

Historical Background of Pecan Plantings in the Western Region

Cooperative Extension Service
College of Agriculture and
Home Economics



Guide H-626
PH 1-110

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This publication is scheduled to be updated and reissued 5/05.

PLANTING HISTORY

The pecan (*Carya illinoensis* (Wangenh.) K.Koch) is not generally considered a native of New Mexico. Although a few large trees producing seedling-type pecan nuts were or are growing in southern New Mexico, there is evidence that some of these were brought to the area from central Texas and north-central Mexico in the late 1800s or early 1900s. Few of these original pecan trees remain today. One, considered the largest pecan tree in the state, still grows near the town of Mesilla, NM.

The oldest known planting of the so-called improved (named) varieties was made at the Fabian Garcia Agricultural Center of New Mexico State University in Mesilla Park, NM in 1915 and 1916. At the time it was planted, the four-acre planting was the largest pecan planting in New Mexico. Many of these trees remain in their original planting sites.

One of the early pioneers of pecan promotion in the Mesilla Valley was J.W. Newberry of Fairacres, NM. Newberry grew, propagated, and sold pecan trees. The first large-scale planting of pecans in New Mexico, however, was made by the late Deanne F. Stahmann. This 30-acre planting was made on the Snow Ranch, a farm south of Las Cruces in 1934 and 1935. Stahmann mainly planted 'Western' with 'Burkett' as the pollinator. He made subsequent additional plantings on the remainder of the Snow Ranch, as it is still known today. What is known today as Stahmann Farms was land that was cleared and leveled for planting later. Other smaller plantings were made by other growers in southern Doña Ana

County and in the Rio Grande Valley below El Paso, TX, shortly after the Snow Ranch plantings.

Economic conditions in the mid-1920s and early 1930s kept pecans out of the consumer market. The average pay at that time was 75 cents for a 9-hour workday, or 8.5 cents an hour, making pecans selling at just under 14 cents a pound worth almost 2 hours of work. Today's minimum wage of \$4.25 an hour, with pecans selling in 1992 for over \$1.50 a pound, allows a worker at that wage level to buy nearly 3 pounds of pecans for an hour's pay.

In the early 1960s, interest in planting new pecan orchards grew because, for the first time, pecans were considered economically justified after other growers saw the returns from Stahmann's highly productive trees planted in earlier years.

Plantings of pecans in West Texas and Arizona probably began as they did in New Mexico. Some of the early plantings of pecans in Arizona were made in the late 1920s to mid-1930s. Arizona reported 4,000 acres of pecans in 1932, with about 5% of the trees bearing pecans. There were no reports of pecan yield in Arizona until the mid-1970's when plantings made in the early 1960s came into production. In the 1980s more pecan trees were planted in Arizona than in New Mexico; however, in the late 1980s some acreage was abandoned in Arizona due to high water costs. Most pecan plantings in California were made in 1980; the average tree age in 3,500 acres planted is about 18 years.

Five of the top 10 pecan-producing counties in the United States are located in the western region. In fact, the top three counties in the country are



Figure 1. Western pecan growing region.

west Texas, Southern NM, Southern Arizona and California’s San Joaquin Valley (figure 1).

PECAN VARIETIES

The pecan varieties in the original planting at the NMSU Agricultural Science Center are given in table 1. Few of these varieties are still grown, because many were not well adapted for the Southwest and other western pecan production areas. Varieties tested later are also included in the table’s right-hand column.

Table 1. History of plantings of pecan varieties in southern New Mexico.

Planted 1916-1917	Planted 1930 and later	Planted after 1960
Colorado	Burkett	Western Schley
Delmas	Western Schley	Wichita (Pollinator)
Frotscher	San Saba Impr.	
Halber	Clark	
Indiana	Harbin	
Kentucky	Mahan	
Moneymaker	Oklahoma	
Niblack	Williamson	
Onliwon	Kincaid	
Pabst	Altoman	
Schley	Ideal (Bradley)	
Stuart		
Success		
Texas Prolific		
Van Deman		
Warrick		

situated in this region. Doña Ana, NM, is first followed by El Paso, TX and Pima, AZ. Pinal county in Arizona is ranked eighth followed by Pecos, TX. (U.S. Department of Commerce, 1992). There are three shelling plants in the Western Region: Visalia, CA; Sahuarita, AZ and Las Cruces, NM. Another plant in Juarez, Mexico, State of Chihuahua, services pecan growers from northern Mexico. Currently, there are about 61,122 acres of pecans in the western region, which involves far

PECAN PRODUCTION

Pecan production in New Mexico has been recorded since 1920, when only 626 pounds were harvested. New Mexico pecan orchards totaled about 6,000 acres in 1963, but this increased production in the 1960s was mostly from Stahmann Farm plantings. As other plantings came into production, the state’s total yield increased (table 2).

The western region produced over 100 million pounds of top-quality pecans in 1999 (table 3). Nationwide production is shown in table 4.

Table 2. New Mexico pecan production (thousand lb).

Year	lb
1920	626
1929	3,543
1939	21,936
1949	1,943
1969	6,700
1979	14,700
1984	24,000
1987	25,000
1988	26,000
1989	29,000
1990	34,000
1991	29,000
1992	30,000
1993	36,000
1994	24,000
1995	45,000
1996	22,000
1997	45,000
1998	32,000
1999	50,000 (USDA January 2000)

Source: NMDA, Agricultural Statistics

Table 3. Acreage and pecan production in the western pecan growing region, 1999.

State	Acres	Production (Million lb)
Arizona	15,000 ¹	24.3 ³
California	3,500	2.8 ³
New Mexico	29,622 ²	50.0 ³
Texas (Far West)	13,000 ¹	25.0 ¹
Total	61,122	102.1

¹Estimated.

²1997 Census

³National Agricultural Statistics Service, USDA, January 2000

Table 4. Early and current U.S. pecan production and price/lb.

Year	Total U.S. Production (thousand lb)	Price per lb (cents)	
		Native and seedling	Improved varieties
1924	25,141	18.2	37.8
1931	74,985	5.7	13.8
1979	210,600	41.9	70.0
1984	232,400	46.6	68.2
1989	250,500	53.8	78.6
1990	205,000	90.2	128.0
1991	299,000	83.5	114.0
1992	166,000	114.0	157.0
1993	365,000	39.6	62.9
1994	199,000	76.4	115.0
1995	268,000	72.5	112.0
1996	221,500	46.4	68.6
1997	338,100	53.1	92.9
1998	146,400	77.2	135.0
1999	324,500	53.9	97.0

Source: National Agricultural Statistics Service, USDA

TREE SPACING

Tree spacing in early plantings was determined by the growth and fruiting habits of the pecan tree. In the early years, pecan trees were considered a crop that did not need pruning to maintain high production and quality, as with apples and peaches. Early recommendations were for mature trees to be spaced 60' X 60' but 50' X 50' would also be acceptable.

Plantings made by Stahmann were 60 ft between rows of trees and 30 feet between trees in the row to establish 24 trees per acre. As the pecan tree grew larger and shading began to affect size and quality of nuts, the plan was to remove every other tree and have a final spacing of 60' X 60'. However, economics dictated that more trees per acre during early production years meant more return per acre; thus, about thirty years ago more trees were interplanted resulting in a 30' X 30' spacing. Trees are thinned to prevent too much shading and the consequent death of branches in the tree's lower areas.

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Revised May 2000

Las Cruces, NM
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