Country/Product Spotlight

Pecans & USA

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One of the greatest environmental benefits of pecan orchards is their effect on soil quality

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This edition is the 19th in our series of industry and market overviews in *Nutfruit* magazine. This report provides a snapshot of the US pecan industry, with data, analysis, and trends.

We would like to thank the American Pecan Council for their collaboration on this edition.

Industry Highlight

The US Pecan Industry in Numbers

129,500 MT
in-shell production
2025/26 estimate

176,400 ha
total planted area

26,900 MT
in-shell exports
average 2020/21-2024/25

45,300 MT
shelled exports, in-shell equivalent
average 2020/21-2024/25

16,000 MT
in-shell imports
average 2020/21-2024/25

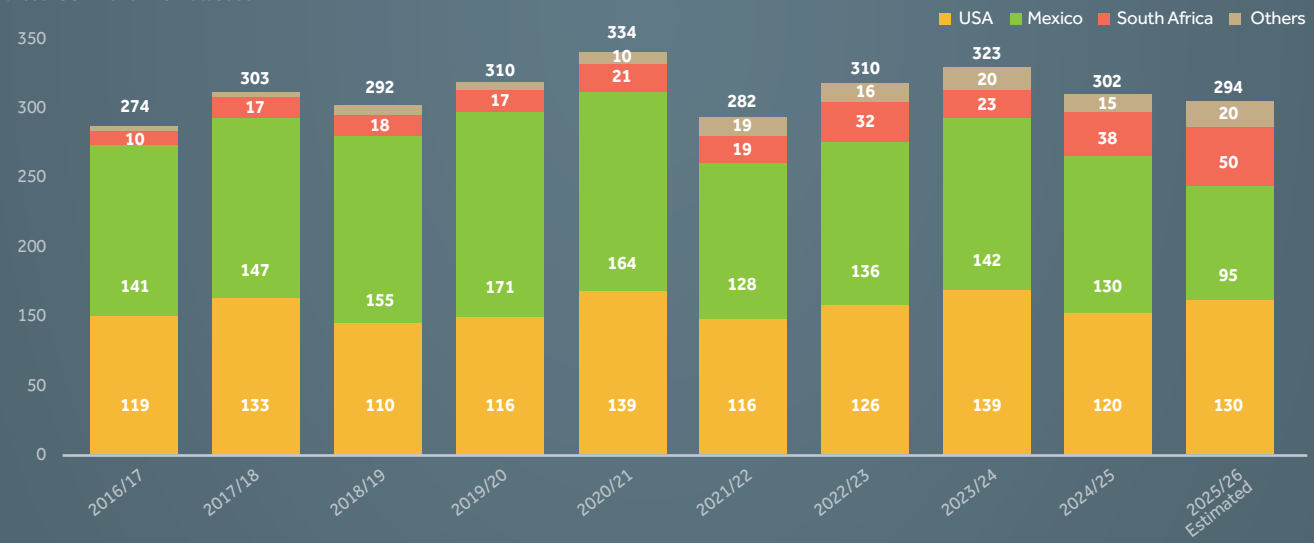
89,300
shelled imports, in-shell equivalent
average 2020/21-2024/25

In-shell equivalent calculated using a kernel to in-shell ratio of 0.5.

Production

The pecan (*Carya illinoinensis*) is the most valuable native North American nut crop.[1] Over the last decade (2016/17-2025/26), the United States and Mexico accounted for 88% of the world's annual pecan production, on average (Figure 1). While Mexico has expanded production rapidly over the past two decades, the US has historically led global pecan output, supported by a combination of long-established orchard systems, breeding programs for improved cultivars, and increasing investments in orchard management and post-harvest handling.

Figure 1. World Pecan Production, 2016/17-2025/26 (1000 Metric Tons, In-shell Basis).
Sources: USDA and INC Database.



Commercial pecan orchards in the US began in the 19th century with open-pollinated seedlings of variable yield and quality. Around 1900, vegetative propagation gained popularity, enabling the planting of superior varieties with higher productivity and better nut quality. Advances in tree selection, controlled pollination, grafting and rootstock improvement have since shaped modern pecan production and led to the development of today's leading varieties.[1]

Pecan is grown in a wide range of environments across the southern US, spanning from California to Virginia, requiring cultivars adapted to local conditions and differential orchard management.[1] The main producing states are New Mexico, Georgia and Arizona.[2]

Total US production between 2016/17 and 2025/26 averaged 125,000 metric tons (in-shell basis) or 61,000 MT (kernel basis) and accounted for 41% of global supply. Interannual variability responds to production challenges related to the impact of diseases, drought and hurricanes on the Gulf Coast.[1] Additionally, production exhibits year-to-year variability, driven by alternate bearing.[3] These factors help explain the fluctuations observed in US production (Figure 1) despite longer-term gains linked to genetic improvement and modernization.

