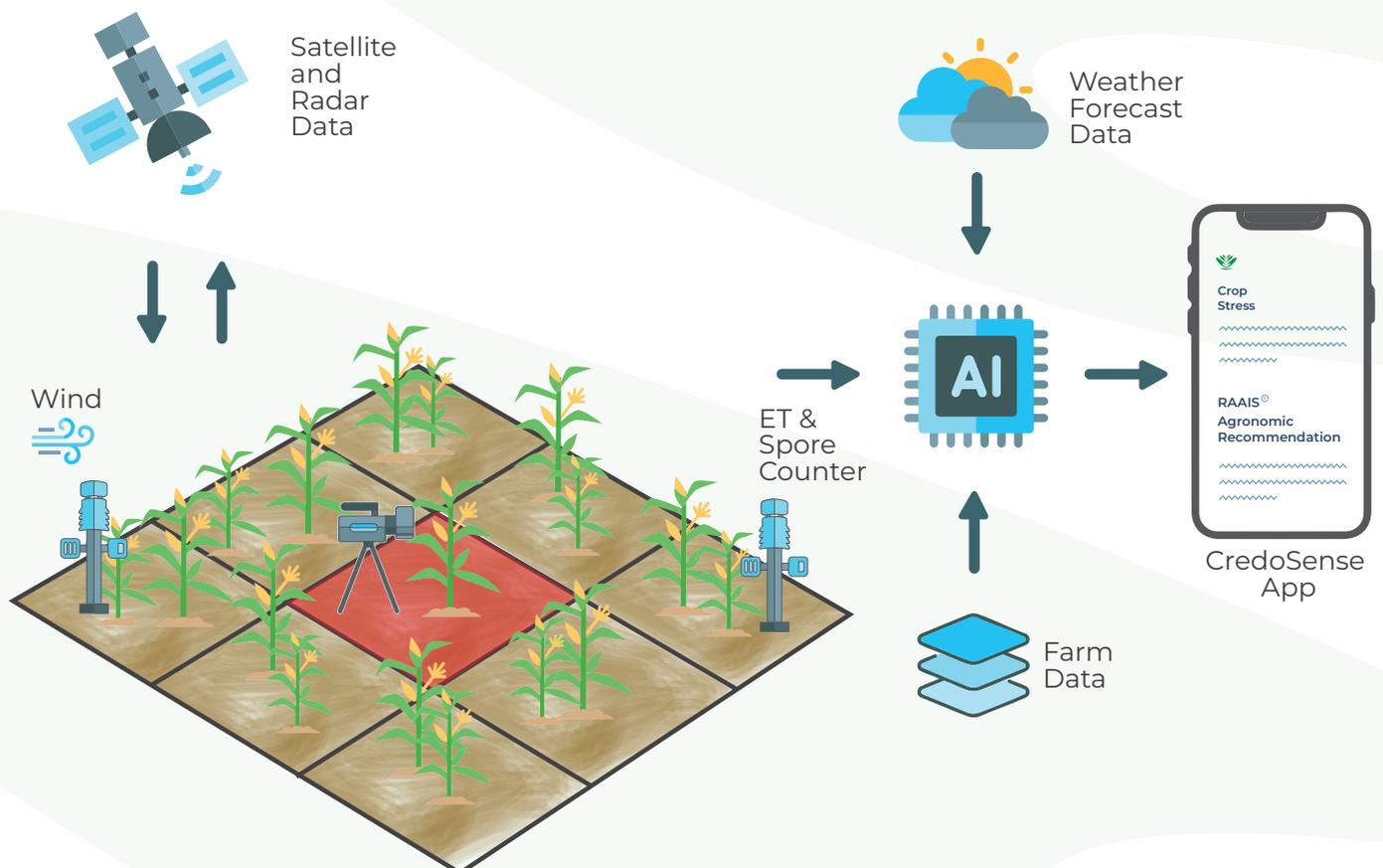


# CREDOSENSE CROP HEALTH DIAGNOSTIC SYSTEM : OVERVIEW

## OUTDOOR

CredoSense delivers decision-grade diagnostics for outdoor fields by combining early grid-level screening with targeted on-site confirmation. Satellite and radar monitoring flags field grids that are drifting from expected crop- and growth-stage performance, then CredoSense guides in-field measurements using the microclimate and spore monitoring station, root-zone sensing, and the handheld leaf chamber. These signals are fused by our region-aware agronomic AI engine to identify the primary stress driver and deliver crop-specific recommendations for irrigation, nutrition, and crop protection.



# CROP, SOIL, & MICROCLIMATE DATA POWERING OUR AGRONOMIC AI ENGINE



## Satellite & Radar Data

Early stress detection system

- Crop Water Stress
- Vigor Vigilance
- Nutrient Stress
- Biotic Stress
- Thermal Stress
- Soil Moisture Stress
- Topographic Wetness Index



## Microclimate & Spore Monitor

The first rapid fungal spore counter on the market

- Incoming Solar Radiation
- Rain Gauge ( optional )
- Air Temperature
- Relative Humidity
- Barometric Pressure
- Wind Speed and Direction
- Evapotranspiration
- Leaf Wetness
- Soil Moisture
- Soil EC
- Soil Temperature
- Fungal Spore Counter ( up to genus level )
- Insect Counter ( alpha deployment in 2027 )



## Weather Forecast Data

Available at 1km resolution

- Daily Weather Dashboard
  - Air Temperature
  - Barometric Pressure
  - Precipitation
  - Evapotranspiration
  - Extreme Weather Alert
  - Relative Humidity
  - Wind Speed & Direction
  - Humidex
  - Vapor Pressure Deficit
  - Photosynthetic Photon Flux Density
- 5-day Weather Forecast
  - Air Temperature
  - Barometric Pressure
  - Precipitation
  - Relative Humidity
  - Wind Speed & Direction
  - Extreme Weather Alert



## Leaf Chamber System

25+ crop stress metrics

- Visible Symptoms of Stresses Using ML
- Leaf N, P, K Contents
- Leaf Chlorophyll Contents
- Leaf Flavonoids Index
- Leaf Carotenoid Index
- Leaf Anthocyanin Index
- Leaf Temperature Anomaly
- Photochemical Reflectance Index
- Light Adapted PS-II
- Leaf Temperature & Moisture Content
- Photosynthesis
- Stomatal Conductance
- Plant Water Use Efficiency
- Ambient Air Temperature
- Ambient Relative Humidity
- Barometric Pressure
- Soil Moisture, EC, pH, and Temperature



## Farm Data

User provided farm-specific ancillary data

- Crop Planting Date
- Crop Name and Variety
- Recent Management History
- Soil Texture ( Preset or Custom )
- Yield Map ( Single Layer GIS Map )
- Soil N, P, K Map ( Single Layer GIS Map )
- Digital Elevation Model ( CredoSense Data )



## Agronomic AI Agent | RAAIS<sup>®</sup>

Regulation-Aware Agronomic Intelligence System

- Key Physical and Biological Crop Stresses
- Crop-Specific Agronomic Recommendations

