



Figure 1. Pecan leaf sample collection. Select two leaflets (dark color in the diagram) from the middle of the compound leaf per shoot.

amount. The general rate for nitrogen fertilizer is 1/4 to 1/2 pound of ammonium nitrate or equivalent per 100 square feet. The fertilizer should be broadcast in a band starting 2 feet from the trunk and going beyond the drip line two or three times from bud break to early summer. Annual terminal growth of mature bearing pecan trees should be 5 to 12 inches. Poor nut production can occur from either low nitrogen, which causes weak vegetative growth, or from excessive nitrogen, which causes excessive vegetative growth. The amount of nitrogen fertilizer should be adjusted to improve nut production.

Fertilization of Individual Trees

Where insufficient terminal growth and nut production are not achieved with regular lawn applications, an additional amount of fertilizer

should be applied. Table 1 shows the extra amount of fertilizer to apply per tree using your soil test results.

Fertilizing Commercial Pecan Orchards

Fertilizing of commercial orchards will vary depending on the cultural practices used and the type of pecan in the orchard. Table 2 shows a general total rate for fertilizing commercial orchards with improved varieties and native pecans. Splitting the fertilizer into two or three applications is best. If split, fertilizer applications should be applied at bud swell in mid-March, April and May. Another light application in June can be used in very heavy crop years.

Table 1. Pecan nitrogen rate recommendations based on the amounts of potassium and phosphorous in the soil.

| Tree Age or Tree Trunk Diameter ^{a,b} | Rates Per Tree | |
|--|--|--|
| | Soil Test P \geq 35 ppm Soil Test K \geq 125 ppm lb ammonium nitrate or equivalent/tree | Soil Test P < 35 ppm Soil Test K < 125 ppm lb 10-10-10 or equivalent/tree |
| Year of Planting | 0 | 0 |
| 1 | 0.5 | 1.5 |
| 2 | 1 | 3 |
| 3 | 1.5 | 4.5 |
| 4 | 2 | 6 |
| 5 | 3 | 9 |
| 6 | 4 | 12 |
| 10 | 8 | 24 |
| 14 | 12 | 36 |
| 19 | 20 | 60 |
| 23 | 30 | 90 |
| 27 | 40 | 120 |

^a Use the smaller number.
^b Measure trunk diameter at 36 inches above the ground.

Table 2. Nitrogen fertilizer recommendations for improved varieties and native pecan orchards based on various cultural practices.

| Cultural Practice | Improved Varieties | Natives |
|---|---|---|
| | lb N fertilizer (33-0-0 or equivalent) per acre | lb N fertilizer (33-0-0 or equivalent) per acre |
| Pasture or grass cover | 270-450 | 180-360 |
| Spring cultivation and summer vegetation | 180-360 | 90-270 |
| Winter legumes and pasture | 90-270 | 0-120 |
| Winter legumes and spring cultivation | 90-180 | 0-90 |