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1. Thompson, T. E., & Conner, P. J. (2012). Pecan. In M. L. Badenes & D. H. Byrne (Eds.), *Fruit Breeding* (Handbook of Plant Breeding, Vol. 8). Springer.
2. Pecan Production (January 24, 2024). National Agricultural Statistics Service (NASS), U.S. Department of Agriculture (USDA).
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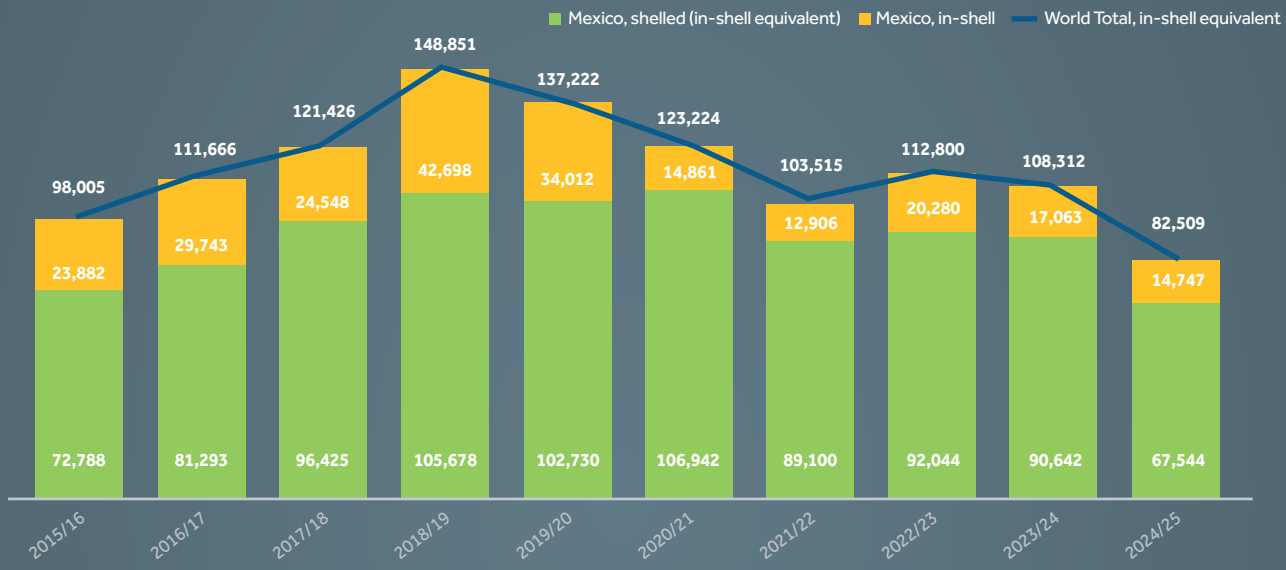
Trade

IMPORTS: The US and Mexico pecan supply chains and trade flows are closely interconnected. Over the past decade, Mexico has shipped an average of 80% of its pecan crop to the US. This steady inflow supports the expansion of the US pecan sector and contributes to supplying both domestic consumption and export markets. Throughout the entire decade, Mexico clearly dominated US pecan imports, consistently accounting for nearly 100% of total volumes, while shipments from other origins remained marginal. Shelled imports represent the most significant share of total imports, while in-shell shipments have shown greater variability (Figure 2). Overall, the data highlights the strong integration of the US pecan market with Mexican supply, reflecting the close trade relationship and complementary production dynamics between the two countries.

