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Hunt Institute was dedicated in 1961 as the Rachel McMasters Miller Hunt Botanical Library, an international center for bibliographical research and service in the interests of botany and horticulture, as well as a center for the study of all aspects of the history of the plant sciences. By 1971 the Library's activities had so diversified that the name was changed to Hunt Institute for Botanical Documentation. Growth in collections and research projects led to the establishment of four programmatic departments: Archives, Art, Bibliography and the Library.



UNIVERSITY OF FLORIDA
INSTITUTE OF FOOD AND AGRICULTURAL SCIENCES

COLLEGE OF AGRICULTURE AGRICULTURAL EXPERIMENT STATIONS COOPERATIVE EXTENSION SERVICE SCHOOL OF FORESTRY

DEPARTMENT OF FRUIT CROPS

1172 A MCCARTY HALL
GAINESVILLE, FLORIDA 32601

November 10, 1970

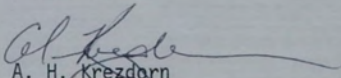
Mr. Wilson Popenoe
Antigua, Guatemala
Central America

Dear Mr. Popenoe:

I think you might want to consider the grape work at the Leesburg Station. However, Dr. John Mortensen could answer this better than I. I'm forwarding your letter to him and suggesting he give you a brief review of his work.

Be sure and stop by for a chat on your next visit to Gainesville.

Sincerely,


A. H. Krezdorn
Chairman

cc: Dr. J. A. Mortensen



UNIVERSITY OF FLORIDA
INSTITUTE OF FOOD AND AGRICULTURAL SCIENCES

COLLEGE OF AGRICULTURE AGRICULTURAL EXPERIMENT STATIONS AGRICULTURAL EXTENSION SERVICE SCHOOL OF FORESTRY

WATERMELON AND GRAPE INVESTIGATIONS LABORATORY

POST OFFICE BOX 388
LEESBURG, FLORIDA 32748

November 13, 1970

Mr. Wilson Popenoe
Antigua, Guatemala
Central America

Dear Mr. Popenoe:

Our Laboratory has had a grape breeding program under way since 1945 when Mr. Loren Stover made a cross between the native 'Pixiola' (Vitis simpsoni) and Golden Muscat. This gave rise to the 'Lake Emerald', released in 1954. It is a green to golden variety that is self-fertile, bears well, but is a poor keeper. It's main use is as a wine grape and as a rootstock, and it grows like a weed in most sections of Florida. Our principal species used in breeding are Vitis simpsoni, V. smalliana, V. shuttleworthi, V. vinifera, V. labrusca, and V. rupestris. In 1960 the Blue Lake was released, a blue-fruited, juice and jelly type of grape. It is self-fertile, amazingly tolerant of insects, diseases, summer rainfall, etc., and is doing nicely in the lowlands of Haiti as well as in Florida. The Blue Lake probably would do well in tropical America, and can be eaten fresh as well as processed. Two more recent releases from our station are the Norris (large purple, female variety), and Stover (early-ripening self-fertile golden variety). Of these, the Stover is more likely to succeed in the tropics (a blend of Vitis shuttleworthi, V. rupestris, and V. vinifera).

In addition to the four released varieties we have six newer selections undergoing trials at various locations in the state. Two of these (F4-16 and F4-36) are firm-textured with adherent skin and are red in color. I would not venture a guess as to how these would succeed in the tropics, but they look good here so far.

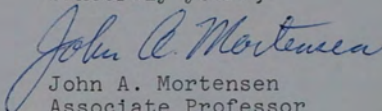
Page 2
Mr. Wilson Popenoe
November 13, 1970

I don't know how V. rotundifolia does in the tropics, but certain varieties look very promising here and in southern Florida: Fry, Higgins, Hunt, Jumbo, and Yuga (from Ga. Exp. Sta.); Magoon, Southland (from U.S.D.A., Mississippi); Magnolia, Tarheel (from N. C. Agr. Exp. Sta.). Marked improvements in size and quality of fruit are evident in the newer varieties above as contrasted to older varieties of V. rotundifolia.

Individuals that I know about in subtropical areas who are now breeding grapes are Dr. Santos Neto, I.A.C., Campinas, Brazil (since 1950-now has several scion and rootstock types adapted to subtropics - using tropical and subtropical species of Vitis in addition to rupestris, vinifera and labrusca); Dr. E. P. Evans, Pretoria, Republic of South Africa (has new grape varieties with tolerance to summer rainfall - using primarily the Isabella and certain V. vinifera varieties in the breeding); R. K. Bammi, Indian Council of Agricultural Research, New Delhi, India (in southern India they obtain two crops of V. vinifera per year by scheduled pruning, and vines never become fully dormant).

I hope the above comments will be helpful to you. We will be glad to send you some cuttings of our better types if you would like to try them in Guatemala.

Sincerely yours,



John A. Mortensen
Associate Professor
(Associate Geneticist)

JAM/mh

cc: Dr. A. H. Krezdorn



UNIVERSITY OF FLORIDA
INSTITUTE OF FOOD AND AGRICULTURAL SCIENCES

EDUCATION - RESEARCH - EXTENSION - SERVICE - FORESTRY

WATERMELON AND GRAPE INVESTIGATIONS LABORATORY

C-O-P-Y

POST OFFICE BOX 308
GAINESVILLE, FLORIDA 32609

November 13, 1970

Mr. Wilson Popenoe
Antigua, Guatemala
Central America

Dear Mr. Popenoe:

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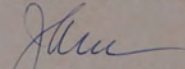
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November 13, 1970

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Sincerely yours,


John A. Mortensen
Associate Professor
(Associate Geneticist)

JAM/mh

cc: Dr. A. H. Krezdorn

Antigua, Guatemala, 16 November 1970

Dr J A Mortensen
Watermelon and Grape Laboratory
Leesburg, Florida.

Dear Doctor Mortensen:

Something has got me started to thinking about tropical grapes again. Perhaps it was the request of George Kessler for a little paper for the journal of the American Pomological Society. I wrote Dr Krezdorn, asking for a few notes; I have not heard from him yet; but I have decided not to stop with a little paper for publication, but to get back into the field and do something.

I think you know how discouraging our efforts of the past 50 years have been. But I believe those most interested feel that the plant breeders will eventually lick the game. It is in this connection that I want to ask you a question: Back in 1918 I sent to Washington from Tehuantepec, Mexico, seeds of a wild muscadine which Joe Fennell named for me and which he said was the muscadine which grows farther south than any other. I have a good picture of the fruit taken in Tehuantepec in 1918; I am going over to Honduras next week and I think I will get it copied. But maybe this species has been given enough attention and has no value in connection with breeding for tropical grapes. This is what I want to know, for it would still be worth while to get seed from Mexico I think I could do it.

