

## Pecan Leaf Sample Instructions

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Maintaining proper nutrition is vital to a successful pecan orchard. A balance of proper nutritional levels will provide the best conditions to produce a consistent crop. Applying unneeded fertilizer without knowing nutrition levels can be an unnecessary expense, detrimental to the environment and harmful to the health of your pecan trees. Inadequate fertilization may affect the availability of other nutrients, can reduce growth, and may reduce cold hardiness and the overall health of the trees. Soil samples are useful to determine pre-plant nutrition needs and soil pH, but the most reliable indicator of pecan tree fertility needs is leaf analysis. Leaf analysis can be used to diagnose or confirm nutrient problems after symptoms appear. More importantly, these tests can determine nutrient shortages or excesses before symptoms develop or yield is reduced. This service is available through OSU Extension county offices across Oklahoma. For a list of county Extension offices, visit extension.okstate.edu/county/.

## To ensure accurate results, the following instructions should be followed:

- Collect leaf samples in JULY.
- Do not mix varieties into one sample. Native trees from one area may be sampled as one variety.
- Samples should be from uniform trees. It may be from one tree or several acres. Different soil types and management practices may need separate leaf samples.
- Collect 100 leaflets for each sample.
- Select the middle pair of leaflets located on the middle leaf of current season's growth. Remove leaves with a downward or backward pull, so that the leaf stem remains attached to the leaf.
- Choose leaves from accessible shoots on different sides of the trees. Do not collect from suckers, water sprouts or limbs that do not receive sunlight.
- Avoid leaves with insect, disease or mechanical injury or leaves that are not representative of the sample.
- Do not use galvanized containers or rubber gloves or come in contact with materials that may contaminate the samples.

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- Remove spray residue or dirt by dipping leaves in tap water for one minute or less.
- After washing, spread the leaflets out to air dry until they crumble. Don't expose to direct sunlight or heat to dry.
- Place dry leaflets in a paper bag and return to the county Extension office.
- Provide identification for each sample when presenting to the Extension office.

Samples will be sent to the OSU Soil, Water and Forage Laboratory for analysis. The fee for each sample is \$23. Results of analysis will be returned to the Extension office for nutrient recommendations.

## Resources

Oklahoma Pecan Management Link: https://extension.okstate.edu/programs/oklahoma-pecanmanagement/

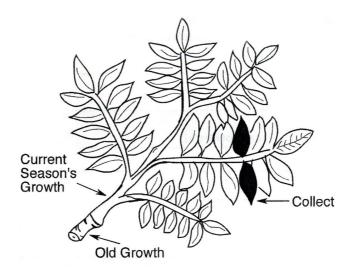


Figure 1. Leaf Image

## The Oklahoma Cooperative Extension Service Education Everywhere for Everyone

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Extension carries out programs in the broad categories of agriculture, natural resources and environment; family and consumer sciences; 4-H and other youth; and community resource development. Extension staff members live and work among the people they serve to help stimulate and educate Americans to plan ahead and cope with their problems.

Some characteristics of the Cooperative Extension system are:

- The federal, state, and local governments cooperatively share in its financial support and program direction.
- It is administered by the land-grant university as designated by the state legislature through an Extension director.
- Extension programs are nonpolitical, objective and research-based information.
- It provides practical, problem-oriented education

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- It utilizes research from university, government and other sources to help people make their own decisions.
- More than a million volunteers help multiply the impact of the Extension professional staff.
- It dispenses no funds to the public.
- It is not a regulatory agency, but it does inform people of regulations and of their options in meeting them.
- Local programs are developed and carried out in full recognition of national problems and goals.
- The Extension staff educates people through personal contacts, meetings, demonstrations and the mass media.
- Extension has the built-in flexibility to adjust its programs and subject matter to meet new needs. Activities shift from year to year as citizen groups and Extension workers close to the problems advise changes.

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