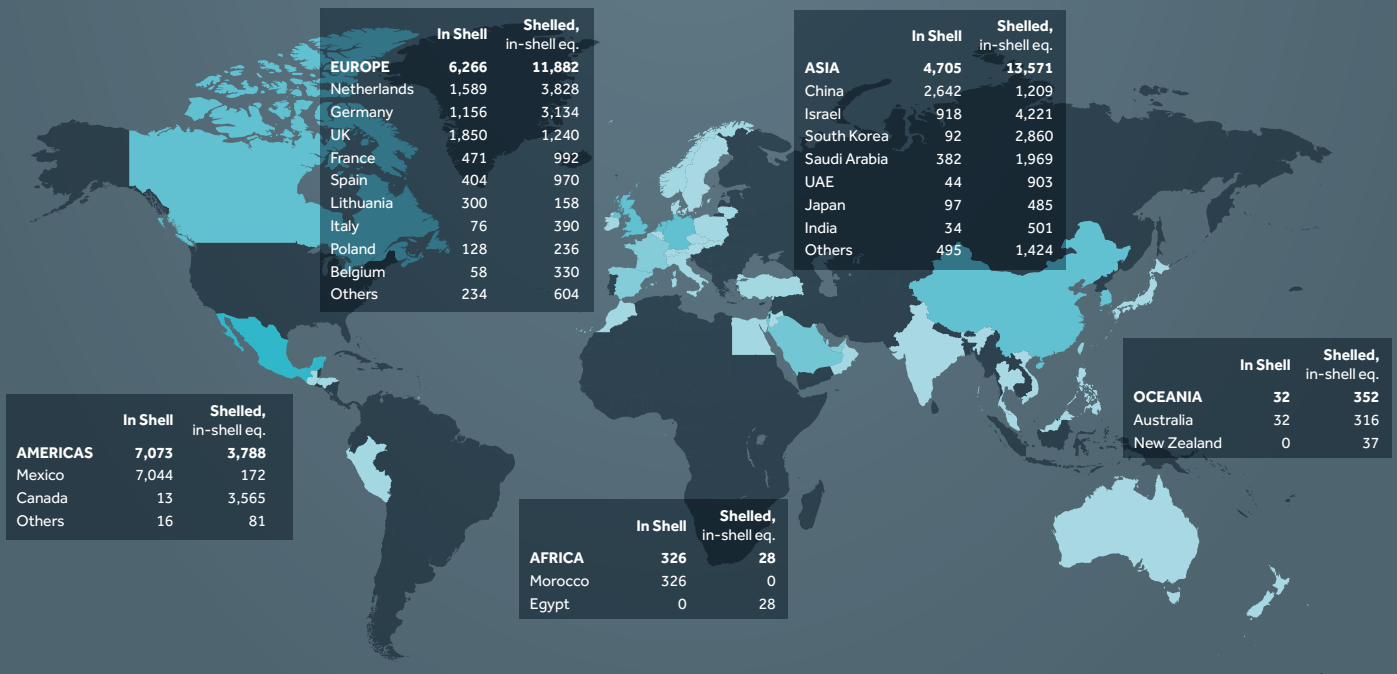
Figure 2. Global US Imports of Pecans (Metric Tons, In-shell Equivalent, 2024/25, October 1-September 30).

Shelled transformed to in-shell equivalent; kernel to in-shell ratio 0.5.
Source: U.S. Department of Agriculture (USDA), Foreign Agricultural Service (FAS), Global Agricultural Trade System (GATS).



EXPORTS: Over the last decade, US pecans (in-shell and shelled) were exported to 94 destinations worldwide, with shipments reaching 57 different markets in 2024/25 (Figure 3).

Figure 3. Global US Exports of Pecans by Destination (Metric Tons, In-shell Equivalent, 2024/25, October 1-September 30).



	In Shell	Shelled, in-shell eq.
EUROPE	**6,266**	**11,882**
Netherlands	1,589	3,828
Germany	1,156	3,134
UK	1,850	1,240
France	471	992
Spain	404	970
Lithuania	300	158
Italy	76	390
Poland	128	236
Belgium	58	330
Others	234	604

	In Shell	Shelled, in-shell eq.
ASIA	**4,705**	**13,571**
China	2,642	1,209
Israel	918	4,221
South Korea	92	2,860
Saudi Arabia	382	1,969
UAE	44	903
Japan	97	485
India	34	501
Others	495	1,424

	In Shell	Shelled, in-shell eq.
AMERICAS	**7,073**	**3,788**
Mexico	7,044	172
Canada	13	3,565
Others	16	81

	In Shell	Shelled, in-shell eq.
AFRICA	**326**	**28**
Morocco	326	0
Egypt	0	28

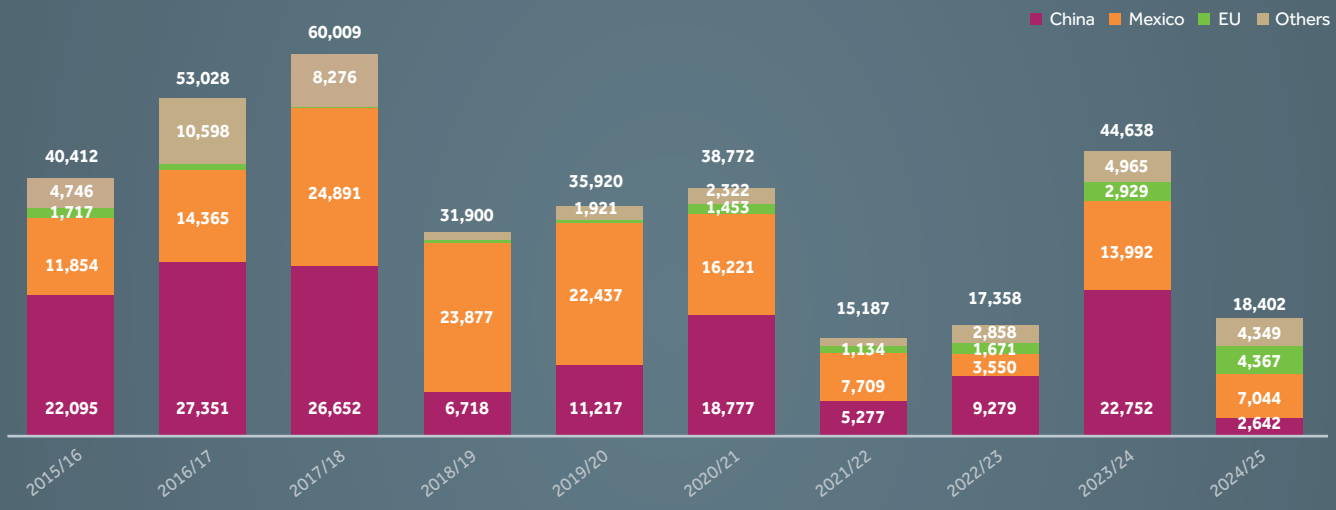
	In Shell	Shelled, in-shell eq.
OCEANIA	**32**	**352**
Australia	32	316
New Zealand	0	37