If I can develop some cooperation down this way, do you think we should ask Dr Krezdorn if Florida would like to give more attention to the sort of thing Joe Fennell tried to do way back yonkers?

Sincerely yours,



UNIVERSITY OF FLORIDA
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COLLEGE OF AGRICULTURE AGRICULTURAL EXPERIMENT STATIONS AGRICULTURAL EXTENSION SERVICE SCHOOL OF FORESTRY

WATERMELON AND GRAPE INVESTIGATIONS LABORATORY

POST OFFICE BOX 388
LEESBURG, FLORIDA 32748

November 20, 1970

Via Air Mail

Mr. Wilson Popenoe
Antigua, Guatemala
Central America

Dear Mr. Popenoe:

I just received your letter of November 16 concerning grapes for the tropics. I had already sent you a letter in answer to your correspondence with Dr. Krezdorn. It was mailed November 13, but I find that it did not go by air mail. Consequently, I am enclosing a copy of that letter with this one.

You mentioned the wild muscadine from Tehautepec, Mexico, which is officially known as Vitis popenoci Fennell. I feel that this species has been to a large extent neglected in breeding grapes for the tropics. Joe Fennell had a 3-way hybrid between (rotundifolia x munsoniana) x popenoci which is extremely healthy here in Florida. Mr. Robert Zehnder, a private breeder in Summerville, South Carolina has used it some in breeding. He sent me some open-pollinated seeds of it, seedlings of which are now bearing highly flavored fruit (slightly small) on vigorous vines.

If there is some way you could get some more seed from Mexico of Vitis popenoci, I would be very happy to grow it out and use it in crosses with high quality muscadines in an effort to get something suited to the tropics. Also, if you have any reprints of your 1942 article on grapes for tropical America, I surely would appreciate one or two for our library here. I have not seen this paper.

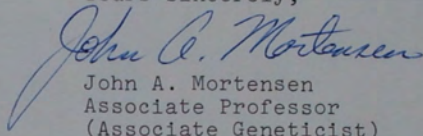
I was interested in your comment that Niagara may do as well as Isabella in the tropics. One thing these two varieties have in common is their adaptability to high humidity, which includes tolerance to downy mildew and anthracnose. Neither

Page 2
Mr. Wilson Popenoe
November 20, 1970

has succeeded in Florida because of the prevalence of Pierce's disease here, but they make a better showing than most varieties ^{from} ~~from~~ ^{out-of-state,}

I also appreciated your comment on not basing a grape business on spraying every 10 days. The muscadines respond better to that type of culture here in Florida than any bunch grapes do, up to the present. I would like to see you try the newer muscadines, some of which resemble small plums, under your conditions. Some, like Tarheel, are rotundifolia-munsoniana hybrids more likely to succeed in the tropics but of lesser size and quality.

Yours sincerely,


John A. Mortensen
Associate Professor
(Associate Geneticist)

JAM/mh
Enc:

Antigua, Guatemala 18 Dec 1970

Sr Don Amado Pelen C.
Escuela Agrícola Panamericana
Tegucigalpa, Honduras

Dear Amado:

I refuse to give up hope of growing grapes in Central America and have been in touch with the authorities in Florida and California. They are much interested in a wild grape, called totoloche, which I collected in Tehuantepec back in 1918 and which was named for me, Vitis pelenoi. I am going to see if I can get some more seeds of this grape from Mexico, which they can use in their breeding work. In the meantime, they want to know more about this wild grape, and I have just found a picture of it in my files. I need some copies of this to send to Florida, California and Venezuela and Colombia. I think five copies in all, but I suggest you reduce them to about post card size so they will be easier to mail, and I suggest when you make these copies you focus on the grapes and not on the girl.

So, I will thank you to send me five prints as soon as you conveniently can and I will pay you when I come over there again which I hope will be early in the New Year. We have not had time to call on your father and mother since we came back from Honduras but will be doing so around Christmas time, when Alice will take them a basket of Christmas cookies, German style, which I believe you accustomed to call weinnachtskuchen. Right?

Siempre su muy afmo

Antigua, Guatemala, 15 May 1971

Dr. John A. Mortensen
Watermelon and Grape Investigations Laboratory
Leesburg, Florida 32748

Dear Doctor Mortensen:

Ever since receiving your interesting letters of last November, together with the publications you sent, I have been trying to line up things at this end so we could get ahead with the testing of material of interest in connection with "Grapes for Tropical America". I think I have a collaborator here in Antigua, Arturo Falla who is primarily interested in peaches and pears and has been getting a lot of help from Ralph Sharpe at Gainesville. Seven years ago I gave him a collection of bunch grapes, Delaware, Catawba, Niagara, Caco and Golden Muscat which started out beautifully, but as usual fizzled out after two years. At the same time I got a set for Escuela Agrícola Panamericana which likewise fizzled out, as most grapes do with us. The old reliable Isabella is the only one, so far, that carries on pretty well year after year. Catawba has done pretty well, Niagara hangs on year after year where conditions are favorable, and Golden Muscat starts off well but needs too much spraying. I think I have written you about all this, but the fact remains, as you know better than I do, that the job is by no means liked. Doctor Olmo at Davis sent me a copy of the excellent report of his trip to Venezuela in 1968, where, with his vast knowledge of grapes he sized up the situation admirably. He thinks, as I believe all of us (and as Joe Fennell did) that tiliacifolia must be the basis of breeding work, and he thinks they may do something along this line in Venezuela, but I

believe you are likely to do more in Florida. I have just written my son Hugh that I may fly up to Gainesville next month and if I do, I would like to come to Leesburg and have a good talk with you, to see that I may be able to do, to help at this end.

I believe Lake Emerald and Blue Lake have been brought to Central America but I have not had them myself - I have no place to conduct trials of grape varieties - and I am afraid they have not been given a serious trial anywhere in this region. I have been wondering what became of Joe Fennell's "Fairchild" grape which was *tilliaefolia* x *Alfonse Lavallee*. It seems to me he told me the last time I saw him at Lady Lake, which was many years ago, that for some reason it did not fill the bill. Joe Fennell did a lot of work in Florida, in Puerto Rico and in Costa Rica. I wonder if you have ever talked with him about his work? Incidentally, you asked for a copy of my paper "Grapes for Tropical America", in which I published a lot of notes from Joe. This paper appeared in "Tropical Agriculture", Vol. XIX, No. 2, 1942. This excellent little Journal used to come from the Imperial College of Tropical Agriculture in Trinidad, West Indies. There must be a file of it in the library of the College of Agriculture at Gainesville. I only have one copy left, but I am going to bring it with me when I come up to Florida next month and will leave it with you if you cannot get it at Gainesville.

