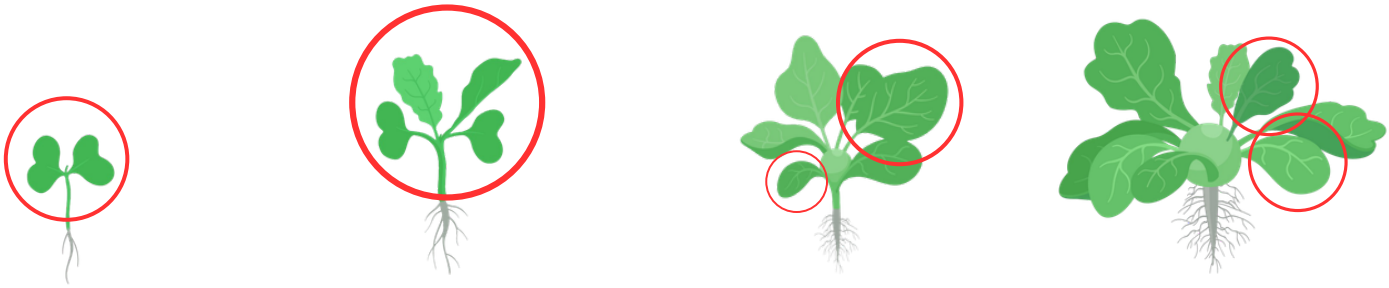
# LEAF EXTRACT ANALYSIS
# Sampling Guide - Kale



| LEAF DEVELOPMENT | VEGETATIVE | HEAT STRESS | HARVEST & DISEASE MANAGEMENT |
|---|---|---|---|
| KALE: RECOMMENDED SAMPLING INTERVALS | | | |

## Submission Instructions

1. **Collect** NEW leaves and OLD leaves SEPARATELY in individually labeled bags:
   - New = newest recently-mature growth from the top of the plant
   - Old = oldest still-viable growth from the bottom of the plant
2. **Gather** a representative sample by pulling multiple new leaves and multiple old leaves from 20+ plants of the same variety from your sampling zone. Collect enough leaves so that each sample (new and old) will fill a 1 quart Ziploc bag or an Apical submission bag. For larger leaves, stack and roll leaves to fit in a 1-gallon bag.
3. **Remove** petioles and all other non-leaf plant material from sample leaves. Ensure leaves are clean of dust, dirt and fertilizer. Rinse with non-chlorinated water if needed and pat dry before bagging.
4. **Order** reports online at https://www.apical-ag.com/grower/order/quick?step=1.
5. **Print** out your order summary and include it with your shipment.
6. **Write** the sample numbers from your order summary on each bag.
7. **Ensure** samples remain viable by minimizing shipping time and using cold packs and/or insulated packaging when shipping in warm conditions. Wrap frozen cold packs in paper to insulate them from direct contact with sample bags.
8. **Mail** samples (including check/money order or paid submission form) to:

**Apical Crop Science LLC**
**1382 SE 3rd Ave, Suite 4**
**Canby, OR 97013**

**DO NOT SEND ANY INTERNATIONAL LEAF, SOIL, WATER, OR CNA SAMPLES WITHOUT PRIOR WRITTEN APPROVAL FROM APICAL. SUBMISSIONS THAT DO NOT COMPLY WITH THE ESTABLISHED SAMPLING PROTOCOL WILL BE DEEMED INVALID.**

## TIPS FOR BEST RESULTS:

1. Achieve optimal plant health by conducting the above LEA sampling process and applying Apical's tailored recommendations consistently throughout the growing season.

2. Always sample at a consistent time of day, preferably prior to 10am to ensure minimal transpiration — about two hours after sunrise is optimal. For indoor plants, sample within one hour of light cycle start.

4. Ensure samples are clean and surface-dry (not dried out) before bagging — dust, fertilizer residue, rain, and condensation affect accuracy.
   - If samples are not dry, please dry with paper towel or air dry to ensure leaves are not wet in sample bags.
   - **Please do NOT leave any paper (labels, paper towels, etc.) in bags with samples.**