Shelled transformed to in-shell equivalent; kernel to in-shell ratio 0.5.
Source: U.S. Department of Agriculture (USDA), Foreign Agricultural Service (FAS), Global Agricultural Trade System (GATS).

In-shell exports ranged from around 15,200 MT in marketing year 2021/22 (October 1-September 30) to 60,000 MT in 2017/18. Over the last ten years, Mexico and China have alternated as the leading destination markets. Shipments in 2024/25 amounted to 18,400 MT, with Mexico being the main destination, accounting for 38% of the share, followed by China, with 14% (Figure 4).

Mexico serves as a key shelling hub for US pecans, largely due to its lower labor costs and its logistical proximity between pecan-growing areas in the southwestern US and northern Mexico. After processing, a substantial share of these shelled pecans is shipped back to the US for domestic distribution or re-export. Over the analyzed period, exports of in-shell pecans to Mexico have been consistently significant, with notable fluctuations but a broadly stable role in the export structure. In-shell shipments varied between 3,600 MT in 2022/23 and 24,900 MT in 2017/18, easing to around 7,000 MT in 2024/25. In relative terms, Mexico has typically been the second-largest destination for US pecans after China. Its share peaked at about 75% in 2018/19, when shipments to China dropped sharply (Figure 4).

Figure 4. Global US Exports of In-shell Pecans by Destination (Metric Tons, 2024/25, October 1-September 30).
Source: U.S. Department of Agriculture (USDA), Foreign Agricultural Service (FAS), Global Agricultural Trade System (GATS).



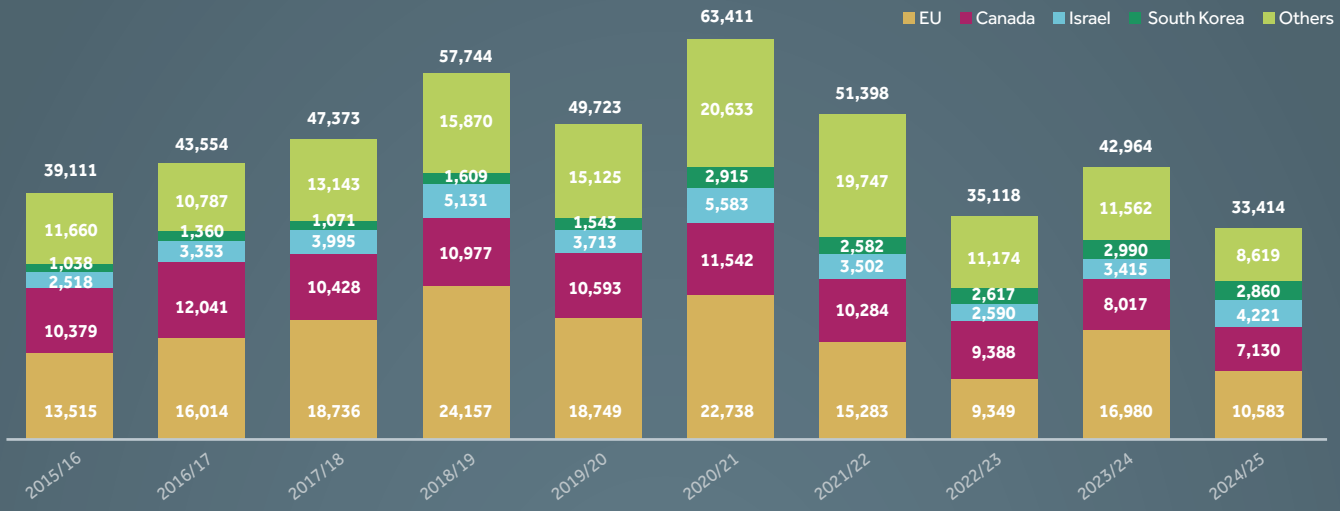
Shipments to China (including Hong Kong and Taiwan) were strong between 2015/16 and 2017/18, peaking at over 27,000 MT. From 2018/19 onward, volumes declined, reflecting the impact of US-China trade tensions. More recently, China's antidumping investigations into pecans from the US and Mexico have further hampered exporting potential (Figure 4).

