

### **DETAILS OF CAITEST PACKAGES**

Macro and Micro-nutrients testing: There are 16 essential plant nutrients (macro and micro-nutrients) and their functions in crop production is well proven. CAI's laboratory has multi-nutrient analysis capabilities and is equipped with many top-notch instruments including ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry), Microwave, Muffle-furnace and CHNSO Analyzer.

Pathogen Testing: We provide a paramount testing platform that includes the identification and quantification of pathogens for various crop/plant diseases such as (Ascochyta blight, Black leg, Clubroot, Chocolate spot, Fusarium, Sclerotinia stem rot, Root rot, Verticillium stripe, White rust, White leaf spot, Grey stem, etc.) using paramount testing platform includes Real-time PCR (quantitative Polymerase Chain Reaction), **DNA-Gel Agarose** and **UV-visible detection unit**.

#### **Plant Tissue and soil Test:**

**CAI:1**, Basic Soil Analysis \$155.00

> pH (Water), pH (Buffer), Phosphorus (P), Potassium (K), Sulfur (S), Calcium (Ca), Magnesium (Mg), Sodium (Na), Iron (Fe), Manganese (Mn), Copper (Cu), Zinc (Zn), Aluminum (Al), Boron (B), CEC (cation exchange capacity), percentage base saturation of cation (%BS) exchangeable, Lime Requirement (LR), and organic matter (OM).

CAI:2, Complete Soil Analysis \$125.00

Basic Soil Analysis and Cobalt (Co), Molybdenum (Mo), Selenium (Se), and Barium (Ba).

CAI:3, Additional Analysis \$10.00/150.00

Nitrate-N (NO<sub>3</sub>N), Ammonium-N (NH<sub>3</sub>-N), Chlorine (Cl), total salts (EC), and Silicon (Si).

**CAI:4**, Standard Tissue Analysis \$55.00

NO<sub>3</sub>N, P, K, S, Ca, Mg, Fe, Mn, Cu, Zn, B, Na, Al

• <u>CAI:5</u>, Complete Tissue Analysis \$100.00

Standard Tissue Analysis and Mo, Co, Se

CAI:6, CHN analysis









### \$35.00

Percentage of Carbon, Hydrogen, Nitrogen analysis with C/N ratio.

# • CAI:7, Pathogen Test (QPCR) \$100-\$200.00

Pathogen detection using agarose gel run and quantification using QPCR, disease set includes clubroot, sclerotinia, root rot, other diseases. We also detect dead and viable pathogens in the sample.

- CAI:8, Microbiology Testing: Salmonella Spp., Faecal coliforms Total coliform count \$30-\$40.00
- CAI:9, Solid and Liquid test \$65-\$100.00\*

Compost: pH, phosphorus (P), potassium (K), magnesium (Mg), calcium (Ca), sodium (Na), Dry matter, organic matter, organic carbon, nitrogen, with C/N ratio, Moisture, CFU count. Manure (Liquid or solid): Dry matter, nitrogen (N), phosphorus (P), potassium (K), total salt (EC), ammonium nitrogen (NH<sub>3</sub>-N), Moisture, CFU count.

## CAI:10, Carbon sequestration analysis \$45-65.00\*

Analysis includes percentage of Carbon content from the soil samples, fertilizer applied and includes calculations on GHG emissions reduction to generate carbon credits. \*varies depending on the acres of customer land.

CAI:11Compost \$45-\$65.00

\$00- Suggestions, 00.00\*

The additional field information collected from the customer will integrated with test results by in-house experienced scientist and agronomists followed with written amendment for recommendations on nutrients, suggestions for formulations applications and crop management guidelines. \*depends on tests or elements selected.