Now, here is my principal reason for writing today. You are interested in *Vitis rotundifolia* and you would like to get seeds. I have just written Harold Winters as per enclosed copy. It seems to me the Plant Introduction people at Beltsville must have connections in Mexico which will enable them to get seeds of this grape. If they cant, maybe I can figure out some way to do it. I havent not taken up the matter previously as the season was not right. It is is now

As far as I know, almost nothing has been done to try the muscadine group here in tropical America. Thirty years ago - and I may have told you this - I introduced the muscadines then offered by the nurserymen in Florida - I think we got them from Reasoner Brothers "Royal Palm Nurseries" but we got no males if I recall correctly. The vines grew well for some years here in Antigua. Seven or eight years ago Arnold Krochmal, who was then at Escuela Agricola Panamericana, brought in 200 plants, it seems to me, of the muscadine group, I don't know what varieties, but the horticultural department at the school was in a mess at the time and the planting never came to anything, it disappeared completely.

I do not think, however, that pure muscadines are what we want for tropical America. I think the only thing which will become popular is a grape which will pass for a good table vinifera; Golden Muscat would be it if it would grow and bear like *tilliaefolia* and required no spraying. As a table or dessert grape, Isabella can not become too popular because Latins like sweet fruits and they don't want any foxy flavor. They want Muscat of Alexandria - or something like it. As yet, they are not interested in wine grapes. I don't think it will be easy to develop a great demand for wine in tropical America. Dr Olmo seems to agree with this. Beer and rum fill the bill; but they love dessert grapes pay tremendous prices for Tokay and one or two others from California.

I do hope I can get to Florida next month and have a talk with you. I think the first thing we must do is to get someone down here to give serious attention to your recent hybrids. I will try to make arrangements toward this end.

Faithfully yours,

P. O. Box 177
Lady Lake, Fla. 32659

[June 1977]

Dear Wilson:

It was a real treat to hear from you in your letter of May 15th. I have wondered many times where you were now living and how you were getting along. We surely hope you can find it convenient to come to see us at Lady Lake.

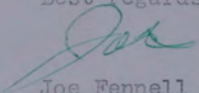
You mentioned that you expect to be in Florida in June. Shortly after July 4 we usually go to our place in the North Carolina mountains for about two months, or until early September but expect to be here until about July 4th or 5th. If for some reason you cannot come down to see us let us know and we will be glad to drive up to Gainesville to see you. (Our phone no. is 753-2935) Will be looking forward to seeing you.

In recent years I have intentionally cut down on the time and effort given to grapes in order to allow more time for certain mechanical interest of exploratory nature. However, I still have some grape projects going both here and in N.C.

Was glad to have the photo of *V. popenoei*. It is difficult to grow this species here. I still have one small plant (9.5.0) which winter kills to the ground almost every year - has never flowered in 12 years or more. In south Florida it did better - flowered and bore some fruit though root borers were a problem. In contrast to this poor result with the species I have a hybrid of it with scuppernong and Florida bird grape, (*V. rotundifolia* x *V. munsoniana*) x *V. popenoei*, which is vigorous and healthy after 21 years. It typically produces heavy fruit crops and has never suffered from cold or other problems at this location. Typical clusters average 20 - 30 berries, berry size 1/2 to 3/4" diameter, skin and pulp tough, pronounced flavor. This hybrid would appear to offer promise for use in developing superior muscadine varieties for the tropics. Would be glad to give you a rooted plant if you care for it.

Hope to see you soon.

Best regards,


Joe Fennell

Area 904

753-2935



UNIVERSITY OF FLORIDA
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COLLEGE OF AGRICULTURE AGRICULTURAL EXPERIMENT STATIONS COOPERATIVE EXTENSION SERVICE SCHOOL OF FORESTRY

~~WATERMELON X ANON X GRAPE X NURSERY X LABORATORY~~
AGRICULTURAL RESEARCH CENTER

POST OFFICE BOX 388

LEESBURG, FLORIDA 32748

August 3, 1971

Dr. Wilson Popenoe
Antigua, Guatemala
Central America

Dear Dr. Popenoe:

It was a pleasure to have you here with us to visit. I'm sure the Fennell's, Mr. Stover, and Dr. Balerdi share this.

The diseased leaves of Catawba that you sent could be Pierce's disease. I consulted with Dr. Crall and Dr. Hopkins, and they thought the leaves could be symptomatic of Pierce's disease. On the other hand, deficiencies of potash and magnesium could be the factor. The question is, what other symptoms were in evidence, like delayed bud break, dwarfed shoots, uneven maturity of bark (islands of green in brown wood), leaf blade drop (leaving petiole intact), dieback of canes, browning of vascular tissue (cross section), and decline of vine vigor, sometimes followed by death of the vine. The above make up the Pierce's disease syndrome. What the Catawba vines had could be part of that syndrome, but I would look for other symptoms such as those listed above to be a little more confident that it is is Pierce's disease.

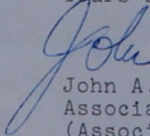
I was interested in your variety observations from Honduras. No doubt, the conditions there are quite different from here on a year-around basis. For example, we rarely have a problem of insufficient winter chill here, at Leesburg, but it is quite conceivable that lack of chill would be a factor for declining vine vigor in Honduras. Pierce's disease is major here, but may be relatively unimportant for grape survival there in Central America. Catawba and Niagara survive longer here than Concord or Golden Muscat, but none of the four varieties has enough resistance to be productive over a period of years in Florida (except for isolated locations near the sea shore).

For an 8-year-old planting to still have good-looking Catawbas would be extremely unlikely in Florida, and suggests that Pierce's disease, if present there in Honduras, has not yet become a limiting factor to grape production.

Dr. Wilson Popenoe
August 3, 1971
Page 2

One other thing - Vitis tiliifolia has extremely good vigor and performance in the tropics, but certain clones may not have resistance to Pierce's disease. One clone of Vitis tiliifolia went out with Pierce's disease for us last winter. It is called "El Bejuce". Other clones may be fully resistant, but seem to object to our winters here and do not do as well as they should.

Yours sincerely,



John A. Mortensen
Associate Professor
(Associate Geneticist)

JAM/mh

Antigua, Guatemala, 14 Sept 1971

Dr John A. Mortensen
Agricultural Research Center, Box 388
Leesburg, Florida.

Dear John:

I was just about to write you, asking How come? when day before yesterday I received your letter postmarked at Leesburg 3 August and Antigua 10 September. The same day I received three airmails from California postmarked at Berkeley in July.

