

Pecan Leaf Sample Collection for Nutritional Analysis

*Adapted from an article by the [LSU AgCenter](#), [Pecan Research-Extension Station](#)
Article link: <http://tiny.cc/zRI0i>*

Foliar analysis provides assessment of tree health. A leaf sample is best for determining the amount of essential minerals being absorbed from the soil or foliar treatments. Nitrogen, potassium, zinc and other nutrient deficiencies can be identified from leaf samples. See Figure 1.

Soil sampling is still recommended, however, to determine soil texture, certain mineral levels or imbalances, soil pH and any toxic mineral levels, and/or to determine fertility needs in new plantings.

Pecan leaf analysis should be made in July. Collect the middle pair of leaflets from the middle leaf of the current season's growth. Take samples from shoots that have terminated their growth for the season and have fully expanded leaves. Continue this procedure until 40 pairs of leaflets have been collected from at least 10 trees. This constitutes one sample. See Figure 2.

Select shoots in the sun and near the ends of branches, not small branches arising from large limbs nor shaded branches near the center of the tree. Collect from all sides of the trees. Avoid taking leaflets damaged by insects or diseases or those that are otherwise contaminated. Leaflets in one sample should all be from one variety, but this is not essential. Avoid damaged or dirty leaves. Keep samples from young, non-bearing trees labeled separately from samples of older, bearing trees.

Sample preparation for shipment:

The laboratories listed below should be contacted to confirm how to prep the samples and to determine the current fees for this service. Some laboratories accept clean fresh green leaves and others may require leaves to be dried before shipping.

The nutrients normally analyzed are: nitrogen, phosphorus, potassium, magnesium, calcium, sulfur, zinc, iron, manganese, boron, copper and molybdenum. Local state university laboratories performing pecan leaf analyses include:

[Plant Analysis Laboratory](#)

LSU Department of Agronomy

126 MB Sturgis Hall

Baton Rouge, LA 70803-2111

(225) 578-1219

<http://www.stpal.lsu.edu/>

Agriculture Chemistry Laboratory

Agricultural Chemistry Building, Room 102

LSU Highland Rd.

Baton Rouge, LA 70803

(225) 342-5812

(Indicate "Pecan Plant Tissue Group" on sample)

MSU Soil Testing & Plant Analysis Laboratory

Box 9610

Mississippi State, MS 39762

(662)325-3313

<http://msucares.com/crops/soils/testing.html>

Extension Soil, Water and Forage Testing Laboratory

Texas A&M University

2474 TAMU

College Station, TX 77843-2474

(979)845-4816

<http://soiltesting.tamu.edu/>

Noble Foundation

Attn: Agricultural Testing Services

2510 Sam Noble Parkway

Ardmore, OK 73401

(580)223-5810

www.noble.org/ag/

Sample Laboratories – continued

Samples can be sent directly to the laboratory and the results of the nutrient analysis will be returned directly to the grower with an adequate, deficient or excessive rating given to each nutrient. If you have questions on the results, contact your county agent or pecan horticulturist.

This information will help you plan your fertilization program to remedy or avoid nutrient deficiencies developing in your orchard. Over-fertilization can also be avoided when excessive amounts of nutrients are detected.

Pecan Leaf Sampling



- Sample in July
- Collect halfway up tree
- Select midway of current season shoots
- Two leaflets from middle of compound leaf
- Minimum of 100 leaflets

Figure 1. General guide for nutrition analysis. Slide courtesy John Begnaud

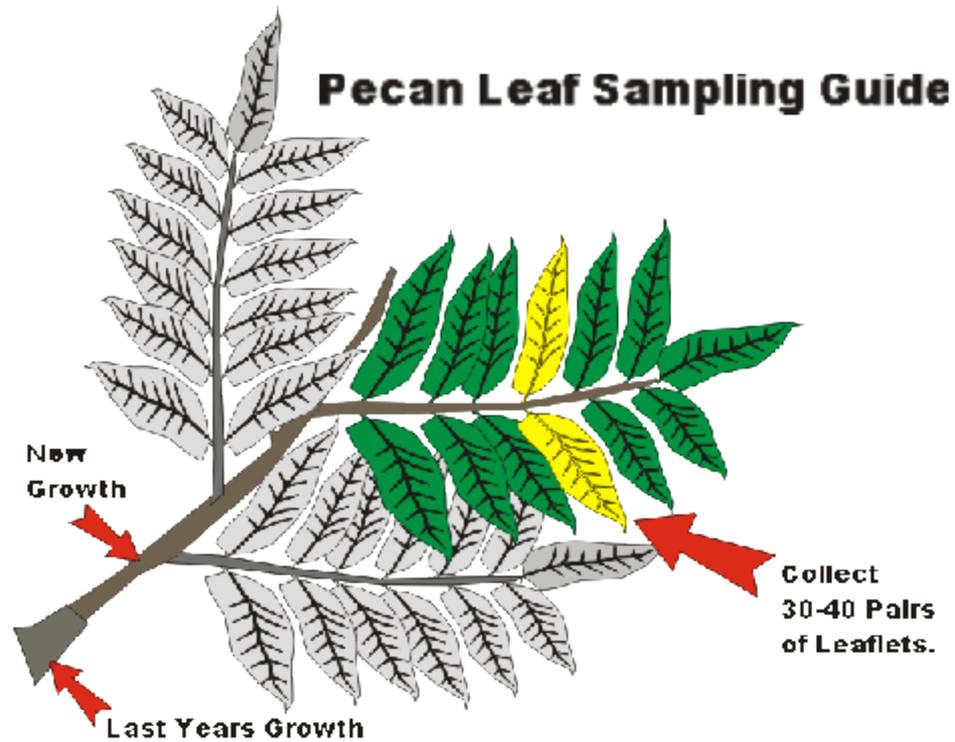


Figure 2. Pecan leaf sampling.

Graphic Courtesy John Begnaud