

PECANS, ARIZONA'S NEW INDUSTRY

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The Deep Fertile Soils of the Irrigated Valleys of Southern Arizona Are Ideal for the Growing of Pecans

ARIZONA, already famous for her vast mineral resources, may, in the course of a few years, become widely known for the production of nuggets of a different sort, called pecans. These are the product of large, beautiful trees, and, unlike the products of the mines, may be harvested in increasing amounts each year for centuries to come.

The pecan is strictly American in its origin, being native to 13 states in the southern part of the United States. It has been planted in other southern states, however, and is now being produced in 22 states east of the Rocky mountains. This territory, for the most part, is characterized by a long growing season, a humid climate and plenty of rainfall.

Here, along the water courses and on the broad flood plains of the larger rivers, where the soils are deep and fertile and moisture is plentiful, the pecan tree has found ideal conditions for its development.

Arizona, in its lower irrigated valleys, seems to meet most of these requirements for the successful production of pecans. Here, we have a long growing season, large areas of deep, silty loam soils and an abundance of water, not from rainfall, which may be inadequate when most needed, but from mountain streams and reservoirs which may be applied as the trees require it. Although the long, hot summers may result in some burning of the foliage the first year or two after the trees are transplanted, this condition is not found when once the trees have become well established. In fact, our extremely arid climate is an advantage in one respect in that pecan scab, a very serious disease in the coastal sections of the southeastern states, can probably never become established in Arizona.

A considerable number of pecan trees are now growing and producing abundant crops in Arizona, principally in the Salt River, Yuma and Safford valleys. These, for the most part, are yard or roadside trees, seedling in character. Trees of a number of the leading varieties as developed in the south have been tried out, however, and have been producing such large crops of high quality nuts as to attract the attention of hundreds of

farmers in the districts where they are grown. This interest has been so great that during the last winter more than 1500 acres have been set to pecan trees, principally in the valleys mentioned. In addition, several hundred trees have been planted in the Santa Cruz valley adjacent to Tucson where climatic and soil conditions should prove favorable for their successful development. These plantings include orchards of 80 acres and more in extent and brings the total acreage in the state up to more than 2000.

If yields from some of the trees already planted are an indication, we are led to believe that many varieties will be early and precocious bearers with us. Instances are known of a budded tree 5 years from planting yielding 15 pounds of nuts, one 7 years old yielding 25 pounds, one 9 years old yielding 70 pounds and one 15 years old yielding 110 pounds. This last mentioned tree was of the Success variety and a few nuts from it numbering 28 to the pound, were sent to a large nursery company in Texas. The nursery officials, upon receipt of the nuts, wanted to know where in the world such pecans grew, as they had never seen such large specimens of this variety. They later offered \$1000 for this tree as a source of bud wood. The question might well be asked, could trees be propagated from this parent tree that would bear pecans of such size and quality if planted in Texas, or would the nursery company have to buy up Arizona's climate, soil and water in addition.

Trees for planting have been secured almost entirely from nurseries in the south where the growing of pecan trees is a well established business and where they may be grown cheaply. A few nurseries have been established in Arizona within the past two or three years and several thousand Arizona grown pecan trees will be available for planting next year.

With the great demand for pecan trees for planting the past winter, the farmer has been an easy prey for the unscrupulous tree salesmen. These itinerant, self-styled pecan experts, have in some cases, grossly misrepresented their trees, delivered trees of a variety other than the one they had sold and made such guarantees for their trees, including their bearing

the second year in the orchard that they could not possibly be met. The writer was called on to assist in the top-working of a splendid grove of young trees sold by one of these companies while operating in an adjacent state, which, when they came into bearing, were not of the variety that had been ordered.

Pecan trees should be spaced from 50 to 60 feet apart when planted in orchard form due to the fact that they eventually develop into extremely large trees and should live for more than a century. However, this wide spacing allows for the practice of inter-planting or inter-cropping while the trees are young to return a revenue from the land until the trees come into bearing. Other fruit trees, such as the plum, apricot, peach, fig or grape vines may be planted between the trees to be taken out when the pecan trees require all the space; or such crops as alfalfa, cotton and truck crops may be produced between the tree rows for a number of years. Where inter-cropping is practiced, however, it is advisable to give the pecan trees special care with regard to fertilization, cultivation and irrigation so that their development will not be retarded by a lack of moisture or fertility used by the crop grown in between.