Your notes about the Pierce's disease problem are just what I wanted. Unfortunately, I am unable to check the other symptoms which you mention, at the moment, and I am afraid we have no one at Escuela Agricola Panamericana right now who can do it. The main thing, to my mind, is this: When I went over the planting I did not see any leaves like those I sent you on anything but Catawba. I didn't look too hard, but the whole row of Catawba vines, some ten plants in all, just simply hit you in the eye, with those queer looking leaves. I didn't see any on Golden Muscat or Niagara, the only two other varieties which are still doing fairly well in our planting 7 or 8 years old. I have written you that Concord passed out the first year. I have never seen a Concord vine in production down here, though I am sure there must have been quite a few introductions. I am sorry we don't have Isabella at the Escuela any more; we grew it for years and it has done so well everywhere in tropical America that I just simply don't worry about it anymore, except to encourage people to plant it. Last week a neighbor of mine brought me a beautiful dish of Isabella fruits, grown probably from cuttings of a vine I had here in my patio 25 years ago. Yesterday I pruned the only vine I now have. It is about 15 years old and is about through! It bore half a dozen bunches this

year, after it had been neglected for five years or so and I have given it a good dose of fertilizer, but I don't look for a strong come back this time. And a neighbor of mine, to whom I gave a plant of Niagara at least fifteen years ago, told me yesterday that he only got two bunches of fruit this year. His vine has been very interesting; he had it next to his chicken yard and heaped chicken manure on it every year, which seemed to keep it going. But I am wondering if we should not figure on about 10 or 12 years good productive life for a labrusca here in the tropics. That would be enough to make it profitable, but our real problem with labruscas (and of course their assumed hybrids such as Isabella) is that the Latins don't like them as dessert grapes. This is the reason I was so impressed by that white grape you showed us at Leesburg. You know which one I mean. The berries not very large, which is going to be a handicap, because Latins insist on big fruits in general. (I pull a joke on them, when they bring me a fine Persian lime. I ask them, is that the best you can do with lemons (as we call limes and lemons). And I give them a Ponderosa).

From what you wrote, I gather that Catawba could have Pierce's disease. I wonder if that is true of Isabella and Niagara, the two other American bunch grapes, as we sometimes call them, which we have been working with these past ten years. I don't mention Delaware, which I have grown here in my garden and which has produced fine fruit, but it is a weak grower compared with Catawba - the strongest grower of all - and it would be hard to sell such a small fruit here, tho the ones I grew were delicious and reminded me of the Delawares we had in our garden in Topeka Kansas when I was a kid - way back in 1900.

You mention Vitis tiliacifolia and say that a clone you have went out with Pierce's disease last winter. I have seen hundreds of plants of tiliacifolia here in the wild - all over Central America - and I never saw one on which the leaves were not a good clean green color. I don't suppose anyone has ever made a search for Pierce's disease here in the tropics. I wonder if Olmo looked for it in Venezuela? (I hope you received the copy of his excellent report which I sent you). I wish you could have seen those Catawbas at the Escuela of which I sent you leaves. It would have hit you right in the eye, almost knocked you over. And this after so many years during which we have not noticed it, but then, I had no idea of what Pierce's disease looked like and nobody else at the Escuela did. I am asking Mr Armour, the present Director, to keep that row of Catawbas going until we can learn more. Like almost everybody else down here, he has given up hope of doing anything worth while with grapes in Central America. But those lads down in Colombia are going strong; they are recommending several viniferas (including Black Hamburg) for commercial cultivation, with plenty of spraying; but they always come back to talking about Isabella, as good for wine making. But I have heard that most of the Isabella wine made in Colombia has plenty of blackberry juice or something else in it. But we do know that for nearly fifty years there have been small commercial plantings of Isabella in the Cauca valley.

Arturo Falla, one of the best horticulturists here in Guatemala, has agreed to take good care of any material you send us. I will write you about this later, since you said January will be the time. That little white grape that you showed me tasted so much like a Muscat of Alexandria that it raised hopes in my heart. I suppose something will go wrong with it down here, but when you have spent your whole life in Plant Introduction as I have, you never stop trying.

Warmest regards to all of you.

Faithfully yours

Here is the copy of the letter which we were supposed to enclose in our letter of January 24th.

AIR MAIL

September 17, 1971

Dr. Wilson Popenoe
Antigua, GUATEMALA
Central America

Dear Sir:

We are in receipt of your letter of September 13th. To expedite any transaction that may occur I am writing you a letter instead of sending you a proforma. We still have in stock *Pyrus calleryana* and the charge to you would be:

Cost of seed	\$35.00 lb.
Packing	.75
Phytosanitary Certificate	2.50
Minimum Export Fee	2.50
Air Mail	1.98
Minimum Insurance	2.50
	<u>\$45.23</u>

This seed is subject to prior sale. Unfortunately, we must ask you to pay in advance.

We are making note that the shipment should be made to the following address:

Lic. Augusto Ramirez Sagastume
12 calle 12-11, Zona 10,
Guatemala City, Guatemala C. A.

Cordially yours,

HERBST BROTHERS SEEDSMEN, INC.

Roy Herbst

RH/ac

45.23

3

135.69



UNIVERSITY OF FLORIDA
INSTITUTE OF FOOD AND AGRICULTURAL SCIENCES

COLLEGE OF AGRICULTURE AGRICULTURAL EXPERIMENT STATIONS COOPERATIVE EXTENSION SERVICE SCHOOL OF FORESTRY

DEPARTMENT OF FRUIT CROPS

1172 A MCCARTY HALL

GAINESVILLE, FLORIDA 32601

September 30, 1971

Mr. Wilson Popenoe
Antigua
Guatemala

Dear Wilson:

Your last letter of September 8 asked about the Tenn pear. I have checked the limited data I have on dormancy break dates. It is fairly close to Kieffer, Orient and Douglas. It follows Baldwin and hardly overlaps bloom with it most years here. From this you may be able to guess its adaptation. I'd guess you would want to stay as high as all the varieties mentioned and of course it should be a higher elevation than Hood or Pineapple which bloom much before Baldwin.

An important thing is to decide on pollenizers for Tenn. Other than Orient, Kieffer and Douglas mentioned above, and possibly Baldwin, I can't suggest anything. We have never used anything but Hood in hand-pollination, so I don't know for sure how they combine. I hope Arturo has thought of this and has made some plans to include at least 1 other variety he knows will bloom with it for his large planting. Here, at least, I don't believe it sets without cross=pollination, though Hood will.

I'm glad to know you have continued to find Tenn good. Its parents were Garber x Anjou according to Dr. Drain. Garber was reported as a seedling of Chinese sand, supposedly hybrid. Thus, Tenn would be 1/4 oriental, 3/4 European.

I have just received the enclosed article by Dr. Drain and thought you might be interested. We are writing to him in regard to Tenn. Maybe it should be named in his honor? *Sherman says Tenn is OK.*

Very truly yours,

A handwritten signature in blue ink that reads 'R. H. Sharpe'.

