

THE GROWING OF AVOCADOS IN THE EVERGLADES

Paul M. Hoenshel

Port Mayaca

The history of avocado growing in the Everglades shows a very interesting cycle which is repeated at fairly regular intervals. First, there is a period of average or less than average rainfall. During this period whatever avocados chance to be planted make the unbelievably vigorous growth characteristic of avocados on muck soil when conditions are favorable. This causes a mild boom in muck avocado groves and more or less acreage will be promoted by parties with land to sell, the actual planting usually being financed by non-residents. With continued favorable weather, an excellent showing may be expected at a very low maintenance cost. This continues until the inevitable wet year comes along, when most plantings drown out and we do not hear so much about avocados in the Everglades for a few years. Then the cycle starts again with a new crop of grove planters.

The mainspring of this cycle is the undeniable fact that with favorable conditions the avocado on good muck will make a luxuriant growth which has probably never been equalled by any other fruit tree. Not to weary you with a lot of tall tales, which even though true, might sound otherwise, I will give one concrete example of what can be expected. I have a small experimental planting on good muck near the lake. These trees are less than two years old and were set back in growth by the record breaking rain of last November, yet they are well over twelve feet tall, with a branch spread more than equalling their height.

While not all will fruit this season, a considerable number have already set a crop which would do credit to trees three times the age of these.

This particular planting has never been fertilized and has had very little care aside from that received incidental to intercropping with truck crops. It will probably be advisable to apply potash and phosphoric acid eventually but fertilization will never be a large item of cost on groves planted on this type of soil.

While avocados in the Everglades are not immune to the various troubles of growers elsewhere, in practically every case of grove failure, the cause has been lack of water control.

For the past six years I have been in charge of the Mayaca Corporation's experimental development at Port Mayaca. The greater part of the 1100 acres now under cultivation has been devoted to citrus and vegetables, but about four years ago rather extensive experiments with avocados on various types of soil were started. The net results of these experiments have been the development of approximately a hundred acres of avocado grove, the accumulation of considerable data as to what is practical and what is impractical in the way of water control and the sacrificing of more little avocado trees

on the altar of more knowledge than I care to think about.

I feel sure that the experiments which we have made will be of value whenever avocado growing in the glades becomes a stable business. This work has convinced me that with properly selected land and a correctly designed and constructed water control system avocados can be produced in the Everglades at a lower production cost than anywhere in the United States, and it is a question as to whether even Cuba could compete successfully.

On the other hand, if groves continue to be set with no more margin of safety than in the past, the Everglades will be lucky to produce enough between floods to supply the home demand.

One big factor in causing grove failures has been the misunderstanding as to the real status of drainage in the Glades. Just now, the building of the dike around the lake is being capitalized as ending all danger of floods. This dike is hoped to prevent any repetition of the loss caused by the hurricane of 1928 but it will not prevent avocados drowning any more than the Great Wall of China will. The various drainage districts function very well for the production of truck crops and sugar cane, but none are designed for the removal of abnormal rainfall quickly enough for avocados. When an avocado grove gets too much water you have to do something about it right now, you can't wait until next week. Any man who invests in an avocado grove, thinking that the Federal Government or the State of Florida or any of the political subdivisions thereof, is going to keep his trees from getting wet feet, has my sympathy and he will eventually need it.

The only safe way to plant on the muck is to have adequate dikes around the grove and pump capacity to handle 12 inches of rain in 24 hours. This is not prohibitive in cost and operation of such a system is much cheaper than most people think, provided the location is right. Some muck has such porous subsoil that any attempt to pump the water out simply changes the entire tract into one huge spring. I have personally tested other tracts with comparatively impervious subsoil where the seepage did not equal the evaporation.

The future of the avocado in the Everglades depends entirely upon the way it is developed. The possibilities are almost unlimited, but these possibilities may never be realized, I think an avocado grove on muck can be cheaper to maintain and just as safe as any grove can ever be which has to be left outdoors at night, or the biggest hundred-to-one shot that was ever gambled, it all depends on the conditions.

In this connection, I want to extend to all members of the Society and their friends a cordial invitation to visit the development at Port Mayaca at any time.

Mr. Barrow: I would like to state that I have visited Mr. Hoenshel's development, and I think he has the most effective method of water control we have seen, so far.

Member: I think that Mr. Hoenshel is inclined to belittle some of the things accomplished, and I think what Mr. Barrow says is correct. I have been to his place also, and Mr. Hoenshel has a remarkable grove, but I think it might be well for him to state the varieties he is using in his work, and why he is using them.

Mr. Hoenshel: To start with, we didn't know what varieties would do well there. Our first planting was only about 117 trees which consisted of every variety I could get my hands on. Some of them have been abandoned, and some were supposed to be the fine varieties. The success we had with those seemed to indicate that we might accomplish something on a larger scale, and we began to spread out. One reason we are not planting any more avocados than we are right now is because after planting thousands of them we still don't know one outstanding particularly good variety of avocado to plant, and I imagine that will apply to every man's planting in Avocados. We have a number of West Indian, Collinson, and a few Winslowson, but did not plant the Lulu. We wouldn't risk that. We have a humid atmosphere, and doubt whether we could control the scab. Where trees are grown on muck soil you do not have as big root system as on other types, because the soil being fertile it isn't required. We have tried to keep all our Avocados headed low to reduce the danger of that. The Taylor and Lulu, I don't know how you would keep them to the ground.

Member: Did you try the Mexican varieties at all?

Mr. Hoenshel: One Fuerte, that's all.

Member: That's a Hybrid.

Mr. Hoenshel: In that case we haven't tried any. So far, I would say that the West Indian types are considerably better adapted to muck than the other.