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The Hunt Institute for Botanical Documentation, a research division of Carnegie Mellon University, specializes in the history of botany and all aspects of plant science and serves the international scientific community through research and documentation. To this end, the Institute acquires and maintains authoritative collections of books, plant images, manuscripts, portraits and data files, and provides publications and other modes of information service. The Institute meets the reference needs of botanists, biologists, historians, conservationists, librarians, bibliographers and the public at large, especially those concerned with any aspect of the North American flora.

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.

Antigua, Guatemala, 22 June 1967

Prof. Ralph H. Sharpe,
College of Agriculture, University of Florida,
McCarty Hall,
Gainesville.

Dear Ralph:

Two days ago Arturo Falla, Alberto Bianchi and myself had a session on peaches, with some attention also to pears. I would like to tell you about a few recent developments, and at the same time ask for your further assistance on a few points.

Arturo Falla made a fine showing this spring with Floridaawn. This matures well ahead of most local peaches. He picked the fruits hard ripe, put them in trays with the apex upward, and sold them in Guatemala City. They went over big. Arturo is propagating this variety rather extensively, realising at the same time that you have warned that you do not consider it the ultimate thing, but it bears so heavily at his place (6900 feet); it is so pretty, and so tasty, that he intends to go ahead with it until we get something better. He has also done well with Floridahamae, of which he has some 50 trees in bearing at 6900 feet. Lower down, at 5000 feet, Okinawa has produced another beautiful crop this year and surely is good enough to eat, but of course we are counting on this mainly as a rootstock. Arturo is planting more for this purpose.

As you know, we failed to get much action out of Haley Nurseries this past season. I have kept after them but do not get much attention. I feel pretty sure our trouble is that we are small fry, shipping is a problem, and they are in Big Business.

This coming season we must get stock of some of the new varieties which we have not tried yet. You have mention Tejon, Rechen, and a

could dispatch to me by air mail, and I could turn over to Arturo?
I am wondering if this variety has enough Chinese Sand Pear blood to
be good here at medium elevations - say 6000 feet. Baldwin is doing
beautifully with Falla at 6900 feet; you may recall that we brought
in 100 trees from Glen Saint Mary in January of last year. Here at
my place, 5000 feet, this variety has not done well, but conditions
in my garden are not favorable - mainly soil. I recently wrote
Cecile Taber, asking if he will supply us this coming season, and what varieties? We have dealt with
Glen Saint Mary for more than 15 years; they have known how to ship,
and they have sent good stock. But I understand that they are now only
in the wholesale business, and they may not want to bother with an
order for 300 or 400 trees, to be shipped abroad. I shall be interested
to see what Taber writes - if he is willing to help us - but in any
case I am not sure he has all the varieties you will recommend for
trial here.

Apple planting is going ahead well here and does not need much
help. Plums are so abundant that it is not wise to push this fruit very
much. But we are just getting a start with pears. This is a harder job
than peaches. Arturo Falla, who is a great propagator, has established
the Tennessee variety of which you gave me budwood (scions), but we
are anxious to get Mericourt, which has been published recently by
the American Pomological Society. Do you know much about it? The
Tennessee Experiment Station offers scions, but I doubt if they will
send them this far. Do you think you could get us a few, which Hugh
could dispatch to me by air mail, and I could turn over to Arturo?
I am wondering if this variety has enough Chinese Sand Pear blood to
be good here at medium elevations - say 6000 feet. Baldwin is doing
beautifully with Falla at 6900 feet; you may recall that we brought
in 100 trees from Glen Saint Mary in January of last year. Here at
my place, 5000 feet, this variety has not done well, but conditions
in my garden are not favorable - mainly soil.


Returning to peaches: What we have not done, is make any progress in connection with "canning clings". Slightly over two years ago a pretty complete set was introduced from California, but as was to be anticipated, peaches from Central California are not for us. At our meeting the other day, it was asked if we could not get canning clings from Florida. I said that in my talks with you, I had gained the impression that you do not have canning clings in Florida. Is this not right? There is a rapidly growing interest in processing here. Before long there is going to be a demand for canning clings. It has been my feeling that our best bet is to hunt for good melocotones, like those you saw at Santa Maria de Jesus, and propagate them. They will be in season here in another six weeks, and we are determined to scour the highlands for good seedlings. Of course I can't forget your experience with the seeds you took from Santa Maria. But do you know of any better way for us to develop canning clings than to propagate and test some of the best local seedlings?

