

pears to be well adapted to the soil and climatic conditions of the Gulf coast country. I do not know of any attempt to raise figs in Florida for commercial purposes. They do well here when you get them on the right kind of soil. There seems to be quite a mixture in the names of figs. Everybody who has a garden or small piece of land should at least have a few fig trees, the fruit coming in at a time when other fruit is scarce.

Kaki or Persimmon.

I regret to say that I feel my inability to do justice to this subject. It is no long-

er on trial, but has been proven to be thoroughly adapted to Florida as well as all the Gulf coast. When grafted on our native persimmon it seems perfectly at home. The tree is vigorous, prolific and has very few enemies. It is reported that the fruit is growing in favor in the Northern markets. Some of the most successful Southern fruit growers are now planting it extensively.

By judicious selection of varieties one can have ripe fruit from August until December. As it is better known it will be better appreciated, and, in my opinion, it will in years to come be one of our money-making fruits.

The Government Viticultural Experiment Station.

By Baron H. von Lüttichau.

Mr. President, and Members of the Florida State Horticultural Society:

I report on the experimental vineyard in my charge at Earleton. The vines remained in fine condition last summer, bore plentifully and some excellent specimens of many varieties matured perfect and were photographed by Mr. Geo. C. Husmann from the Department of Agriculture, who devoted about a week to examining the vines last summer at fruiting time.

Some marked differences appeared in the different stocks used. Riparia Gloire for instance has proven unsuitable. Naturally, among some 150 odd varieties, they are slowly thinning themselves out—the survival of the fittest—and such as may prove suitable will show their value by remaining in good condition. We are

not yet in a position to recommend certain varieties, but have several which we believe will come up to expectations.

This year, although the vines are generally in good order and showed heavy bloom, owing to the unusual cold, windy weather at blooming time, fruit set very badly, and there is little of it. The flower of the grape is more liable to be injured by cold, especially cold winds, than any other fruit. This is disappointing but not discouraging.

SUPPLEMENTARY REPORT.

By Irving Keck, of the Committee.

We have not yet got hold of the thing in the way of a cluster grape. I have heard wonderful things from a grape on the east coast, and now that the Society is

on the ground I trust it may be cornered and definite information obtained in regard to it. By Government experts I understand it is pronounced the Lenoir. The Scuppernong family is far the reliance in this locality and should be planted by everyone.

Figs.

The problem with figs is cold. The few days of warm weather that we are liable to have at any time in the winter start growth, then a light frost and the trees are back to the ground. Late and thorough cultivation, keeping up the growth as long as possible, seem to be about the only remedy so far.

Kaki.

It seems to me this fruit is not appreciated at its true worth; a campaign of education would be very helpful. It seems to be thoroughly at home in Florida and we ought to have it for four to six months. Gathered before it is fully ripe it will ripen and many take to it very kindly when better acquainted with it, that at first reject it. You all know the history of the grape-fruit, how for years it rotted in our groves, when with a little instruction it became a very popular fruit. The demand for good fruit of all kinds will steadily increase and it does seem that so good a fruit as this should not be neglected. Try all varieties; they are easily propagated, the wild persimmon is an excellent stock, better than the kaki. Graft and they will work out their own salvation. Then show your friends when they are in condition to use and how to use them, and you will have added another attraction to Florida.

DISCUSSION.

Dr. Kerr—I would like to ask the gentleman who read the first paper on this

subject, whether the fig industry pays. I am interested in all these things, whether they pay for food or as an article of clothing.

Mr. Palmer—I would suggest that it pays in the way of an article of food, but when we go back to the Garden of Eden I do not know what construction they put the most value on.

I do not know of any one raising figs in Florida for the commercial value, and will say I do not think they would pay in that way. To make figs pay here, we would have to put them up the same as they do in California, and I do not think we could do it in Florida. Our damp salt atmosphere, I am told, would prevent the drying and putting away the figs. I have never had any experience, but think they are fine to have around the place for one's own use. I am very fond of figs myself. There might be some money made by putting a few on the market, but that is only my opinion, as I do not know that it has been tried in this State.

Dr. Allen—The statement was made by the writer of the article that the only thing to do for figs was to cultivate them. I would like a little information on this subject. I have one fig tree on my place which was not cultivated. Last year it was loaded with fruit, and this year it is also loaded, but there was no cultivation done at all.

I would like to say further, in regard to the statement made that the fig tree starts out in the warm days of spring and the frost kills it back, that that was not my experience this year. The last frost that killed back the ends of the orange tree did not hurt the fig tree at all.

Dr. Kerr—That gentleman is from the county I have the honor of coming from. I live in the northern part of the county

and will say that when the frost of the 14th of February came the trees were leafing out nicely, and they were killed down to the ground. This is another Volusia county story.

