Some Things We Have Learned About Growing Grapes in Florida

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More progress has been made in grape culture in the last six years in Florida than at any other time in history.

Grapes do best on high pine and high hammock land, because grapes, like citrus need good water and air drainage.

R. W. Munson, Lukfata, Fern, Munson, Marguerite and Rupistis St. George are good root stock.

Rows should run north and south and should not be over 400 feet long, eleven feet apart and the grape plants nine feet in the drill.

The best time to plant grapes is from December 15 to February 15.

Cultivation should start about February 10, keeping it up every two or three weeks until July 1. Then a cover crop should be planted or the native grasses allowed to grow, and we have found that crotalaria does real good. For cultivating, a disc, having depth guage rollers, acme harrow and horse hoe are used, also hand hoe.

About 1½ pounds of Commercial fertilizer and a little Nitrate of Soda is needed the first year. Each year thereafter an additional pound is added until the fifth year when the grapes should be in full bearing and receiving a total of five pounds per plant, which is applied in three applications. The schedule that we are using for Carman variety is as follows: February 10, one pound, April 1, two pounds, June 1, two pounds. For earlier varieties the schedule will have to be changed a little. From four to five weeks before your variety starts to ripen your last application should be applied.

The Munson three wire canopy system of trellising should be used. Have found when putting up the lower wire, it is advisable to leave about 8 feet of wire on each end of the row, which can be buried close to the post and serves as a lightning resistant.

A vigorous vine that has reached the wire, and had been headed in and trained to two laterals the first season, at pruning time leave about three buds on each side; at two years leave six buds on each side or a total of twelve; at three years a total of 48 buds; and at five years a total of 60 buds, using Carman variety as an example. With proper pruning one can control his grape crop this season, and also develop the fruiting canes at the proper places for next season.

By watching the fruiting buds of different varieties it will be found that the
Carman fruits on the third, fourth and sixth buds; Beacon on the third and fourth buds; Brilliant on the fourth and fifth buds; Ribier on the fourth and fifth buds; Headlight on the second, third, fourth and fifth buds, etc.

Pruning should be finished by February 1, and the dormant spray should have been applied by this time, which can be made by dissolving four pounds of Blue-stone in four gallons of water, and adding same to forty-six gallons of water. The next spray should be a 4-4-50 Bordeaux mixture to which has been added 1½ pounds of dry lead arsenate, which is used to kill chewing insects, also ½ pound of Kayso, which is a sticker, to each fifty gallons. If the grapes are bothered by any sucking insects add one-fourth pint of 40 per cent Nicotine Sulphte to each fifty gallons of spray material. This should be applied before the grapes bloom. Some varieties bloom by March 28. Last year Lukfata and Gothe bloomed on March 28, R. W. Munson and Brilliant on March 30; Carman, Ribier, Red Cornichon, April 7. Another 4-4-50 Bordeaux mixture with 1½ pounds of dry lead arsenate and ½ pound of Kayso should be applied when the fruit is about one-quarter grown. When the fruit starts to color Neutral Copper Acetate should be used, dissolving two pounds in two gallons of water and adding same to forty-eight gallons of water, also add 1½ pounds of dry lead arsenate and ½ pound of Kayso. This is a stainless spray and care should be taken that the spray tank is well cleaned of the residue from the previous Bordeaux mixtures, as it will mar the appearance of the fruit.

Another application of neutral copper acetate should be used just about the time the grapes are ripe. Do not add any dry arsenate of lead to this last application. It will take about twenty gallons of spray material to spray an acre of grapes.

Have found that a 20-20-60 Copper Lime Dust can be used to good advantage on young plants. For the past three seasons have dusted about 630 Carman grape plants, and the only spray used on this lot of plants was the dormant spray in January, and it seems that we have kept this lot as free from disease and insects as the rest of the patch that we have used different sprays on.

It will take about 2½ pounds of dust and one man can dust one acre with a hand duster in about one hour.

There is a special grape harvesting shear made which can be bought cheaper than an orange clipper, pocket knife or scissors. Have found the 24-pound lug the best container to use, and for harvesting a two-handled ½ bushel basket, with a piece of paper in the bottom to keep out the sand, has proven very satisfactory.

We have an experimental vineyard located near Altoona, Florida, consisting of about three acres, with over seventy different varieties planted in same, of which forty are California or European kinds. Our main patch of thirty odd acres is planted to Carmans, as the main crop, at the present time and this has given us most successful crops. We watch our experimental patch constantly for com-
parisons as to growth and yield, our aim being to not stop with one variety, but to continually experiment until we have found out absolutely what is the best grape for our section.

In helping ourselves, we are glad at any time to help our neighbors. We are pleased at all times, as much as lays in our power to answer what questions we can regarding our findings in grape culture. In this connection, there is a column on "Grapes" published each week in the Umatilla Tribune, the newspaper of our section, wherein questions are answered regarding the culture of grapes in Central Florida. We have contributed to this column, and would say that to show the interest taken in grapes, questions have been handed to the paper from people in the North, in the South and even from Central America and one came from far-away Russia. This shows that great interest is being taken in Florida grapes.

At the present time the bulk of the grapes grown in Florida are Carman and Beacon, both mid-season, slip skin varieties. They start to ripen about June 20, and from July 4 to 10 ripen very rapidly. For an earlier or later grape than either the Carman or Beacon our future seems to point to the European or meaty grape. The following European varieties fruited in a small way last year: Ribier, Red Cornichon, Zante Currant, Flame Tokay and Gros Colman.

Quite a number are in bloom this year and should fruit and are as follows: Thompson Seedless, Red Cornichon, Ribier, Zante Currant, Emperor, Zinfandel, Muscat of Alexandria, Alicante Bouschet, Olivette Blanche, Gros Colman and Flame Tokay.

Have made over 600 field grafts this year of over twenty-five different European varieties, and on ten different root stocks. Through the co-operation of Dr. Geo. C. Husmann, with the United States Department of Agriculture, Bureau of Plant Industry, Washington, D. C., we received seventeen different kinds of European cuttings with which we made over 100 field grafts using ten different root stocks.

The following California or European grape cuttings were received: Albardiens, Muscat Alexandria, Black Hamburg, Hunisa, Muscat Hamburg, Olivette Blanche, Olivette noir, Pizzutella, White Luglienga, Black Morocco, Piment, Zabalkanski, Chauch Rose, Duc de Magenta, Kurtelaska, Blauer Portugeiser, Chavooschee.