Exports of in-shell pecans to the EU have remained relatively small but show a clear upward trend in recent years. Shipments were modest and fairly stable between 2015/16 and 2019/20, generally below 2,000 MT. Volumes increased from 2020/21 onward, reaching around 2,900 MT in 2023/24 and rising to about 4,400 MT in 2024/25—the highest level of the period. While the EU accounted for only a minor share of total exports for most of the decade, typically between 1% and 7%, its importance increased recently, climbing to about 24% in 2024/25, reflecting both higher shipments and a reduced concentration in other markets, particularly China (Figure 4).

Over the past decade, total US exports of shelled pecans peaked in 2020/21 at around 63,400 MT (in-shell equivalent), following steady growth from 39,100 MT in 2015/16, before declining to between 33,400 MT and 51,400 in the last few years (Figure 5).

Figure 5. Global US Exports of Shelled Pecans by Destination
(Metric Tons, In-shell Equivalent, 2024/25, October 1-September 30).

Shelled transformed to in-shell equivalent; kernel to in-shell ratio 0.5.
Source: U.S. Department of Agriculture, Foreign Agricultural Service's Global Agricultural Trade System (USDA FAS GATS).



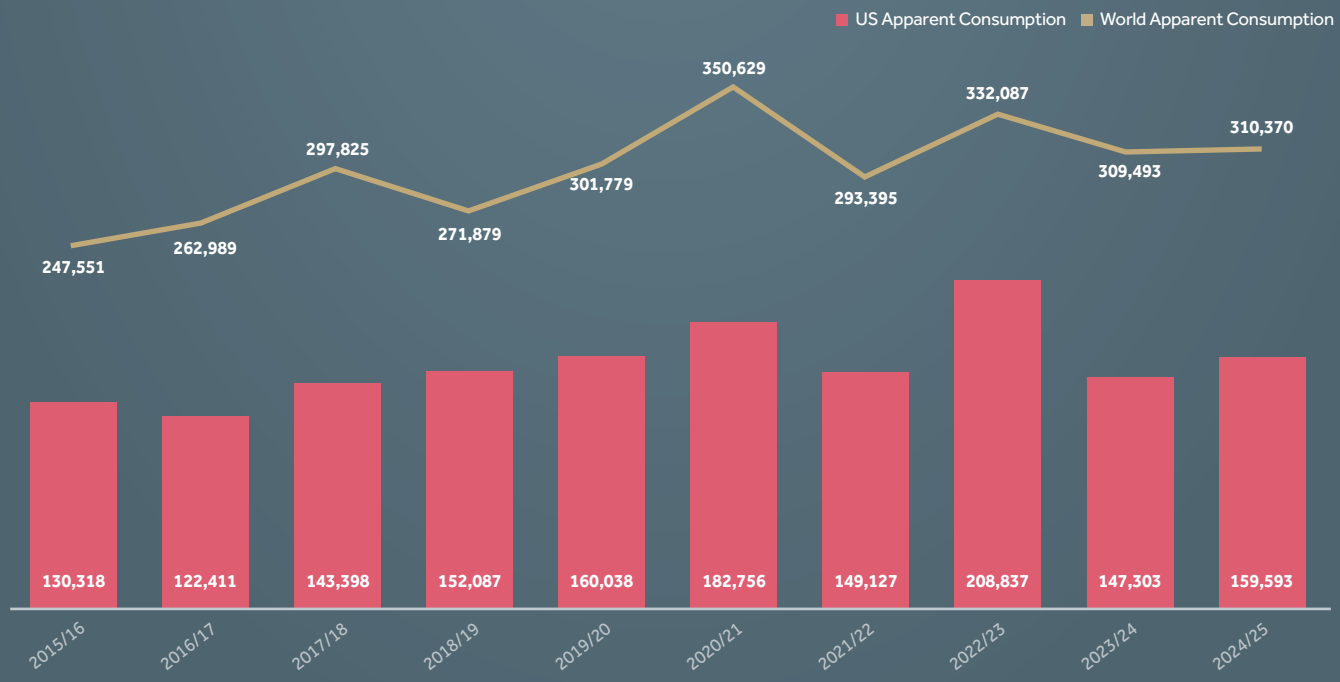
The EU has shown a relatively strong and at times expanding presence. Shipments increased from 13,500 MT in 2015/16 to a peak of 24,200 MT in 2018/19 and varied between 9,300 MT and 22,700 MT during the last half of the decade. Canada has remained a consistently important market, with shipments ranging between roughly 7,100 MT and 12,000 MT. Israel has remained a mid-sized but steady destination, with volumes fluctuating between about 2,500 MT and 5,600 MT, while exports to South Korea were comparatively modest but gradually increased over time.

Domestic Consumption

US apparent consumption followed a broadly upward trajectory up to 2020/21, rising from 130,300 MT in 2015/16 to a decade high of 208,800 MT in 2022/23. Over the same period, the US consistently represented a substantial share of global apparent consumption, accounting for roughly 47-63% of the total, underscoring the country's central role in the global pecan market. Both the world and the US series show cyclical movements linked to crop size and trade dynamics (Figure 6).

