something	
Start Date of Mapping	
Enter date	
Total Area to be Mapped (hectares/acres)	
Enter a number	
Crop/Plant Type	
Corn	
Soybeans	
Wheat	
Other	

Objectives of the Mapping Project	
Write something	
Potential Pests/Diseases of Concern	
Corn Earworm	
Soybean Aphid	
Wheat Stem Rust	
Late Blight	
Other - Specify in Long Text	
Previous Pest/Disease Reports (if available)	
♣ Upload File	
Site Selection & Stratification	
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Site Selection & Stratification  dentifying representative areas and defining strata for mapping.	
Site Selection & Stratification  dentifying representative areas and defining strata for mapping.  Number of Sites Selected  Enter a number  Selection Criteria Used (e.g., crop type, field history)	
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Site Selection & Stratification  dentifying representative areas and defining strata for mapping.  Number of Sites Selected  Enter a number  Selection Criteria Used (e.g., crop type, field history)  Crop Type Field History	

Justification for	Site Selection	
Write something		
Stratification Fac	etors Considered	
Altitude	tors considered	
Slope		
Soil Type		
☐ Irrigation Status		
Crop Variety		
Previous Manag	ement Practices	
GPS Coordinates	s of Selected Sites	
	Set My Current Location	
Number of Strata	a Created	
Number of Strata	ı Created	

Write something	
Data Collection - Visual Assessment On-site observation and documentation of pest/disease symptoms and signs.	
Observed Pest(s)  Aphids Spider Mites Caterpillars Fungus Gnats Thrips Leaf Miners None Observed	
Observed Disease(s)    Early Blight   Late Blight   Powdery Mildew   Downy Mildew   Rust   Anthracnose   None Observed	
Percentage of Plants Affected (Estimate)  Enter a number	

Description of Sy	mptoms	
Write something		
Severity Level (Vi	sual Estimate)	
Trace		
☐ Minor ☐ Moderate		
Severe		
Critical		
Photo Documenta	tion	
△ Upload File		
Precise Location	of Observation	
	Set My Current Location	

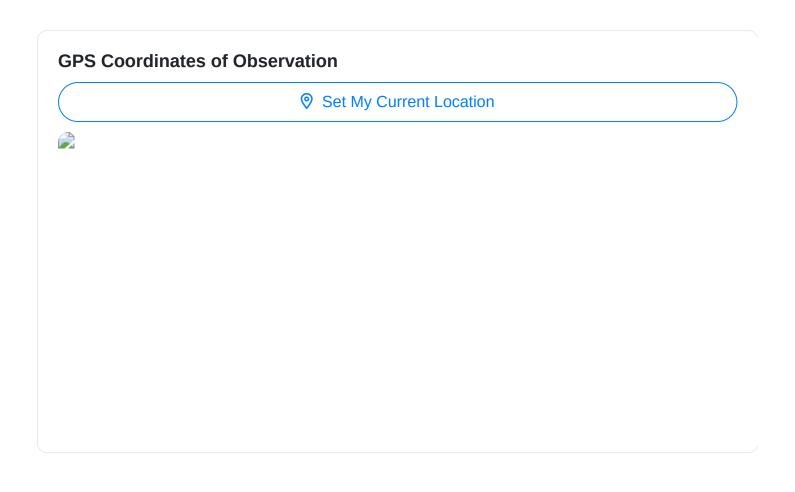
#### **Data Collection - Environmental Factors**

Gathering information on environmental conditions influencing pest and disease development.

Date of Environmental Data Collection  Enter date	
Time of Environmental Data Collection	
Air Temperature (°C)	
Enter a number	
Soil Temperature (°C) - @ 10cm depth	
Enter a number	
Relative Humidity (%)	
Enter a number	
Rainfall (mm) - Last 24 Hours	
Enter a number	
Solar Radiation (W/m²)	
Enter a number	

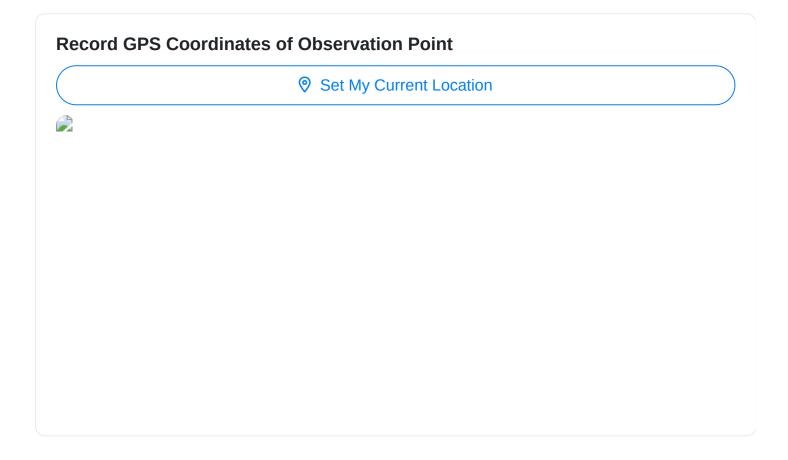
Wind Speed (km/h)
0-5
6-15
16-25
<u>26+</u>
Soil Moisture Level
Very Dry
☐ Dry
Slightly Moist
Moist
Very Moist
Data Dagawiina O Otawalawiinatian
Data Recording & Standardization
Ensuring consistent data recording across different locations and observers.
Plot/Field ID
Enter a number
Date of Observation
Enter date
Time of Observation
Time of Observation