R. H. Sharpe
Horticulturist

Enclosure

RHS/cp

Antigua, Guatemala 21 January 1972

Dr John A. Mortensen
P O Box 388
Leesburg Florida

Dear John:

I believe you said you could send us some cuttings of that white hybrid I like so well - is it Stover? - at just about this time. We have nothing on which to graft here, at the moment, so will have to plant cuttings, and you will know just what kind of material to send. We have found the best way to ship material of this sort from Florida is as follows: Put the cuttings in the usual polyester bags, tightly tied, and put the bags in a large manila envelop and forward by first-class air mail, just the same as a letter. It is well to have the usual "sanidad vegetal" certificates along with the cuttings, just in case the Planr Quarantine people here are interested in inspecting the material which is rarely the case, but there should be nothing on the outside of the envelop to indicate that it contains grape cuttings. The main thing which interests them here is plants with soil on the roots. These are not admitted and I never bring in plants with soil, for I want to cooperate in such matters and I agree about the soil business. I enclose five dollars which I think will cover the postage - which has become pretty high nowadays. If you have another variety which you think we ought to have send it along also, please.

Referring to your letter of last August and the diseased leaves of Catawba which I sent you, I am glad to say that I was over in Honduras a few weeks ago and the Catawba plants have none of these

"diseased" leaves. Our entire two rows of Catawbas were in beautiful condition and were carrying some fruit (not a real crop, and am afraid this may be typical of their behavior here). Bob Armour brought me over all the fruit, a couple of dozen bunches, at Christmas time. Not quite fully ripe, hence pretty acid, but in good condition. As I think I told you, our vines are fully eight years old, maybe nine, and this past season's growth has been beautiful. Our grape collection was neglected for several years. The other varieties have died out - Concord first (hardly grew at all) and Delaware and Caco and Golden Muscat and one or two more. It looks to be as tho Catawba is going to behave as well here as Isabella, which is our old stand-by. But we havent learned yet how to get large crops from our vines.

I was unable to get any seeds of V. rotundifolia from Tehuantepec this past season, but the more I think about it the more I feel we do not want muscadine blood in our grapes. This is just a hunch of course. It wont give us the vinifera flavor. What the Latin Americans want is a grape which tastes like Muscat of Alexandria.

With best regards always,

Faithfully yours

Wilson Popenoe

Antigua, 4 febrero de 1972

Sr Agrónomo Guillermo Arriaga Régil
Jefe del Proyecto Frutales Deciduos
Ministerio de Agricultura,
Guatemala:

Muy estimado amigo:

Habiendo recibido aviso de Herbst Brothe en Brewster, New York que ya tienen semilla de la nueva cosecha de Pyrus calleryana, les he escrito hoy (copia adjunta) pidiendo tres libras, y mandándoles un cheque en la cantidad de 136 dólares para cubrir todos los gastos.

Para no confundirlos con dos pedidos, uno dirigido a Ud y otra dirigido a Arturo Falla, les he pedido tres libras en bolsas de una libra cada una, y las tres despachadas a Ud. En cuanto lleguen, nos va a hacer el favor de entregar una libra a don Arturo; dos quedan para el Ministerio. Mas tarde podremos tratar el asunto del reembolso que pueda ser mediante don Arturo a directamente a mí. No habrá problema.

Cualesquier gasto que hay en la aduana, Arturo pagara la parte que le corresponde, o yo lo pago.

Siempre sy muy atto y SS

Wilson Popenoe

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12 Calle 4-23, Zona 1 - Guatemala, C. A.
Teléfonos: 26-2-11 - 26-2-12

VIA TROPICAL RADIO

A

Grape varieties we should try to obtain:

Goethe - Hedrick p 276

Herbemont - idem p 289

Herbert - idem p 292

Jona idem p 302

Jefferson idem p 317

Salem idem p 397

Wilden

idem p 423

REMITENTE

DIRECCION

11

Many people think that when the Spaniards arrived in the New World they were interested in only two things, Christianizing the Indians and getting gold. This is not true. Right from the start they wanted wheat bread, olive oil and wine, — American corn, beans ^{squashes} and potatoes didn't quite fill the bill. So, beginning with the second voyage of Columbus they commenced the work of Plant Introduction. Grapes were in the program right from the start, and several of the early chroniclers write with enthusiasm about big bunches of luscious ^{grapes etc} fruits they are in Santo Domingo. But ^{as far as I have read,} they ~~wrote~~ did not write about local wine that they drank. Apparently there wasnt ^{much of} any, between Mexico City and Lima. The cultivation of Vitis vinifera seems to have been no more successful in the tropics than ~~was in the~~ in the British colonies on the Atlantic seaboard. Here and there, under particularly favorable ecological conditions (as in that terrestrial Paradise, the Cauca valley of Colombia) small plantings were fairly successful, but no great vineyards were ever established, not a ~~great~~ wine industry developed.

In modern times attention has switched to labrusca hybrids, still without success on a grand scale. The plant breeders have begun to come into the picture. There is hope, though pessimistic horticulturists will not fall in line. I was encouraged last year by talking with H.P. Olmo at Davis, California. But we still have a long way to go.

Since the study of fruit varieties has ~~been~~ since its very inception been the backbone of the American Pomological Society, it may not be out of place to publish a few comments on the present status of grapes which have been planted here and there in the tropics. These comments are based upon my own observations over a long period of years.

ISABELLA. This is the grape which keeps us hoping. It has done so well in many regions. It has been profitably grown, on a small commercial scale, in Brazil, in Colombia and perhaps in a few other ~~regions~~ countries, from sea level up to

7500 feet, (in Guatemala). And this without any need to spray for control of diseases. It is usually sold as a dessert grape, at good prices, ~~It is claimed in the Cauca valley that wine has been made on a small commercial scale.~~ Because there is no well-defined dormant season in the tropics, it is the custom to prune twice a year. A month after the crop ripens, you prune the vines. You get another crop, and repeat the pruning. Two crops a year, which may shorten the life of the vine, but in my own garden in Guatemala I have had ^{Isabella} vines remain in good production for about fifteen years. ~~This same system is used with other labrusca hybrids, a vinifera-labrusca hybrid produced in New York.~~ NIAGARA. Not such a strong grower as Isabella, but just about equally disease-resistant. Twenty years ago it was thought quite promising in several regions, but does not seem to be gaining ground.

GOLDEN MUSCAT. A strong grower but requires some soraying. Its similarity to Muscat of Alexandria in favor and quality has aroused much interest. The Latin American taste for grapes is usually based on familiarity with varieties imported from California. Golden Muscat will become popular if we can grow it successfully on a commercial scale. We have not yet done so, and ^{some} many horticulturists think we never will.

EATAWBA. Of five varieties tested at Escuela Agricola Panamericana in Honduras, this has proved to be the strongest grower and most productive. It is highly disease-resistant, like most other ~~labrusca hybrid~~ American grapes. As far as I know, it has not been ~~introduced commercially~~ anywhere on a commercial scale. It looks promising, if we can only learn to grow it under a range of cultural conditions.