Looks like I won't get to Gainesville again until toward the end of the year. I want to devote a good deal of time between now and October to these temperate zone fruits, right here in Guatemala. As you know, there is a wealth of seedling peaches in this country. And the pears need a lot of investigation. Incidentally, what do you think of Calleryana rootstocks for our conditions? I believe George told me he is using this exclusively. Everyone here uses manzanilla (Crataegus stipulosa) partly because it is hard to get anything else, and partly because when grafted when the trunks are two inches in diameter give pretty satisfactory results.

Many thanks in advance for any help you

Faithfully yours,

cc Don Arturo Felle



UNIVERSITY OF FLORIDA
INSTITUTE OF FOOD AND AGRICULTURAL SCIENCES

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

DEPARTMENT OF FRUIT CROPS

109A MCCARTY HALL
GAINESVILLE, FLORIDA 32601

July 20, 1967

Dr. Wilson Popenoe
Antigua
Guatemala

Dear Wilson:

Sorry I haven't replied sooner to your letter of June 22, as I have been on vacation. I'm happy to hear Mr. Falla has been able to market 'Flordawon' successfully. I think if it would develop a bit more color for us here, it might be more marketable but it gets too soft before forming enough color.

Have you tried to arrange shipments of nursery trees from Grand Island Nurseries, Box 906, Eustis, Florida? They are propagating quite a variety of peaches, including some of our test selections. They export citrus, I understand, so should be able to supply peaches all right, if Glen St. Mary doesn't arrange it.

Our efforts to establish Mericourt pear here haven't been very successful, as we still have only two live dormant buds from a couple sessions of budding. If the Tennessee Experiment Station doesn't want to send you wood, we will probably be requesting more wood this winter and will be glad to share it. Just let us know about December or January if you haven't got it yet. Dr. Sherman thinks it may be fairly low in chilling requirement, but I don't know. I'd doubt it would be as low as Baldwin, but perhaps if it were in the range of Kieffer, it would be useful there at 6900 feet.

We haven't done much on canning clings as I could see no processing interest here. Recently, Mr. Larry Ridley of Gerber Products, Fremont, Michigan visited us. He is doing work in Venezuela, including a start in breeding of California and New Jersey clings on native clingstones. I referred him to you but I think they are more interested in the Venezuela location. I have a half dozen seedlings started in my nursery from crosses of our freestones on the Chichicastenango seedlings. The cling character won't come back until the second generation so that's quite a way off. I think Mr. Ridley's idea of choosing the best native material and crossing with Rutgers University or California clings is the best bet. If arrangements were made with Dr. L. F. Hough at Rutgers and pollen sent, I'm quite sure the crosses could be made there. It would then be up to us or you to grow out the seedlings. Discuss it with Mr. Falla or let us know if you want to try this and I'll give you more details on collecting and sending pollen. It would be good, of course, to propagate some of the best natives for test and to have for comparison if any cross-bred seedlings are grown.

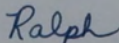
July 20, 1967

I hope Mr. Falla can get started at budding peaches and will want to test some of our unnamed selections, if we send budwood. There are a few of good quality that we may never fruit well enough here to name, because subject to frost damage. They might be good there where 'Flordawon' does well.

The P. calleryana stocks have been used extensively for pears in the south and are satisfactory as far as I know. I have had no personal, long-range experience however, and I think western pear growers prefer 'Old Home' for their varieties since they have had decline problems on oriental stocks in recent years. I'd have to study the most recent literature on the subject to get you the latest thinking. It would be best for you to get information from the Oregon Experiment Station, Medford, Oregon, probably since you will be growing some of their type pears also.

Best wishes for a good summer with the deciduous fruits in Guatemala. We will look forward to seeing you in the fall.

Very truly yours,



R. H. Sharpe
Horticulturist

Antigua, Guatemala, 19 August 1967

Prof. R H Sharpe
University of Florida, Gainesville.

Dear Ralph:

Very many thanks for your interesting and helpful letter of 20 July. We have been in touch with G L Taber of Glen Saint Mary who this year is offering six of the peaches in which we are interested; he says he will supply us and since he knows how to ship to Central America (we have had trees from him several times in the past 15 years) I am placing an order with him, for Arturo Falla, for 15 trees each of the peaches, 100 more Baldwin pears and two new pears we have not had as yet. I assume these will all be on Calleryana because when I visited him a year or two ago he said that is the rootstock they are using. Falla is planning to order a lot of seed of this species. In other words, interest in the Crataegus rootstock is waning; the Ministerio de Agricultura has quite a good nursery coming on, all on "French pear" roots - I suppose mostly Bartlett. This nursery is in fine condition - it is near here and I take a look at it every few weeks.

