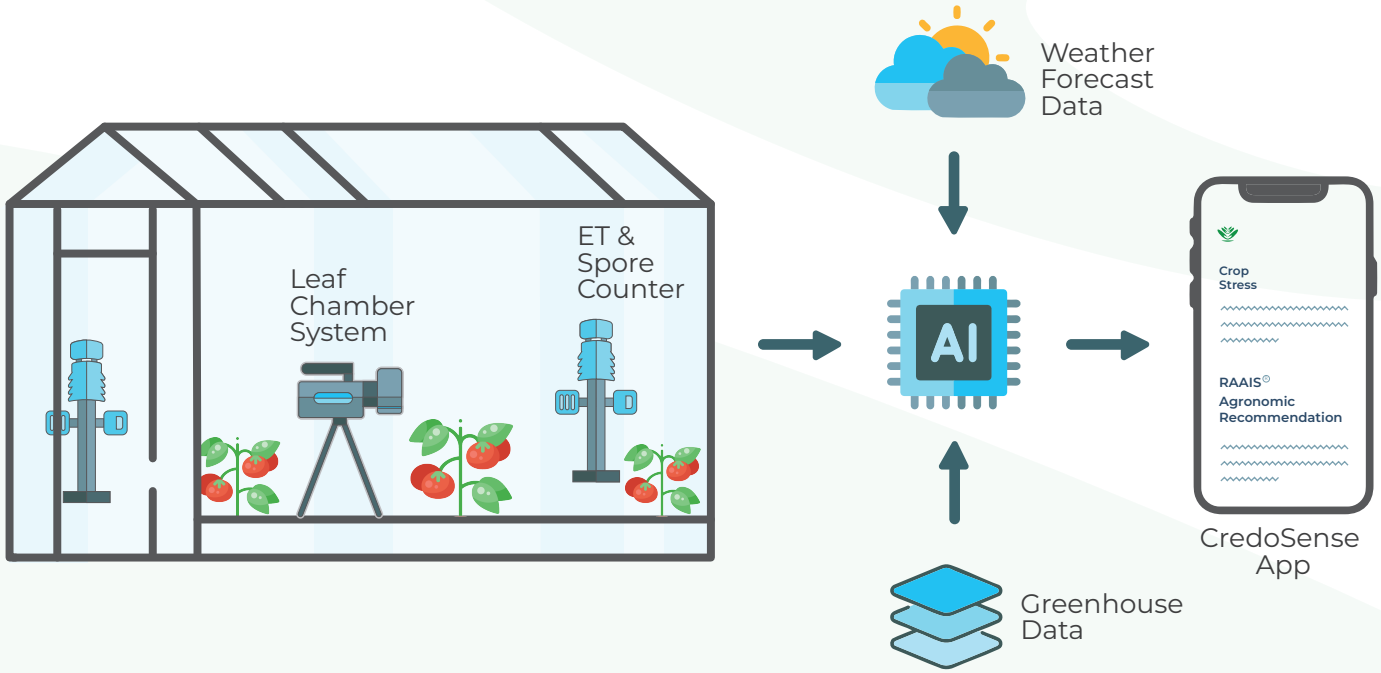
CREDOSENSE CROP HEALTH DIAGNOSTIC SYSTEM : OVERVIEW

INDOOR

CredoSense supports indoor growers by using time-series monitoring to detect benches or zones that are drifting from expected crop- and stage-specific trajectories, then guiding targeted diagnostics to confirm the cause. The workflow combines leaf-level crop response from the handheld leaf chamber with indoor microclimate, root-zone state, and airborne fungal pressure to distinguish physical constraints from biological pressure. CredoSense then uses its agronomic AI engine to produce clear, bench- or zone-level recommendations that improve intervention timing and reduce unnecessary corrective actions.



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

Time-Series Anomaly Detection
Early stress detection system

- Bench-Level Trend of Crop Health
- Environmental Stability Signals
- Root-Zone Dynamics
- Airborne Fungal Pressure
- Infection-Favorable Environmental Windows
- Thermal Stress

Microclimate & Spore Monitor
The first rapid fungal spore counter on the market

- Incoming Solar Radiation
- Air Temperature
- Relative Humidity
- Barometric Pressure
- Wind Speed and Direction
- Evapotranspiration
- Leaf Wetness
- Substrate Moisture
- Substrate EC
- Substrate 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
- Substrate Moisture, EC, pH, and Temperature

Facility Data
User provided facility-specific ancillary data

- Crop Planting Date
- Crop Name and Variety
- Recent Management History
- Bench/Growing Zone Map
- Growth Medium (Type, Nutrients, etc.)

Agronomic AI Agent | RAAIS®
Regulation-Aware Agronomic Intelligence System

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