CAOO. This variety seems to be as strong a grower as Catawba, but it has been tested on a very small scale as yet.

DELAWARE. A weak grower at Antigua Guatemala, the only place where I know it to have been planted, but has produced annually (for five years) its small bunches of perfectly delicious fruits, which, however, would probably never be very popular in Latin America, because of the small size.

~~CONCORD~~. In the experimental planting at Escuela Agricola Panamericana (Honduras) alongside Catawba, Niagara, and Golden Muscat this variety has been a complete failure. It simply does not grow well. But in one country, at least, we get some claret made from Concord grapes. They dilute a bottle of Welch's with what is considered the ^{a profitable} proper amount of water, add sugar, and the indispensable item, plenty of native white rum.

I believe H/P. Olmo is right in feeling that we will eventually have ^{grow more} commercial vineyards in tropical America. A small amount of breeding work has already been done; more is needed. And we have yet to learn how to make grapes behave as well when planted in vineyard form as they do ~~when~~ when planted in the patios of tropical homes. The microclimate of the patio does something which we have not been able to do in the open.

Duplicate

ORGANIZACION DE LAS NACIONES UNIDAS
PARA LA
AGRICULTURA Y LA ALIMENTACION
F. A. O.

Informe al Gobierno Dominicano sobre:

LA VITICULTURA EN EL VALLE DE NEYBA
Y EN LA
CUENCA DE AZUA

--o--

SEGUNDA PARTE

-2-

UN PLAN DE DESARROLLO

Dr. Manuel Telles de Vasconcelos
Experto de la F.A.O

I N D I C E

I.- El proyecto.

II.- Algunos aspectos de la utilización
y distribución de los terrenos del
Estado.

III.- Mejoramiento de la técnica cultural.

IV.- El Crédito y su distribución.

V.- Mejoramiento de la Organización Comercial.

- -0- -

LA VITICULTURA EN EL VALLE DE NEYBA
Y EN LA
CUENCA DE AZUA

-2-

UN PLAN DE DESARROLLO

-2-

1ª Fase - Años de 1964-65-66

I.-EL PROYECTO

1.- El Gobierno de la República Dominicana desea mejorar la producción de uva en el valle de Neyba y distribuir además entre familias de campesinos, una superficie aproximadamente de 10,000 tareas (625 Hect.) para que utilicen estas tierras, principalmente con el cultivo de la vid.

Esta iniciativa parece tener justificación bajo los puntos de vista técnico, económico y social.

2.- Hemos visto, efectivamente, que existen posibilidades de producción de uva en la mencionada región y que la calidad y rendimientos son susceptibles de mejorar con la introducción y generalización de una técnica adecuada.

3.- No cabe duda tampoco que será posible aumentar el consumo interno de la uva, una vez que sea mejorada su calidad y bajados sus precios de venta. Hay, por otro lado, fundadas esperanzas que se pueda originar consumo para otros productos vitícolas que podrán prepararse en el país mismo.

4.- La población de la región considerada es muy pobre y necesita, no solamente productos agrícolas para subsistir y mejorar su

dieta alimental, sino también un producto que pueda venderse al exterior para conseguir los ingresos indispensables al complemento de su alimentación, al vestuario y otros gastos, así como al ahorro que no debe ser apenas estimulado sino también tornado posible.

5.- El cultivo de la vid no solo corresponde a este último objetivo sino que también es uno de los pocos que pueden adaptarse a las difíciles condiciones ambientales.

La producción de uva de mesa tiene además la gran ventaja de comprender numerosas operaciones de cultivo que solo son económicamente realizables cuando son llevadas a cabo por mano de obra familiar.

II.- ALGUNOS ASPECTOS DE LA UTILIZACION Y DISTRIBUCION DE LAS TIERRAS DEL ESTADO

6.- Hemos visto que el riego es indispensable para el cultivo de la vid, así como de todas las otras plantas en la región. Nada podrá, por lo tanto, hacerse sin que se consiga el agua suficiente para el riego de toda la superficie considerada.

7.- Los terrenos pedregosos en todo el perfil (perfil I) son poco propicios al cultivo de la vid y aún menos al de las plantas anuales. Convendría por lo tanto que fueran reservados para praderas con carácter colectivo. La utilización de estas tierras, impropias para otros fines, sería susceptible de crear un nuevo ingreso y de contribuir además, al mejoramiento de la dieta alimental.

8.- Se encuentran en el mismo caso, aunque por razones dife-

rentes, los suelos del tipo VI, cuando su nivel frático se encuentra a menos de 1 metro de profundidad. La utilización de estas tierras con el establecimiento de praderas está tanto más justificado, que existen numerosas especies de hierbas con alta resistencia a la salinidad (conductibilidad eléctrica entre 4 y 18).

Los suelos excesivamente arenosos (tipo IV) se podrán utilizar mejor con cultivos hortícolas.

9.- Deberá ser contrariada la tendencia que se verifica actualmente hacia el cultivo exclusivo de la viña. Presenta los graves inconvenientes económicos de la monocultura, no aprovecha convenientemente el potencial de mano de obra y se refleja en la alimentación que no puede ser tan económica, tan equilibrada ni tan sana, en el campo, cuando todos los alimentos tengan que ser comprados.

10.- La superficie de tierra a distribuir a cada familia parece que no deberá ser inferior a 50 tareas. Una parte solamente deberá ser dedicada al cultivo de la vid; la otra deberá destinarse al cultivo de productos necesarios a la alimentación de la familia.

11.- La tierra destinada al cultivo de la vid necesita de una movilización preparatoria de 0.40 a 0.50 cm. de profundidad que sería, en muchos casos, difícil y extremadamente penoso llevar a cabo sin el auxilio de máquinas poderosas. Convendría por lo tanto, que la Secretaría de Agricultura se encargara de realizar esta movilización antes de distribuir las tierras a los campesinos.

12.- Con el fin de que los campesinos puedan adquirir práctica y experiencia y acompañar progresivamente los adelantos técnicos en el

cultivo de la vid, convendría que la siembra de los terrenos destinados a este cultivo fuera, distribuida por los tres años previstos, siendo 1/10 en 1964, 3/10 en el 1965 y 6/10 en el 1966.

13.- La realización de este programa necesita una producción de vides con raíces, para distribuir, como sigue:

1964.....	50.000	vides
1965.....	150.000	"
1966.....	300.000	"

III.- MEJORAMIENTO DE LA TECNICA CULTURAL

14.- Los principios fundamentales de la técnica a aplicar serán enseñados en cursillos que serán llevados a cabo todos los años, en las épocas más apropiadas. Estos cursillos serán destinados a técnicos de Extensión y Peritos del Banco Agrícola.