Speaking of pears, this fruit and the peach have been getting practically all of our attention this summer, though we had John Bregger with us for a few days, late last month, and went into the apple situation with him. He knows an awful lot more about apples than we do! Incidentally, he identified the famous "Juarez" apple of Chichicastenango, which I had begun to think was Ben Davis, as Wealthy. This is good news, for Wealthy, of which we brought in a few trees three years ago, is showing promise here in my garden at 5000 feet. The crop this year at Chichicastenango is tremendous and the fruit is selling at a fine price.

But to go back to the pears. There is a variety on the market here now which they call Kadman. I cannot find this in any of the literature I have, and when Bregger was with us we compared the fruits with those of two Hood trees at Tecpan which we imported 35 years ago. It looks like the same thing. If you know of a pear called Kadman, tell me. This "Kadman" is really good; has the pear flavor, as Baldwin does, is often quite large, though quite variable in size and shape. It is being propagated this summer on a commercial scale. Like Kiffer and Pineapple, it obviously has a lower chilling requirement than the domestica pears; it is a strong grower; and it is very productive. Falla and I begin to think our future lies in these hybrids rather than in the domesticas. Bose is a weak grower and not very productive. Comice better - we are propagating some of it. But we feel that the grower is going to do much better with things like Baldwin and Hood (Kadman?).

You mention the lack of color in Flordawon. That is not ^a problem here - it has plenty of color at Falla's place, 6900 feet. But more and more we are worrying about the unevenness in ripening. We picked the last fruits of the season just last week; I have held a dozen of them here at my house, and they are all rotting at the apex while still too hard for eating at the base. Falla has a hundred trees in bearing. They have the advantage of ripening much earlier than our local seedlings, and he had no trouble selling the early ones, at a good price. But I suspect he will be top-working these trees eventually. Earligold and Saturn from Armstrong have done well at Quezaltenango. We were up there last month and Earligold (not so early here!) was carrying a tremendous crop of beautiful peaches. But remember, they are at 7800 feet. The eating quality is not nearly so good as Flordawon, but our public is not so crit-

ical as yours, probably; there is, however, an insistance on peaches which have more acidity than Earligold. I think you remember I told you that Chico de Sola has given up the old Jewel-Angel-Waldo group as well as Hall's Yellow and Dorothy N, both of which do very well here.

Now for the canning clings: this is what all of us are after right now. Falla is propagating several from Santa Maria de Jesus. A firm in Guatemalan City (Ducal) has just commenced putting our halved canning clings, copying Del Monte. Falla and I got a can last week and tried them. Pretty fair eating. What worries me is that all the large clings I have seen up to now are shy bearers, compared to the seedling duraznos or small peaches. Maybe we will find some productive ones; we already have them but not of the largest size. We have some which are about as large as average Elbertas, and may have to settle for that type. But we will keep on looking. I believe we are going to get somewhere. Incidentally, Del Monte (Calpac) has a man - one of my old Zamorano boys - covering Central America. They are out to develop production of fruits for juice and for canning throughout Central America - a situation which has been made possible by the establishment of the Central American Common Market. Del Monte has licensed a firm here in Guatemala to make four "nectars" the sweet things are the ones which go over big in Latin America. They send down concentrates from California, at present, and are holding down to apple, peach, pear and apricot nectars. Three cans for a quarter of a dollar, over the counter.

The Gerber man called on me last year. I tried to interest him in Guatemala but it seems, as you mention, that they are going in to Venezuela. They can get all the peaches they want in that country, before long, It will not be so easy down there, when it

comes to apples and pears, but since they are interested in baby foods, maybe it is the carrots and that sort of thing which is their main objective.


As for importing pollen from the States, Arturo Falla is probably the only man here who could handle this sort of project, and I doubt that he is ready for it yet, but I will talk it over with him. Obviously, this will be the ultimate thing, but I suspect until we have worked through some of the things you are producing first. Falla would, I know, be happy to test some of the things you mention, varieties which are subject to frost damage with you. Falla has plenty of land at 4800 feet, where ~~the~~ Flordawon has been very successful and Okinawa is going strong. Falla has planted quite a few Okinawas to get seed, and intends to use this peach as a stock just as soon as he has enough seed. I believe he had more than 1000 fruits this year but he wants a nursery of 10,000.

