Possibilities of Sub-Tropical Fruits in Florida

H. E. Stevens, County Agent, Lee County, Fla.

In a paper before this society last year, Mr. Krome brought to your attention some recent developments of sub-tropical horticulture in Florida. Today I would like to consider for a short time the future possibilities of some of our present known tropical fruits, omitting entirely the citrus group, which has long since become our leading fruit crop. We have made considerable progress during the last decade, especially with the avocado, and I believe the day is not far distant when the commercial production of avocados will assume proportions equalling that of citrus, in a good many sections of our State. There is a large area in Florida where the avocado may be grown and as soon as we can settle on the more desirable varieties to grow, which is rapidly coming about, there will be a great impetus to the planting and production of the avocado. The food value of the avocado is a strong point in its favor. It is more than a luxury although it may be considered as such now, when we think of the prices some of these fruits bring, on the northern markets. The food value of the avocado will encourage its greater production for local use, and, if properly distributed and advertised, I do not believe there will be any danger of over production in commercial plantings, for years to come. Our proximity to the markets, our climate and the large area within the State that may be devoted to the growing of avocados peculiarly fits Florida to lead in the production of this commodity if the growers of the State wish to assume that lead. The industry is yet young, but interest is becoming more manifest and unless I am badly mistaken, there will be a large acreage planted to avocados during the next few years. There will be mistakes and some failures as is true in the building of any new industry, but we may expect these and we must overcome them. Mistakes and failure are more apt to be due to the individual rather than the principles underlying the industry.

The growing of fruit or other crops on a commercial scale is a business proposition, and business principles can no more be ignored in the production and marketing of avocados than in any other business.

In my own section of the State, Lee county, considerable interest has been awakened during the last year or so in planting avocados. There are several commercial plantings now under way and one small nursery that had 4,000 trees for sale this season sold out its entire production and could have sold twice or three times as many. This, to me, is a favor-
able sign for the industry, and the demand for trees far exceeds the supply.

Every home owner in Florida may have an avocado tree in his door yard if he so desires, and I heartily indorse the slogan of "Plant an avocado tree or seed" where it is possible to do so. The Mexican avocado is very hardy and will withstand the low temperatures in northern Florida if the tree can be brought up to three or four years without severe freeze injury. For home use, especially where the more tender varieties can not be grown, the Mexican type will serve every purpose. It is not desirable as a commercial fruit. The Guatemalan types can be grown in the central and southern parts of the State where the temperatures are not so low. This type will, no doubt, furnish us with our leading commercial varieties. The West Indian type will have to be confined to the southern part of the State as they are very susceptible to low temperatures. I will not attempt a discussion of the different varieties at this time as a great deal has already been written on this subject and we have much more yet to learn before the matter is finally settled.

The critical period in the growing of an avocado tree is in its first few years of growth. If it can be protected from frosts or freezes until it has attained three or four years' growth, I see no reason why a grove or planting could not then be carried through any ordinary freeze by some system of orchard heating.

In addition to the avocado we have other sub-tropical fruits that in my opinion offer wide possibilities for development. We do not seem to have made as extensive use of some of the fruits we have in our midst as we might. As citrus culture has been developed and as we are developing the avocado, why not apply this to the mango, the guava, banana, papaya, surinam cherry, carissa and other fruits we are now growing largely as novelties?

The increased production of these fruits may be considered from two view points: that of home use and commercial production.

For the home we should make use of as many different fruits as possible and arrange our plantings to have fruit the entire year. In many sections of Florida, especially the southern part of the State, this is possible.

We should confine ourselves to the fruits that are adapted and do well under our particular climatic conditions, and, if we do this, there is generally a wide field to select from.

I find that it is difficult for the new comer in our section, especially if he comes from Northern states, to forget his taste for northern fruits, and he will invariably want to plant out many of the fruits he has been accustomed to. He wonders why peaches, pears, plums, apples, cherries, gooseberries and the like will not grow as well in Lee county as they do back in Illinois, or some other state.

Nature has seen to it that the northern and southern fruit growers will not come into direct competition with each other as far as the same commodities are concerned, and we can not always make a satisfactory change in the laws of nature.
I suppose there are few of our northern friends, or southern either, for that matter, who would think of planting citrus, mangos, or avocados in either Michigan or New York, yet each of these are famous fruit producing states. So why waste time with fruits peculiarly adapted to our northern climate here in the South when we have so many at home that can be readily utilized.

For the home, lack of space is no valid excuse for not having a liberal supply of fruit. The ordinary building lot or door-yard will supply space enough for a sufficient variety of trees to keep the family in fruit. Our tropical fruit trees do not object to crowded conditions, as this is more nearly their natural environment. A single citrus tree, by the simple process of budding, can be made to carry early, mid-season and late oranges in addition to grapefruit, and on three trees the entire list of citrus fruits of economic value may be had. These should supply the ordinary family with citrus fruits in season. A seedling mango tree can be made to bear, by top working, four or five of the choice varieties, and the avocado can be treated in a similar way. Guavas, papayas, bananas and other fruits can be added to the list until the home planting is made complete and sufficient to meet the needs of the family.