15.- Con el objetivo de estudiar los problemas regionales relacionados con el cultivo de la vid y con la técnica vinícola y también con el fin de asegurar a los cultivadores una asistencia técnica permanente y eficaz para todos los cultivos, deberá ser establecida en la región, una estación experimental con una superficie mínima de 300 tareas. (18 hectáreas 750).

16.- Aunque modesta, esta estación experimental deberá disponer de las instalaciones, medios financieros, personal y el equipo necesario para poder realizar su misión eficazmente.

17.- Convendría que la estación fuera dirigida por un especialista en viticultura, horticultura, y fruticultura, disponiendo

además, de un experto en enología y tecnología frutícola, de un especialista de suelos y de técnicos nacionales para la investigación y la extensión.

18.- Esta Estación deberá disponer de material agrícola pesado y ligero, así como de equipo fitosanitario para responder a las necesidades de los agricultores.

19.- Para constitución de las colecciones vitícolas de la estación regional deberán ser importadas, en el período comprendido entre octubre y febrero, un mínimo de 100 varas de cada una de las variedades de "vitis vinífera" indicadas a continuación:

VARIEDADES DE MESA

Dattier de Beyrouth

Panse Precoce

Moscatel de Málaga o de Alexandria

Prune de Cazouls

Italia

Primus

Cardinal

Moscatel de Hamburgo

Black Monuka

Alphonse Lavallés

Emperor

Regina

Reine des Vignes

Flame Tokay

Delizia di Vaprio

S. Jeanet
Moscatel de Adda
Gros Vert
Thompson Seedless
Perola de Ceaba
Madeleine Oberon
Perlette
Ferral

VARIETADES PARA VINO

Periquita
Arinto
Malvazia
Terrantez
Rabo de Ovelha
Alicante
Tinta Carvalha
Boal de Alicante
Tamarez
Pinot Noir
Pedro Ximenez
Chardonnay
Meunier
Cabernet Sauvignon
Cabernet Franc
Petit Verdot
Semillon
Sauvignon

Sauvignon Blanc
Muscadelle
Alicante Bouschet
Carignan
Grand Noir
Grenache
Mataro
Picpule Noir
Chenin Blanc
Picpule Blanc
Terret Blanc
Saint Emilion
White Riesling
Silvaner
Sangiovetto
Canaiolo Nero
Trebiano
Nebbiolo

20.- Podrá continuarse el cultivo de la vid europea (vitis vinífera) de pie franco. Sin embargo, es conveniente estudiar la adaptación y afinidad de los porta-injertos a que sea posible recurrir para el caso de que aparezca un día la terrible plaga de filoxera. Con este fin deberán ser importadas 100 varas de cada uno de los patrones siguientes:

R 99

R 110

41 B
196 -17
161 -49
420 A
5 RB
8 B
1103 Paulen
1447 "
1616
106 -8

21.- Deberán ser adoptadas medidas de protección fito-sanitarias con el fin de impedir la introducción de enfermedades y plagas de la vid, particularmente el filoxera.

Convendría que las importaciones de material vitícola vi_o solamente pudieran ser hechas por intermedio de la Secretaría de Agricultura y que, de todos modos, se prohibirá la introducción de vi_{des} con sus raíces.

IV.- EL CREDITO Y SU DISTRIBUCION

22.- Dada la pobreza de la población en general y la falta de recursos de los agricultores de la región, el crédito constituye una palanca muy poderosa para fomentar y orientar la producción. Se vuelve, por esta misma razón, en una arma decisiva pero peligrosa al mismo tiempo, que tiene que ser manejada con mucho cuidado.

23.- Hemos visto que sería inconveniente incrementar el cultivo de la vid si no se logra mejorar, al mismo tiempo, la calidad de la uva obtenida y la rebaja de su costo. Este objetivo solamente puede

ser alcanzado con la generalización de principios técnicos en la siembra y el cultivo, de que los agricultores no tienen, en este momento, la mínima noción y que los técnicos locales también desconocen. Parece por lo tanto, que convendría suspender la distribución de créditos para reanudarla después de realizado el primer cursillo.

24.- Por motivos idénticos convendría que el crédito constituyera un estímulo y un premio a la aplicación de los principios técnicos aconsejables. Debería, por este motivo, tomar, en todos los casos, el carácter de crédito supervisado.

25.- De acuerdo con los principios que acaban de establecerse los créditos iniciales a conceder a los agricultores deberían ser uniformes y muy limitados. Se les daría a conocer, al mismo tiempo, que la concesión de futuros créditos más abultados dependería de la forma como fuera utilizado el primero.

Los créditos siguientes serían generalmente aumentados para nuevas y mas largas siembras, a condición de verificarse que el agricultor había seguido hasta ahí, las normas técnicas esenciales y cuidado con esmero a su explotación agrícola.

26.- El Crédito no sería exclusivamente destinado a la siembra de la uva sino que tendría como objetivo fundamental la constitución de explotaciones agrícolas equilibradas de que haría parte el cultivo de aquella especie. Se evitaría de esta forma la tendencia exclusivista actual que se considera peligrosa y susceptible de crear problemas graves al gobierno y a la población.

27.- Con el fin de instituir el crédito supervisado deberían

Los peritos del Banco cooperar íntimamente con los técnicos de extensión actuando en la región, basando sus informaciones no solamente sobre la solvencia de los acreedores sino también sobre la forma como han asimilado y están aplicando las prescripciones técnicas que les han sido enseñadas así como la forma como cuidan de sus explotaciones. Parece sin embargo, que sería igualmente ventajoso que los peritos del Banco adquirieran algunos conocimientos especiales de viticultura.

Por lo tanto sería menester que los mismos tomaran parte en los cursillos que se deberán organizar.

28.- Con el objetivo de evitar que los créditos puedan ser utilizados por otros fines que no sean la explotación agrícola para que son concedidos y a que deberán exclusivamente destinarse, sería conveniente que fueran principalmente concedidos bajo forma de materiales necesarios, tales como alambre, abonos, fungicidas, etc.

Este sistema tendría además la enorme ventaja de crear el embrión de una cooperativa de compra que podría extender más tarde su actividad a la venta y transformación de los productos vitícolas.

En una fase inicial el señor Horacio Vásquez Peña, Encargado de la Campaña de Viticultura en la región, podría tomar a su cargo la compra y distribución de materiales mediante las órdenes del Banco.

V.- MEJORAMIENTO DE LA ORGANIZACION COMERCIAL

29.- El mejoramiento de la organización comercial solamente podrá ser alcanzado con la institución de una cooperativa de compra, transformación y venta de los productos vitícolas.

Podría, sin embargo, enseñarse a los comerciantes loca-

les procedimientos mas perfeccionados para manipular y embasar la u-
va, así como facultarles nuevos tipos de embalaje y material para es-
te mismo fin.

R E P O R T

to

THE GOVERNMENT OF INDIA

on

GRAPE CULTURE

based on the work of .

