



## Plant Tissue Sampling for Tobacco

Tissue analysis is used to monitor tobacco fertility, troubleshoot nutritional problems or to measure leaf ripeness prior to harvest.

**Seedlings (defined as < 12"):** Collect the above-ground portion from 20-30 plants.

**Early through Mature growth:** Collect one Most Recent Mature leaf from ~ 12 plants. For routine monitoring, 1 week before layby is a good time to test.

**Harvest ripeness test:** Collect one MRML from the lower, middle or upper stalk position from 12 plants. Specify that the sample contains *harvestable* leaves (H) instead of *most recent mature leaves* and specify whether the plant position is Upper (U), Middle (M), or Lower (L).



Most Recent  
Mature Leaf  
(MRML)

### Tips

- Fill out the Plant Sample Information Form as completely as possible. The more information you provide, the more precise your recommendations will be.
- Specify the **growth stage** and whether your sample is **Predictive** (routine) or **Diagnostic** (troubleshooting). For diagnostic testing, submit a plant sample and a corresponding soil sample from both a “good” (healthy) and “bad” (unhealthy) area.
- Use paper bags for storing and mailing. Don’t put your leaves in a plastic bag. They will rot.

**Standard analysis includes:** nitrogen, phosphorus, potassium, calcium, magnesium, sulfur, iron, manganese, zinc, copper, and boron.

**Fees:** \$5 per sample for N.C. growers (\$25 for out-of-state; \$12 for N.C. researchers).

**Turnaround time:** 2 days from receipt.

**Send samples to:** N.C.D.A. & C.S. Agronomic Services—Plant Lab

*Mailing address:*

1040 Mail Service Center, Raleigh, NC 27699

*Physical address:*

4300 Reedy Creek Rd, Raleigh NC 27607

Phone: (919) 733-2655

For more detailed information, go to the Plant Tissue Analysis page at [www.ncagr.gov/agronomi](http://www.ncagr.gov/agronomi) or contact the regional agronomist for your area.