Crop Type  Maize Wheat Soybean Rice Other	
Observed Pests/Diseases  Aphids Spider Mites Corn Earworm Powdery Mildew Rust Bacterial Leaf Spot None	
Estimated Infestation/Disease Severity (0-100)  Enter a number  Detailed Description of Symptoms/Signs  Write something	



### **Georeferencing & Mapping**

Assigning geographic coordinates to observations and creating spatial representations.



Elevation (meters)
Enter a number
Mapping Method Used (e.g., GIS, Hand-drawn)
GIS Software (Specify)
Hand-drawn Map
Other (Specify)
Attach Map Image/Screenshot
□ Upload File     □ U
25 Opioad File
Describe Map Legend and Symbol Key
Write something
Coordinate Reference System (CRS)
☐ WGS 1984
UTM
Other (Specify)
Cools of Man (o.g. 1:10.000)
Scale of Map (e.g., 1:10,000)
Enter a number

## **Data Analysis & Interpretation**

Analyzing collected data to identify patterns and assess pressure levels.

Calculate Disease Incidence (%)
Enter a number
Calculate Pest Severity Index (0-100)
Enter a number
Dominant Pest/Disease Identified
☐ Insect
☐ Fungal ☐ Bacterial
Viral
☐ Nematode
Unknown
Secondary Bost/Disease Presence (Select All That Apply)
Secondary Pest/Disease Presence (Select All That Apply)  Insect
☐ Fungal
Bacterial
Viral
Nematode
None
Average Leaf Area Affected (%)
Enter a number

Write somethin	g	
Identify High-	Risk Zones (Geolocate)	
	Set My Current Location	
	ure Level (Subjective Assessment)	
Low	ure Level (Subjective Assessment)	
	ure Level (Subjective Assessment)	

## **Reporting & Communication**

Documenting findings and communicating them to relevant stakeholders.

Executive Summary of Findings
Write something
Identified Pests & Diseases (Select all that apply)
Aphids
Spider Mites
Fusarium Wilt
Bacterial Leaf Spot
Other (Specify in Long Text)
Estimated Severity Index (0-100)
Enter a number
Maps and Spatial Data (Shapefile, GeoJSON, etc.)
♣ Upload File
25 Opload File
Recommendations for Control Measures
Write something
Recipient of Report (Choose One)
Farm Manager
Crop Specialist
Regional Extension Office
Other (Specify in Long Text)

Report Submission Date	Report Submission Date	
Enter date		
eview & Refinement		
aluating the mapping process and identifying areas for improvemen	nt in future iterations	
Summarize overall effectiveness of the mapping methodology		
Write something		
Estimate the percentage of map accuracy (based on ground tr	uthing or	
comparison to known infestations).	utiling of	
(		
Enter a number	)	
Enter a number		
Which data collection methods proved most effective? (Select	all that apply)	
Which data collection methods proved most effective? (Select  Visual Assessment	all that apply)	
Which data collection methods proved most effective? (Select  Visual Assessment  Drone Imagery	all that apply)	
Which data collection methods proved most effective? (Select  Visual Assessment  Drone Imagery  Farmer Interviews	all that apply)	
Which data collection methods proved most effective? (Select  Visual Assessment  Drone Imagery  Farmer Interviews  Trap Counts	all that apply)	
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Which data collection methods proved most effective? (Select   Visual Assessment   Drone Imagery   Farmer Interviews   Trap Counts   Soil Sampling  What was the biggest challenge encountered during the mapp		
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Which data collection methods proved most effective? (Select   Visual Assessment   Drone Imagery   Farmer Interviews   Trap Counts   Soil Sampling  What was the biggest challenge encountered during the mapp   Resource limitations (personnel, equipment)   Difficulties in accessing certain areas		
Which data collection methods proved most effective? (Select  Visual Assessment  Drone Imagery  Farmer Interviews  Trap Counts  Soil Sampling  What was the biggest challenge encountered during the mapp  Resource limitations (personnel, equipment)  Difficulties in accessing certain areas  Inconsistent data recording		
Which data collection methods proved most effective? (Select  Visual Assessment  Drone Imagery  Farmer Interviews  Trap Counts  Soil Sampling  What was the biggest challenge encountered during the mapp  Resource limitations (personnel, equipment)  Difficulties in accessing certain areas		

Date of this review.	
Enter date	
Recommendations for improving data recording standardization.	
Write something	
Was the chosen map projection suitable for the area?	
Yes	
No	
Unsure	