H. P. Olmo
FAO Consultant

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS
Rome, 1970

Factibilidad del Cultivo de la Uva en Guatemala

Por CARLOS ROBERTO CASELLAS C.
Estudiante de la Facultad de Agronomía.

Para iniciar, es necesario hacer un poco de historia sobre la Vid. La antigüedad de la uva la atestiguan hojas fósiles y semillas descubiertas en América del Norte y Europa. En los depósitos del periodo terciario, hay pruebas de que el hombre usó la uva en la edad de bronce.

El cultivo de la Vid empezó en el Asia menor en la región Sur, entre los mares Caspio y Negro. Muchos botánicos coinciden en esa como la cuna de la «Vitis Vinifera». Desde allí el cultivo de la Vid se extendió hacia el Este y Oeste. Mucho tiempo después cuando Europa colonizó nuevas tierras, la Vid siempre estuvo entre las plantas que los acompañaron. Actualmente, las plantaciones de Vid alcanzan cerca de diez millones de hectáreas cultivadas en todo el mundo.

La viticultura, fue traída a las costas occidentales de América por los conquistadores españoles. Con el avance de los límites en las zonas inexploradas, el cultivo de la Vid también avanzaba. El negocio floreció en tal forma, que España llegó a temer la pérdida de su comercio del vino con las colonias, situándose en tal extremo que el Rey de España prohibió nuevas plantaciones a partir del año 1995. Pero como es sabido, la iglesia era lo suficientemente fuerte para resistir los decretos civiles y así fue como en las misiones que tenían establecidas en las diferentes colonias, florecieron estos cultivos y en donde también ellos elaboraban el vino.

Fue de esta manera como llegó también a Guatemala, con los misioneros de San Jerónimo Verapaz el cultivo de la Vid cuyos resultados fueron halagadores. Pero esto sucedió en nuestro país, por decirlo así como un caso aislado; cualquiera habrá visto en nuestro medio alguna Vid, pero en la mayoría de los casos las frutas no son de calidad, ya sea porque la variedad no es buena, porque la planta es vástago de otra que por la falta de conocimientos sobre el cultivo, la variedad se desmejoró etcétera y son plantas aisladas no plantaciones.

Las uvas, son nativas de la zona tibia templada, entre los 34° de latitud Norte y 49° de latitud Sur y es donde su cultivo tiene más éxito. Los viñedos cultivados fuera de esa zona ocurren en áreas dispersas. En los climas tropicales la uva se da de color verde y las cosechas son de pobre calidad. Durante los últimos 40 años, se ha progresado mucho en la ciencia y el arte del cultivo de la Vid más que en cualquier siglo anterior, sea que estas se destinan a la mesa, para pasas o a la producción de vino. Como resultado de adelantos tanto en investigación básica como aplicada, nos conducimos a un conocimiento más preciso de las respuestas de la Vid al ambiente y a las prácticas de cultivo y principios relacionados al ciclo de crecimiento y producción de fruta, que nos marcan una viticultura más racional.

El clima tiene el papel más importante en el factor que gobierna la composición de la uva en su madurez. La adición de calor es vital para determinar donde deben cultivarse las parras. En climas calientes las cualidades de las uvas pierden delicadeza y riqueza y los demás constituyentes del fruto no están bien balanceados.

En Bolivia, se cultivan uvas a menos de 20° de latitud Sur utilizando regiones de mayor altura, que puede darnos la pauta para hacer pruebas con distintas variedades mejoradas y llegar a una conclusión de peso respecto a nuestro país, ya sea positiva o negativa. Hay localidades que tienen la misma latitud y clima, pero que varían grandemente en sus aspectos climáticos en lo que a ambiente se refiere. La uva vinífera necesita veranos largos desde

tibios hasta calientes secos e inviernos frescos, su desarrollo no es adaptable a veranos húmedos debido a la susceptibilidad de la Vid a ciertas enfermedades criptogámicas y a las plagas de insectos que encuentran en la humedad su ambiente propicio, tampoco resiste un frío intenso en invierno.

Como dato curioso, a pesar de no ser la uva un cultivo de intensidad en Guatemala, ya fue encontrada una enfermedad peligrosa de la Vid. En muestras traídas al laboratorio de Fitopatología de la Facultad de Agronomía por un estudiante, se logró hacer una investigación rudimentaria en una planta, habiéndose encontrado un nuevo patógeno que está causando estragos. Este ha sido reportado tanto en plantaciones de uva en el Sur de los Estados Unidos, como en Sur América y se conoce con el nombre vulgar de Roya de la Vid (UREDINO VITTAE), enfermedad de mucho peligro, que seguramente fue traída a nuestro país procedente de alguno de los lugares mencionados y que ya logró establecerse en esta región. Una nota interesante bajo el punto de vista científico, nos hace ver el jefe del departamento ingeniero Agrónomo Mario Molina Liardén, que no está de acuerdo con el género donde ha sido clasificado el hongo, ya que sus características morfológicas lo llevan al género CAEOMA y especie VITTAE.

Ahora bien, la Vid exige tierras que sean muy ricas en nutrientes del suelo. En Italia se halla una de las regiones más conocidas en el mundo por su calidad de uvas me refiero a la región del Vesubio, que posee un suelo de origen volcánico, suelos grumosos. Guatemala los tiene pues geográficamente es un país volcánico.

Los climas benignos de las regiones costeras poseen suelos profundos que almacenan suficiente agua de lluvias de invierno como para proporcionar a un cultivo de uvas que la necesitara.

Una prueba que podría llamarse histórica para responder positivamente a que en Guatemala sí se puede cultivar la uva, es el caso anteriormente citado de los misioneros en San Jerónimo Verapaz, y con la variedad de uvas existentes, de mesa, para producir vino o para pasas, se podría hacer un estudio de importancia, que de llegar a efectuarse, puede ser una respuesta al monocultivo que tantos problemas ha causado a nuestro país, social y comercialmente.

Pero uno de los motivos que pueden haber influido, a que en nuestro país no se haya explotado la Vid, es el de que existen otros cultivos que se presentan más halagadores en el sentido comercial y de menos trabajo en lo que a cuidados se refiere. Esto también puede estudiarse, ya que no es sólo el fruto el importante, sino también los productos que se puedan elaborar derivados de la uva, los que representan verdaderamente un grado en la escala comercial.

Este trabajo por lo breve, sólo nos puede dar una ligera respuesta, pues para llegar a una conclusión material y sólida se necesitaría más tiempo y muchos estudios, de las distintas situaciones que puedan salir al paso o que prevalecen.

Bibliografía:

- 1) Winkler, A. J. Viticultura.
- 2) Consultas al ingeniero Mario Molina Liardén.

The totoloché, a wild grape which grows
in the Isthmus of Tehuantepec. Tehuantepec,
Oaxaca, October 3, 1918/ 1659.