

Avocados on High Pine Land

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My remarks are described as "Avocados on High Pine Lands," but before going into this, I must say, that I am experiencing this evening a somewhat novel sensation, for although I have been greatly attracted to the avocado for the past five years, my stimulus has been greatly increased after hearing such a good report from Mr. Stevens, and so much so, that I shall be inclined to plant more and more.

The avocado, so far as I can gather, was first introduced from the West Indies in the year 1739, and from this we may note, it has been on record a long time. In my opinion the fruit, from a nutritious standpoint is unrivaled and may be gathered when ripe without any treatment or curing; further, the most delicate stomach can digest the avocado fruit, when animal fats may upset it. I would further say that I long for the day when we can have this fruit in plenty. For although I am not a vegetarian, I am thinking that as I love the taste so much, when the day does come that we can have them in abundance, I shall not need much of the bovine, that tells no lies, wanders on the prairie and on mischief bent, lustily tears and eats up our vegetation in yards, gardens and groves.

The avocado tree in my opinion would make a good shade tree on our way-sides and should be used more than it has been in the past, for it has a singular striking appearance, combined with good spreading branches. Probably it may not be generally known, that it is said, that marks made with the seed on a white wall will turn as red as blood and cannot be effaced until the wall is whitewashed and even then only with difficulty.

I am not in a position to say that you should follow a definite plan in your planting on the so-called "high pine lands," for although I have spent my whole life in studying and working amongst trees and plants, my experience on the subject before us only covers five years. However, in all our works we must form a base or construction line to work from, particularly so, when you are not growing your trees on a well enriched humus area, for you must realize that the sudden fluctuations of heat and moisture quickly affect the avocado, more particularly during its early life.

Just as individual tastes differ on various matters, so does the result change according to the treatment you give your trees in the first place. It is well known that good food is requisite for this tree, or good humus, whereby food can be incorporated. This brings to mind a true story of a gentleman who, with his gardener was showing an interested friend around his garden and pleasure grounds. After they had passed over all the interesting trees, they came to an enclosure in an obscure corner. The gentleman paused a moment and with a smile of satisfaction and finger pointing to a manure heap said, "There, is my head gardener."

In my opinion, to obtain returns in the early days from your trees on high sandy pine lands, it is necessary for them to be provided with a stable manure, under and on each side of the plant, though not nearer than say three inches to the roots. Should this not be procurable, and then use the next best thing, decayed vegetable matter, such as may be termed "muck." Added to this, do not omit steamed bone, for I have found in experimenting, that where I have opened up the soil, the young roots have literally hugged the small particles of bone.

It is of no use "beating about the bush," as the saying goes, for there are a great many of us in our planting schemes and after attention thereto, who seem to forget the words, "*be thorough.*" This brings me to a remark made by a well known lady in the Florence Villa district, who said, "Yes, we see today so many instances where in the past, people planted their five-dollar trees in less than one-dollar holes." The moral being, that had they put more money into the preparation for the plant, better returns would have followed.

We now come to water, which is a greater necessity than we have hitherto thought and in my opinion all plant life on these high sands needs much more than they receive from the clouds. I like water, even sometimes mixed, but in any case regularly during my waking hours, and we are apt to forget that these trees require water regularly just the same. If our neighbors are all following the same method, like one goat follows the other on the mountain trail, we are inclined to follow in like manner and go harrowing and harrowing. So far as it goes, it is alright, and we preserve our trees by so doing, but to get the best out of them in our early as well as later days, we must watch and give them water before they get too far, for although we stir the ground by harrowing, this necessity of water calls, I think I am right in saying, at some period or other every year that goes by.

Our first trees of 590 Trapps and 10 Pollocks were planted during July, 1917, and are now of various sizes up to 16 feet and even more than that in width. There is one distinct observance I have made, that we on high sand can produce a tree with many more short fruiting branches than is usually found on trees on muck soils; naturally we fail when it comes to producing long vigorous shoots.

The method of planting the first batch will show you an omission of stable manure, for each hole was cut out to a depth of 2½ feet and about 3 feet in diameter. The top soil was used in the bottom and on the sides of the ball of the tree, then a mixture of 2 pounds of steamed bone, 1 pound of castor pomace and ½ pound of goat manure was carefully put around the sides and bottom so as not to be nearer than 4 inches from the roots. I must say that this is dangerous quantity to use if not carefully carried out; however, I personally saw to this being dealt with in every case. Careful shading was adopted so that the mid-day sun could not reach them and frequent watering, which is very important, was attended to.

FERTILIZING

This has been given as follows: First year, 1 pound in one application during September; second year, applied four times, at the rate of 2½ pounds per tree; third year, 4½

pounds each time of three applications; fourth year, 6½ pounds per tree three times during the year, and this year 9 pounds at each application. So far, I have never applied commercial fertilizer later in the year than September.

MULCHING

This has been carefully carried out up to this year on the first batch of trees and I have now decided to abandon this, after the fourth year, on our sandy soil, and follow up by periodic harrowing, as I am of the opinion that the nursing of small roots near the surface after this age is liable to court disaster and I would prefer keeping the roots deeper and encourage them nearer the center of the rows. The time may come when the trees will make a general shade over the ground, and I may then, again consider the necessity of a general mulching, for weeds and natal grass should not be such a menace at that period.

With regard to insect pests, our greatest trial has been the pyriform scale on some of the trees amongst the Trapp variety only; however, with three applications during December, January and end of May of 1 to 70 and 1 to 80, respectively, of Oil Emulsion we have kept them down fairly well. During February we have given lime sulphur at the rate of 1 to 60, and again in March, Bordeaux and Black Leaf 40 during the flowering season.

Our Trapps produced a few fruits after the second year after planting and the third year they set on an average six fruits to each tree, but all these did not fully develop. Last year we had few blossoms and hence little fruit. This year nearly every tree was laden with blossoms. Unfortunately I may say, owing to the unusual dry period, the setting is not good. In future, we trust now that we have bought some experience that a water scheme or irrigation may assist us to obtain better results. As to the Pollock variety, this shows blossom, but has not brought any fruit as yet.

PROTECTION

So far we have relied on hay piles and wood during the past year, but in future we shall adopt other means, as our trees are getting larger each year.

Under experiment we have over 23 distinct kinds and about 40 Guatemalan seedlings, which show distinct characteristics, therefore we have some hopes of seeing something new as time goes on.

As to propagation on general lines, I leave this to the nurseryman, for he has to go on and I have only experimented in a small way, chiefly on the Mexican stock; however, from experience I might say that as a stock as seen here I shall not favor it in future, for it pushes forth into growth much earlier in our locality than the West Indian or Guatemalan, therefore leaves us open to danger if a cold snap comes along.

In conclusion, we must be thorough in all our work and hope that this nutritive food may stand us in good stead.