It is regrettable that we do not have more men like Falla. Perhaps we can turn up a few, or train a few. The government is going in mainly for apples - principally Winter Banana - right now, with a limited quantity of pears, mainly "Kadman". In Quezaltenango they have some really fine nurseries of ~~a~~ Mallin Merton stocks, regarding which we are getting a bit worried, as I may have written you, because apple trees do not grow to the same large size here they do in the States, and we wonder if we want any dwarfing.

I expect to be in Gainesville by October at latest, and I look forward to some interesting talks with you.

Faithfully yours,

Wilson Popenoe



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DEPARTMENT OF FRUIT CROPS

108A MCCARTY HALL
GAINESVILLE, FLORIDA 32601

August 30, 1967

Dr. Wilson Popenoe
Antigua
Guatemala

Dear Wilson:

I will look forward to seeing you in October for more discussion of topics covered in your letter of August 19. There are a couple of developments from here that may be of interest to you, in the meantime.

We had a brief visit from Sergio Sacks, Est. Exp. de Pelotas, Pelotas, Brazil. He formerly worked near Porto Alegre. Both of these areas have mild winters similar to central Florida. Porto Alegre, especially, is at low elevation and receives little chilling. He has a M.S. degree from Rutgers and is now in California, particularly interested in cling peaches. He reports some commercial canning in the Pelotas area but I gather the fruit is not large and needs much improvement. He has obtained good freestone types, mostly derived from seed obtained in the U. S. from the 'Southland' x 'Hawaiian' crosses with which we started. He also reports a good white peach, 'Delicious', of local origin. But of most interest, he reports the pear 'Packham's Triumph' of good quality, fairly fruitful at Porto Alegre, and good at Pelotas. Other pears they like at Pelotas are 'Triumphe de Vienne' and 'Guiot' (from Uruguay) but these are not fruitful at Porto Alegre. I haven't yet checked to see if these are available in the U. S. but plan to check on 'Packham's Triumph' at least.

The other item of interest is that Mr. Ridley reports in Venezuela use of a defoliant on peaches called Shed-a-Leaf, from Shell Chemical. This might help in regulating production better, where there is so much prolonged bloom. I should think it might be tried on trees that behave the way you describe for 'Flordawon' there. He also indicates some initial success in crosses of U. S. clings and native Criollo peaches.

I appreciate all the information you are passing along on pears, apples and peaches there. Let me know whenever you are ready for buds of some of our peach selections to test.

Very truly yours,

Ralph
R. H. Sharpe
Horticulturist

Antigua, Guatemala 28 Oct 1970

Pref. Ralph H. Sharpe
College of Agriculture
Gainesville, Fla.

Dear Ralph:

After a summer in Europe we get back a month ago and I am once more getting onto the job here. I have been over to see Arturo Falla whose work is coming along beautifully. One of these numbered Peaches of which you sent budwood came into fruit this year and he thinks very highly of it. He says it is a "molecoten" but I am not sure just what he means. That Tennessee pear, number something like 10-27 or 27-10, - you will remember what it is; I always forget it - bore a fine crop this year and he is crazy about it. He is propagating all he can, from the trees he has, and is putting the majority on P. calleryana of which we now have a tremendous stock here. Some 5000 seedlings from last year's planting, now ready for grafting, and more than 40,000 from the seeds obtained last January. He has grafted quite a few Largas (what we are calling Clapp Favorite) and I saw the trees the other day; two feet high and growing beautifully.

In talking with him over the phone this morning he asked if I could help him get material of Early Amber to bud about 100 peach seedlings he now has available (he has more, as a matter of fact). How can we get hold of this material? It could be sent down by air mail. I doubt that you have it, but isn't there somebody in your region who could supply it? It seems to me this variety is patented, but there ought to be some way of getting a hundred buds, isn't there? If we get it from the owners of the patent they may ask an exorbitant price.

Arturo has just ordered from the States 7000 Nemaguard seedlings, so as to save time. He did not get much of a crop from his Okinawa

trees this year, and his man told me the seeds in many of the fruits were not perfect.

Arturo asked to inquire if you have put out any new peaches this year, or knew of any new ones which he ought to have. This would be a good time to order them, or get prepropagating material - new or a little later.