Figure 6. Apparent Consumption of Pecans
(Metric Tons, In-shell Equivalent, 2020/21-2024/25, October 1-September 30).

Kernel to in-shell ratio 0.5.
Sources: INC and U.S. Department of Agriculture (USDA). Prepared by the INC using monthly trade data from the USDA Foreign Agricultural Service's Global Agricultural Trade System (USDA FAS GATS).



Pecans and the Health of the Land

Consumers are increasingly concerned about the environmental impacts of food production. As a long-lived, perennial crop, pecan trees offer many advantages like carbon sequestration and biodiversity. One of the greatest environmental benefits of pecan orchards is their effect on soil quality.

Photo: American Pecan Promotion Board.

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The quality of soil is frequently taken for granted. This is probably because soil quality can be hard to see with the naked eye. In their native environment, along the rivers of east-central Texas into Mexico and throughout the Mississippi River valley and its tributary streams, pecan trees prefer soils that are high in organic matter, drain well, and are frequently refreshed with a pulse of nutrients in the seasonal flooding of bottomland ridges.

Some of the beneficial soil quality conditions in the pecan's native range are a by-product of pecan trees themselves. Pecans have a long lifespan, capable of exceeding 100 years of age. They are grown over a wide geographic area, under a host of soil and environmental conditions. Fortunately, pecans are highly adaptable trees. Most commercial pecan orchards are planted on land that was formerly in row crop production or pasture. Just as we see in its native environment, the pecan tree enhances soil quality in agricultural systems over time. This all begins with soil organic matter (SOM). A fertile soil is the basis of a healthy civilization and SOM is the foundation of healthy and productive soils. SOM consists of living organisms, fresh residues, and well-decomposed residues. Though it typically comprises only 1-6% of an agricultural soil, SOM has an overwhelming effect on almost all soil properties, and thus, the health of the land.

As limbs break and leaves fall each year, as bark is sloughed off over time, and as pecan shucks decompose on the orchard floor, portions of this organic matter are returned to the soil in a constant flow of nutrients back and forth between the soil and the trees. Soil organic matter is significantly improved in pecan orchard systems compared to row crop fields within four years of tree planting and over time SOM is enhanced further with tree age. There may be variations in organic matter from one location to the next related to microbial activity as influenced by variations in temperature and/or rainfall. But even in warm and wet climates, where SOM decomposes rapidly, SOM levels are increased by as much as 137% in pecan orchards compared with conventionally farmed row crop fields from the same region.[1]

Higher levels of organic matter in pecan orchards are the result of the accumulation of plant biomass that is returned to the soil each year. Pecan husks alone account for 25-30% of the total mass of the pecan fruit.[2] These husks dry out and fall to the orchard floor each growing season, bringing a considerable amount of plant material back to the soil. Decomposition of leaves and woody plant debris on the orchard floor along with orchard soils being left uncultivated also contribute to the increased levels of organic matter observed in pecan orchards.

Along with SOM, various measures of soil microbial activity are higher in orchards than in row crop fields. Along with increasing SOM, soil microbial activity increases with orchard age. Soil microbes are essential for keeping plants well supplied with nutrients through the breakdown of SOM. Some soil bacteria even fix nitrogen gas from the atmosphere, making it available for plants. This is observed in many pecan orchards where clover or other legumes are used as a winter cover crop or grown perennially on the orchard floor. Other microorganisms dissolve minerals and make important nutrients like phosphorus more available for plants. Greater microbial activity such as that which we see in pecan orchard soils reduces the need for nutrient fertilizer inputs by farmers and ensures that fewer potentially harmful organisms will be able to reduce crop yield.[1]

Aggregate stability also significantly increases in orchard soils with orchard age. This is important because it helps the soil to strike the appropriate balance between drainage and water-holding capacity. This improves plant water availability and reduces runoff and erosion, making trees in the orchard more resilient.

The increased SOM in pecan orchards also has important implications for the chemistry of the soil in the form of cation exchange capacity. Many essential plant nutrients exist in the soil as positively charged molecules called cations. SOM improves the ability of the soil to hold onto these cations in a way that keeps them available to plants. This ability is measured via cation exchange capacity (CEC). As organic matter increases, so does CEC. Pecan orchards exhibit a much higher CEC with age compared to row crop fields. This further enhances nutrient availability of important nutrients like potassium, calcium, and magnesium, reducing the need for heavy inputs by producers.

Pecans also help to scavenge nitrogen from the soil at greater soil depths than do row crops. The deep, spreading root system of the pecan tree captures nitrogen as it gradually leaches down, resulting in lower rates of leaching below the root zone and into the water table.