It appears to me that we have neglected the home planting sadly in many cases, and that we are not utilizing the fruit trees we have at hand to the best advantage.

The home planting can be made the means of stimulating a wider use and demand for a number of the tropical fruits which are now grown as occasional specimens. By using more of these fruits ourselves and by preparing them in a variety of ways, a greater demand can be created for them.

Many of us may not care particularly for some of these fruits in their raw state, but, if they are cooked, preserved, made into jelly or conserve, a pleasing and appetizing product is produced. In this connection the ladies of the State, the Home Demonstration Clubs, and the Home Economics Department of our Extension Service can aid materially in creating a demand for these fruits, by finding new ways for serving them or new uses to which they may be put.

If you will pardon a local reference I would like to cite one illustration along this line which brings out the point I have tried to make. The ladies of the Home Demonstration Council of Lee county, recently published a cook book. This cook book is rather unique in that the recipes were furnished by various ladies of the county, and they applied chiefly to the use of the local grown products. Many of them were new and original. Some fifty or sixty of these recipes apply to the use of the fruits grown in Lee county. So if the ladies interested in our home fruits will exercise their ingenuity a little further on some of our lesser known tropical fruits, I feel sure that a greater demand will be created for these fruits and their products. If we use these more extensively among ourselves, it will not be long before our tourist friends become acquaint-
ed with them and a market practically unlimited will be created.

Turning again to the commercial production of sub-tropical fruits the mango may be considered next in importance to the avocado. There is a ready market for the finer varieties of this fruit grown in the State at the present time, and the common seedlings are easily disposed of locally. The uncertainty of the crop has been a drawback to the development of the industry, and if we can overcome this by suitable varieties and better cultural practices, there is a future for the production of mangos in Florida.

In Lee county the common seedling mango trees make a rapid, vigorous growth, with very little care and practically no fertilizer. The fruit is generally small, full of fibre, but of fairly good flavor. It is not suitable for shipment to the northern markets in competition with the better varieties. The crop is uncertain although the trees bloom profusely every season.

If we can put a larger and better quality of fruit on such trees and insure the production of an average crop each year, there will be large profits for the mango growers in this section. These are some of the problems to solve in connection with the growing of mangos, and I believe in time they will be solved. It is an industry that offers promise and one that should command more interest.

In the guava there are commercial possibilities that have barely been touched upon as yet. This fruit grows well in South Florida with very little attention or care, and it produces well. If proper varieties were developed, planted in grove form and brought under cultivation as any other fruit crop, the production of guavas could be made to pay well. It is a fruit that lends itself to a variety of uses, and the products made from it have met with favor in many places in the North. Guava jelly is a well known commodity and easily disposed of, and other products of the guava would no doubt find a ready market. Except locally, the guava can never be marketed as a fresh fruit, but the canned guavas, jelly, preserves and other products could be put on every market in the United States. I believe the canned guava would take well. I see no reason why it should not easily compete with the canned peach, if put up as attractively and given a reasonable amount of advertising.

We consume thousands of cans of peaches in Florida each year which come from other states in the North. May we not substitute canned guavas for some of these and in addition send our canned guavas into the northern markets. A guava industry would necessitate the establishment of canning factories in the State and these could be put to use in caring for other products, that annually go to waste.

A canning factory or enterprise for taking care of waste products is an important adjunct to any fruit industry, and it is something sorely needed by the fruit growers of this State. We can create a ready market for all the guava products we can produce and there are acres of land in South Florida today producing only sand spurs and palmettoes which might be devoted to the growing of guavas.
The banana is another fruit that we have done very little with, and which has latent possibilities both for home consumption and commercially in a local sense.

We pay handsomely for the fine bananas furnished us from the South American countries by the American Fruit Company. These usually sell for 50 to 60 cents per dozen in our local markets, while the home grown product can be bought for half that much when obtainable.

I recently read a little booklet on the banana, published by the American Fruit Company, which gave in detail the trouble and expense involved in supplying us with the excellent banana. They may be fully justified in the charges they make for their product, but why should we, here in Florida, pay such prices when we can grow bananas at home for about half that price?

There is a lot of land in Florida that will grow the banana, and it should not be an expensive crop to produce in a small way.

I believe that in any county where the banana can be safely grown, sufficient soil can be found to produce fruit enough to supply the local markets in that county, and a few banana plantations in the State could easily take care of the Florida markets and some of those in our neighboring states.

We have done much to develop and extend our citrus industry and it will continue to extend, always remaining the leading fruit crop in the State. However, it seems to me that there are great possibilities in some of these fruits I have mentioned if we devote the same interest and energy to their production and marketing. The Horticultural Society can aid materially in encouraging and fostering this development.