The Ministerio de Agricultura has quite a pear nursery and will raise several thousand trees for distribution, mostly Hood and "Larga". I think I told you that I believe there are several varieties which go under the name Larga here, the earliest of which we believe to be Clapp Favorite. I am afraid there is going to be some confusion when it comes to prepropagating these pears. We have been watching a good pear at Quezaltenango - I haven't the least idea what it is - but it is not an Oriental hybrid. A medium sized fruit of very satisfactory eating quality, and it seems quite productive at altitudes of 7600 feet or so. I am afraid to recommend it for San Bartolomé, 6800 feet, until it has been tried there. But I think there may be several thousand trees propagated this coming spring.


Baldwin, by the way, is very slow coming into bearing, while Hood is just the contrary. Baldwins at seven years have not yet come into production. Plenty of Hood in the market right now, and quite a lot of Pineapple. I bought some last Sunday and we tried them, stewed. Hood was to me quite satisfactory, but I don't care for Pineapple at all.

The Ministerio is prepropagating several thousand "malacotenes" - "canning clings" from the trees at Santa Maria de Jesus. My fear is that they not going to bear very heavy crops, and I believe also that they will need more altitude than some of the "duraznes".

With warmest regards always,

Faithfully yours

Wilson Popeo



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

DEPARTMENT OF FRUIT CROPS

1172 A MCCARTY HALL
GAINESVILLE, FLORIDA 32601

November 9, 1970

Mr. Wilson Popenoe
Antigua, Guatemala

Dear Wilson:

Glad to have your letter of October 28th. I would like to have the number of the peach selection that looks good to Arturo, also a full listing of the Florida varieties and selections he has established. When I get that, I can then check what more should be tested there. We saved over 20 new selections this year; mostly nectarines, but it's too soon to send these out, I think. There are a few older selections that we liked that I don't believe you have though. In earlier correspondence, you noted Arturo liked 'Sunred' nectarine. Is it still promising? Our market was so good for 'Sunred' this year, that we are concentrating on other nectarines to follow it in ripening and extend to about June 10 when California starts shipping.

'Early Amber' has been planted in Mexico and Israel where there has been no patent protection. It could be obtained, I'm sure, but the patent holders are understandably not going to distribute it, except as budded trees in numbers sufficient to be of profit. Their other patented variety 'Rio Grande' looked very good in Texas this year and is of slightly lower chilling requirement than 'Earligold'. It's not quite what we want for central Florida, but could be of considerable interest at 6500' for you.

I had a brief visit in Mexico in August and saw their peaches at Aguascalientes, San Miguel de Allende and Chapingo. Two generations of breeding with about 2000 seedlings per year would put them in business with clings in about 6 years. I doubt if it will be done there soon, if ever. Our 'Flordasun' and 'Flordabelle', are more promising varieties for them for fresh fruit than for us, I believe, but they've got to get them down below 6000' where frost hazards are less. Above 6000', they bloom too early in relation to the 'criollo' types to be reliable. I'm more of the opinion than ever that the cling types they call 'criollo' and those evidently mostly classed 'melecotones' in your area are almost as high chilling requirement as 'Earligold', June Gold and Maygold which we rate 550 to 650 hour types. I may attempt a few crosses here to reduce the chilling and increase earliness. We now have material from Mexico and Venezuela in addition to that from Guatemala. The canning clings of Mexico are all processed in about 3 weeks and require 160 to 180 days from bloom to ripe fruit. Breeding could reduce the cycle to 100 days and thus add at least 60 days to the processing period. Lower chilling requirements should improve the cropping ability of these types, provided it isn't put so low it causes bloom before frosts are finished.

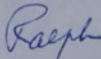
Mr. Wilson Popenoe
November 9, 1970
Page 2

10-37

I appreciate the information about Tenn. 37-30 being increased. Is the increase for himself or does he plan to sell trees? If the latter, what will it be called? If you were not there to keep us informed, identifications could be mixed up on this as on all the other pears and apples. It doesn't bother me too much if something useful is spread around, but it could be a lot more useful if we can keep our identifications straight. We fruited several seedlings from the cross of Tenn. 37-20 x Hood this summer. Most are as tasteless as 'Hood' but we liked two well enough to propagate. One resembled 'Comice' except a few more stone cells and was ripe in late June about when 'Hood' ripens here. The other was ripe in mid-July. Both should be intermediate in chilling need between 'Hood' and Tenn. 37-20 but we haven't checked them yet. I'm interested in something we can enjoy fresh, which of course eliminates 'Pineapple' and for me also 'Hood' and 'Baldwin' which will soften but are so lacking in flavor.

You must get 'Anna' apple from Israel, if you don't have it yet. It is genuinely a low chilling apple, not in the class of apple you mention there, and with fruit we rate superior to Red Delicious as we get it in our markets. We still don't know what to suggest for pollinators or whether one is needed.