Taken together, the many enhancements of soil by pecan trees are good news for the pecan industry and provide a good message for consumers about the sustainability and potential environmental benefits of pecan production. Pecan trees not only hold soil in place, enhance the fertility and nutrient availability of the soils on which they grow, but they are actually building soil over the course of their remarkably long lives. Soil quality of land previously used for conventional row cropping systems can be significantly improved by pecan orchard establishment and can further improve with orchard age. These same environmental enhancements benefit the producer by lowering production costs, potentially leading to increased profit margins.

Pecans: Nutrient-Rich Nuts for Health and Wellness

Pecans are increasingly recognized as a nutritional powerhouse, offering a broad array of healthy fats, essential vitamins and minerals, and health-promoting antioxidants. With their nutrient-dense profile and rich, buttery flavor, pecans have long been valued as a versatile ingredient in both sweet and savory dishes, and they also make an ideal choice for a wholesome, nourishing snack.

Nutritional Profile

Pecans are high in monounsaturated fat, which may help reduce cardiometabolic risk factors.[1,2] The most abundant fatty acid in pecans is oleic acid[3] —the same heart-healthy fat found in olive oil. A standard 30-gram serving of pecans provides 18 grams of unsaturated fat and just 2 grams of saturated fat.[4] Pecans also supply plant-based protein and are naturally high in dietary fiber,[1] making them a convenient and nutritious snack.

Beyond macronutrients, pecans contain a wide range of vitamins and minerals. They are high in vitamin B_1—which contributes to the normal heart function—as well as magnesium, phosphorus, zinc, manganese and copper. Pecans are also a good source of vitamin B6, iron and potassium, adding to their well-rounded nutrient profile.[1]

Heart Health

Decades of clinical research have established the role of pecans in supporting cardiovascular health. A comprehensive review[3] of human trials indicates that regular pecan consumption consistently leads to improvements in lipid levels. Studies involving adults with metabolic risk factors have found that daily pecan intake—ranging from 30 g to 68 g—results in significant reductions in total cholesterol, LDL ("bad") cholesterol, and triglycerides. Research has also shown that pecans may enhance postprandial lipid metabolism—the way the body processes fats immediately after eating—with various studies reporting lower triglyceride responses after a pecan-enriched meal compared to control groups.[3]

Diabetes Management

Clinical research has found that pecans can play a role in managing markers related to glycemic control and insulin sensitivity. A trial involving adults who were overweight or had central obesity reported that incorporating pecans into the diet led to measurable improvements in insulin concentrations and beta-cell function.[2] Furthermore, substituting typical isocaloric foods with pecans has been shown to lower postprandial glucose levels—the sugar response immediately following a meal.[5]

Weight Management and Satiety

Although pecans are packed with nutrients, clinical evidence suggests that they have a neutral effect on body weight when included as part of a healthy, balanced diet. This "weight neutrality" may be partly explained by the nut's ability to promote a feeling of fullness, helping to regulate appetite throughout the day. Trials have shown that pecan consumption may increase the secretion of satiety-related hormones, such as peptide YY and cholecystokinin, while suppressing ghrelin, the hormone responsible for hunger signaling.[3]

Diet Quality

Incorporating pecans into a daily routine has been shown to significantly enhance overall diet quality, a key component of long-term health. According to studies based on Healthy Eating Index criteria, replacing typical processed snacks with a daily helping of pecans resulted in a significant increase in total diet quality scores over a 12-week period.[6,7]

Antioxidant Activity

Pecans are characterized by a diverse array of bioactive phytochemicals, including polyphenols such as ellagitannins and proanthocyanidins, alongside gamma-tocopherol, a unique form of vitamin E. Clinical observations indicate that pecan consumption acutely increases plasma antioxidant capacity within hours of intake.[3]

Emerging Research

Recent studies have begun to explore the potential benefits of pecans for cognitive performance and gut health. In one trial, participants who consumed a pecan-enriched meal showed improved performance on tests of attention, processing speed, and memory compared to the control group.[8] Additionally, early research into the gut microbiome suggests that the fiber and polyphenols in pecans may support microbial diversity and intestinal health.[9]

Conclusion

Pecans are a versatile and nutrient-dense addition to a modern healthful diet. Incorporating a daily handful offers a simple, natural way to boost the intake of essential vitamins and minerals, healthy fats, and antioxidants that support long-term wellness.