Mr. Carnes—I know they grow abundantly and beautifully in central Georgia; I have seen them growing there for twenty odd years. I know that where these figs grow the thermometer gets down to thirteen degrees above zero every year. I do not know about the cultivation in Florida, having been here only a few years, but in my grove I have a fig tree that has never been cultivated, and nobody pays any attention to it, but it is full of figs every year.

Mr. Street—The fig trees on my place in Volusia county in the freeze of 1895 were frozen down to the ground. In Tallahassee, where they had some very fine fig trees, they were frozen. In Alabama, north of Birmingham, there are very fine fig trees which have not been frozen down in winter.

Mr. Carroll—I have lived in the central part of the State for twenty-five years. Had figs in great abundance, but on the 28th of December, 1894, the winter that we had that nice little cold spell that we all remember so well, the figs were dormant, there was no bud or sap moving. In February following, 1895, the leaves were out, probably as large as a dime and you could see the fruit forming, but they were killed to the ground and the roots were killed. Those that came up from the stump again grew up and in 1897, on the 7th of March, were four feet high, 1 1-4 inches in diameter, and on that day they were cut down to the ground again.

Where I was raised, in Charlotte, N. C., my father had a fig tree twenty inches at the base, which lived and grew and

never was killed. I have seen icicles on it there, but it was dormant, and I think it is because of those sudden changes of which the doctor speaks that makes it possible to kill fig trees here.

Dr. Kerr has very little frost where he lives, and that is why his tree is getting on so well.

Mr. Crane—There is a difference in figs; some are killed much more easily than others. The Celestial will stand the cold. I have a number and have had them a number of years. The Celestial gets through without any trouble whatever. My Celestial trees are twenty feet in height and twenty-five inches in diameter. They are set very close, and have never been injured at all. I think the difference is in the variety.

Mr. Butler—It was not a Celestial I had killed. The trouble in our locality is root rot. Some tell us how to use ammonia, when they ignore the thing that kills the fig trees. It has another enemy, which grows along that coast—fungus.

Mr. Terrell—I think by recalling the experience with orange trees in 1894 and 1895, it will somewhat explain the matter of the trees freezing. Our orange trees did not freeze in 1894, but in 1895, in February, the same trees died to the ground. It is the same with fig trees. If there is a little warm weather the sap begins to move and it does not take much to kill them.

About fertilizing the fig tree, I find it is a good chicken yard tree. If you don't want the chickens to have the figs, put a fence about the trees, otherwise the chickens will get them. I would suggest that the fig tree be put in the yard as an incubator.

Rev. E. V. Blackman—The Bolton or Key grape is equal in flavor to the im-

ported grapes. One of our citizens has some he got from the Experiment Station some of the fine varieties of the vinifera. One vine grew a bunch equally as large as any in the old country, but equal in flavor of those of the imported kinds. Grape culture with us is in its infancy. Very few of our farmers have even one grape vine, but we are looking forward to the time when we shall be shipping grapes in carload lots. Mr. Watson, here in Miami, has another grape that grows in a bunch that weighs six to eight ounces. Last year was the first year of bearing. We have evidence enough that the grape will do well in this country; not common grapes, but the finer varieties that are grown and so much sought after in the northern markets.

Mr. W. S. Hart—I would like to ask Mr. Blackman if the grape that has such

large berries or bunches ripens up evenly, the variety called the Key Grape?

Mr. Blackman—In some instances there has been difficulty about the grape ripening evenly. In some cases it ripens up evenly where good culture is given. Fruiting of the finer varieties of grapes here is yet an experiment. I think the older vines I have mentioned are three years old. This year the fruit has set much heavier on them than on the second year vines.

[The Secretary, with Mr. Blackman, visited two vines growing on city lots; both of them very vigorous and fruitful, covering trellises fifteen or twenty feet long. All the bunches on one were covered with paper sacks; on the other about a half bushel were in sight, fine, large, healthy fruit. Varieties not known.]

Notes on Celery Culture.

By H. H. Chappell, of Sanford.

Sanford growers have probably the most ingenious system in this country combining in one both drainage and underground irrigation. The irrigation water is derived from artesian wells, from seventy-five to 150 feet deep, costing \$50 to \$75, and arranged along the margin of a field having a slight incline. The field is gridironed with a system of earthenware tile, about eighteen inches below the surface.

Nine-tenths of the truck farms are provided with drain tiles for irrigation, and those who have formerly used triangular wooden flumes for this purpose are taking

them out, the Florida Agriculturist editor to the contrary, notwithstanding.

Nearly all the pipes used are unglazed. The main supply line is laid with the incline of the land, and the branch or irrigating pipes lead off from this as nearly as possible on the level of the land. By this means the pockets, as they are called, are mostly kept on the outer edges of the field out of the way of cultivation. The pockets are made with partitions and placed along the main supply pipe. The partition is made lower than the sides of the pocket, and is provided with a plug. Suppose the plug inserted into the orifice, the water