Although instances are known where pecan trees bear a few nuts their second or third year in the orchard, yields of any consequence should not be expected until the sixth or seventh year from planting, especially since only 12 trees can be planted on an acre where a 60 foot spacing is used. Some growers are planting their trees twice as thick in the row, thus doubling the number of trees per acre. This also doubles the production from the time the trees start to bear until they begin to crowd at from 14 to 19 years of age, a period when production is usually most to be desired. The owner, of course, plans to cut out every other tree when they grow together, but the disadvantage of this plan is that he will usually postpone the cutting out of the surplus trees from year to year until finally those to be left permanently are seriously damaged from crowding.

Prices received from the small
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amount of the large paper-shell varieties of pecans produced in Arizona have been very good, as much as one dollar per pound having been received. When the present non-bearing acreage came into production, however, prices will doubtless be reduced to the level of those being received from nuts of like grades in the south, which should be from 35 to 65 cents per pound.

Some practical suggestions for the establishment of a pecan grove in Arizona based on the experience and observation of the writer are as follows:

1. Only deep, fertile soils, free from hard pan or caliche layers should be planted to pecans. The prospective grower should learn the character of the soil 10 or even 15 feet beneath the surface by use of the soil auger. Should areas be encountered which tree roots and moisture could not penetrate, another site should be found to plant the trees. Land with a permanent water table closer than ten feet to the surface should also be avoided.

2. At least two varieties should be used, principally for pollination advantages as some varieties are incapable of pollinating their own flowers. More than four varieties would only tend to make a less uniform product and consequently make marketing more difficult.

3. Planting distances should not be less than 50 or 60 feet each way unless more trees are planted with a view of cutting the surplus ones out when they begin to crowd.

4. Only budded or grafted trees of well tried improved varieties should be planted. In the markets of the future the seedling and inferior type of nuts will receive little recognition.

5. Pecan trees should be planted in early or mid-winter for best results. This allows for a more vigorous growth the first season since the root system has had time to establish itself before the leaves appear.

6. The holes should be dug deep and wide to allow for the spreading of the roots in a natural position. The soil should be packed firmly about them and water applied as soon as the tree is set.

7. In general, the medium to below medium size pecan tree has a better chance to live and make a vigorous start than a large one. An average size as listed by nurseries is 3 to 4 feet. It is a good plan to cut the top of the tree back rather severely at

planting time to balance with the root system which has been greatly reduced when dug from the nursery. Leaving only three or four buds above the bud union will be sufficient. During the first or second summer, a vigorous shoot from one of these buds may be trained up to form the new trunk.

8. Water should be plentiful and should be applied frequently to the new trees. Once every week or ten days during the hotter part of the season will not be too often on most soils.

9. Intercropping the first few years may be practiced provided a strip of land 6 to 10 feet wide is left for the trees to be separately irrigated, cultivated and fertilized.

10. Shading with burlap or palm leaf shelters may be necessary the first season to reduce foliage injury from the hot sun, but, with early planting, severely reducing the top at planting time, and with an abundance of water, this injury should be negligible without protection.

In conclusion, the writer believes there is a bright future for a pecan industry in Arizona, for the man who will care for a pecan tree as well as a citrus tree is supposed to be cared for, and above all, for the man who loves trees.

Turning the Tables

"Three gallons of gas, please."

"Yes, sir. Want some cylinder oil, too?"

"No, just gas."

"Do you want some paint? Your car needs it, and we've got some dandy paint—heat-proof, dirt-proof, guaranteed to wear long."

"No, I want only gas today."

"Then you want your car washed?"

"I said I wanted only gas."

"You want a tire, then. We've got some good non-skids. Only \$40 apiece. Want one?"

"I tell you I want only gas today!"

"Yes, sir; but say, your rear lights are all shot to pieces. You need new ones. We just got in some dandy new crack-proof celluloid lights. Shall I put some in?"

"No! I want only gas, gas! Do you hear! !"

"Yes, sir." And with the gas obtained, the exasperated motorist drove angrily away. But for once the garage man had got even with his barber.

**Mohawk Tires
Invade Tucson**

Claiming superior wearing qualities and long life, Mohawk tires are this week invading Tucson under the leadership of the SOUTHERN ARIZONA MOTOR CO., the local distributors. In speaking of the addition of this tire line Mr. J. W. Briscoe, in charge of tire sales, states that Mohawk tires have for the past several years been one of the most popular tires in Northern Arizona and in other sections of mountainous country. Mr. Briscoe further states that in selecting this line numerous inquiries were sent to various car owners and dealers, and all reports bore out the reputation which Mohawk tires have claimed for their line. A complete stock of tires, including all balloon sizes, will now be maintained in Tucson, and it is anticipated that they will find a ready sale among Tucson motorists. Advt.

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