



TILLERING

ELONGATION

HEADING

RIPENING (P&P)

BARLEY: 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 field sample by pulling multiple new leaves and multiple old leaves from 20+ plants of the same cultivar, block/field. Collect enough leaves so that each sample (new and old) will fill a 1 quart Ziploc bag or Apical submission bag.
  - a. Roll leaves lengthwise AFTER ELONGATION.
3. **Remove** petioles and all other non-leaf plant material from sample leaves.
4. **Fill** out Leaf Extract Analysis report order form online at [www.apical-ag.com/grower/order](http://www.apical-ag.com/grower/order).
5. **Print** out submission forms and attach necessary forms to each submission bag.
6. **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.
7. **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.
3. Ensure samples are as clean as possible — dew, dirt, dust, and fertilizers can affect test accuracy.
  - If samples are not clean, wash leaves with clean, non-chlorinated cold water.
4. Ensure samples are surface-dry (not dried out) before bagging — dew, 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.