HIGH IN

- Monounsaturated fat
- Fiber
- Vitamin B_1
- Magnesium
- Phosphorus
- Zinc
- Manganese
- Copper

SOURCE OF

- Vitamin B_6
- Iron
- Potassium

References: 1. Regulation (EC) No 1924/2006 of the European Parliament and of the Council of 20 December 2006. **2.** McKay, D. L., et al. (2018). A Pecan-Rich Diet Improves Cardiometabolic Risk Factors in Overweight and Obese Adults: A Randomized Controlled Trial. *Nutrients*, 10(3), 339. **3.** Sandhu, A. K., et al. (2025). Pecans and Human Health: Distinctive Benefits of an American Nut. *Nutrients,* 17(23), 3686. **4.** U.S. Department of Agriculture, Agricultural Research Service. FoodData Central. https://fdc.nal.usda.gov/. **5.** Guarneiri, L. L., et al. (2021). Pecan-enriched diets decrease postprandial lipid peroxidation and increase total antioxidant capacity in adults at-risk for cardiovascular disease. *Nutr Res*, 93, 69–78. **6.** Hart, T. L., et al. (2025). Consuming pecans as a snack improves lipids/lipoproteins and diet quality compared with usual diet in adults at increased risk of cardiometabolic diseases: a randomized controlled trial. *Am J Clin Nutr*, 121(4), 769–778. **7.** Dos Santos, J. L., et al. (2022). Effect of pecan nuts and extra-virgin olive oil on glycemic profile and nontraditional anthropometric indexes in patients with coronary artery disease: a randomized clinical trial. *Eur J Clin Nutr*, 76(6), 827–834. **8.** Guadagni, A. J., et al. (2025). Cognitive function in response to a pecan-enriched meal: a randomized, double-blind, cross-over study in healthy adults. *Nutr Neurosci*, 28(9), 1075–1092. **9.** Delgadillo-Puga, C., et al. (2023). Pecans and Its Polyphenols Prevent Obesity, Hepatic Steatosis and Diabetes by Reducing Dysbiosis, Inflammation, and Increasing Energy Expenditure in Mice Fed a High-Fat Diet. *Nutrients*, 15(11), 2591.

Pecan Nut Cookies

Ingredients:

- 90 g dates
- Hot water
- 90 g pecan nuts
- 50 g peanuts
- 1 egg
- 50 ml olive oil
- 150 g oat flour
- ½ tsp cinnamon
- 1 tsp baking powder

To decorate:

- 12 pecan nuts
- 5 g maple syrup or honey
- Salt flakes

Preparation:

1. Prepare a date paste by pitting the dates and hydrating them for about 10 minutes in hot water. Drain, reserving a small amount of the soaking water, and blend until smooth.
2. Finely chop the pecans in a food processor. Pulse the peanuts briefly so they are more coarsely chopped, and set aside.
3. In a large bowl, whisk together the egg, date paste and oil. Add the dry ingredients: chopped pecans, oat flour, cinnamon and baking powder.
4. Mix everything well, then fold in the peanuts using a spatula. Let the dough rest for 15 minutes.
5. Preheat the oven to 180°C.
6. Roll the dough into small balls and gently flatten them. Arrange on a baking tray lined with parchment paper, place a pecan half on each cookie, brush with a little maple syrup or honey, and finish with a pinch of salt.
7. Bake for 9 minutes, remove from the oven, and allow the cookies to cool.

Tip:

The shaped, unbaked dough can be frozen in a zip-top bag without any decoration. Add 3-5 minutes to the baking time and bake straight from frozen—no need to thaw.

New Product Launches

Renowned for their rich, buttery flavor, irresistible crunch and surprising health benefits, pecans are a favorite ingredient in both sweet and savory creations. Their natural sweetness and distinctive texture bring depth, sophistication, and a touch of indulgence to everything from desserts to savory dishes. Celebrated by chefs and sought after by consumers, pecans are inspiring inventive new products and fresh flavor experiences. Here's a look at some of the most exciting pecan-based launches making waves in today's marketplace.

Starbucks Pecan Oatmilk Cortado

USA

Three shots of espresso, steamed oat drink, and notes of pecan, brown butter and baking spices, plus a pecan crunch topping.

Harrods All-Butter Date and Pecan Biscuits

UK

The ideal accompaniment to mid-morning tea or coffees, these biscuits boast the naturally sweet pairing of chunky pecans and decadent dates.

ModAllergen Pecan Powder

Australia

This fine-milled organic pecan powder is designed to be integrated into purees to introduce babies to pecans at an early age.

Wanderlands Mineral Creek Wilds Snack Mix

USA

New Mexico pecans, pepitas and black sesame seeds, flavored with Hatch chiles, habaneros, apple cider vinegar, carrots and corn.

Halva Kingdom Pecan Halva

Israel

This premium halva is perfect for elevating desserts, enhancing breakfast dishes like oatmeal or yogurt, or simply enjoying on its own.

PKN Zero Pecanmilk

USA

This dairy-free, gluten-free, additive-free pecan drink is simple—just lightly roasted, stone-ground pecans, vanilla, and sea salt.

Amoretti Pecan Compound

USA

Add the luscious, buttery taste of pecans to cakes, muffins, pies, mousses and more with this delectable pecan compound.

Proof Pecan Cocktail Syrup

Canada

Freshly roasted Georgia pecans are blended into bitters to create this irresistible syrup that mixes equally well with whisky or rum.

The Art of Pecan Pure Pecan Oil

USA

With its high smoke point and an outstanding flavor profile, this pecan oil is a terrific health-conscious substitute for butter.