With best regards,



R.H. Sharpe
Horticulturist

RHS/dd

Antigua, Guatemala, 21 November 1970

Prof. Ralph H. Sharpe
1172 A McCarty Hall
Gainesville, Florida.

Dear Ralph:

Yesterday I went down to see Arturo Falla, taking me along your fine letter of the 9th. You asked about the number of the peach selection which looks good to Arturo, and he said that there are really two. One thing led to another, and I told him you would like a list of the Florida varieties and selections which he has up at Concepción.

This is quite a job, but Arturo is going to try to prepare such a list. He has a good filing system; has the lists I sent him or those he got from you, and will do his best. You know how these things go in Latin AMERICA. I don't know of anybody who does as good a job as Arturo, and I will try to help him go over the material in the field (they have made no records since planting, so it is a matter of letting the trees now speak for themselves). This does not worry me too much; Arturo has given his trees better care than any other experimenter with whom I have worked.

Incidentally, he ran over the list of material which Fred Hough of New Jersey brought down two or three years ago (I have the list and the dates but won't bother to look things up) and Arturo says that as far as he knows, nothing has come of the material left with him. At the time, I felt that the pears, peaches and apricots did not seem very hopeful. During the next growing season I will see if I can run down any of the material and find just what has happened. It is going to be very difficult, in large part because of the constant changes in person

To go back to your letter, Sunred. Most definitely it is promising Arturo is propagating it as rapidly as he can. I ate a few fruits from Arturo's place before I left for Europe on 4 June. They were fine, and that red color was gorgeous. You know that we believe all these fruits develop more color here in the highlands than they do in your hot summer climate. Golden Delicious is an example.

We got down to talking about Early Amber. I think I understand the situation up there. Arturo has half a dozen grafts, about two feet high. He doesn't know well this variety is going to perform here, but its importance in Florida worries us, so to speak! You mention the possibility of getting propagating material in Mexico. I am looking into this, but I do not have many contacts up in the peach country. I will try to work through friends in the Mexico City area who do have contacts farther north. What we are wondering is Early Amber likely to prove immensely more valuable here than some of the peaches we already have - yours especially? Arturo still has a lot of Florida on because he sells the fruit in Guatemala City and the trees have borne very well. He thinks highly of Tejon and Suwanee also, but we do not have much experience yet with these varieties.

As regards the canning clings, we are really not doing anything here except to propagate commercially seedlings of almost anything they call "melocoton". I hope other regions will develop good canning clings for us faster than we develop them here. You know that we really have no plant breeders on this job. Next season if I am still alive I shall try to hunt good seedling melocotones again, and encourage others to do so. As far as I can see, nothing was done this past season. Having seen quite a lot of these local seedlings in past years I can not help feeling that we may find something good, without waiting too long for breeding work to help us. What concerns me most is the productivity of our seedlings. We've got to have bigger crops than any

I have seen if we are going to make real money out of canned peaches.

Now as to the pears. Both Arturo and I were balled up on that delicious (we think) Tennessee variety. His record says Tenn. 37-20, though I will have to check this again to make sure. Its chilling requirement is met at Arturo's place - 6900 feet (we have to look out for those micro-climates which sometimes fool us). As I am sure I told you, I have eaten the fruit and it is good enough for me. You ask if Arturo is going to put this variety on the market. Yesterday he told me that for the next year or two he is going to plant all the trees he can propagate in his own orchards. When he has enough, if the variety still looks good, he will sell grafted trees probably on calleryana. This rootstock is taking over, so far as nursery work is concerned. Nurserymen just simply cannot handle Crataegus; you have to plant trees in orchard form and then graft them at 2 or 3 years of age, as you know. But we should not yet say that calleryana is the answer to a maiden's prayer. We will find out with the 50,000 seedlings we now have in Guatemala for rootstocks for all kinds of pears. We may get some hard jolts in the meantime, but I sure like the way 10 to 15 year old oriental hybrids are doing on calleryana in Central America and I sure don't like the way communis pears did on Bartlett rootstocks at our lower levels.

Now how about naming this Tennessee pear? You are dead right. Lets try to avoid such confusion as we have had with Winter Banana (one grower still says it is Red Astrachan) and with Wealthy (which is better known here as Juarez. Arturo and I talked about this and we said if you will give this pear which his men now call Tenn a name, he will use it when he puts the variety on the market. We don't feel that we have the right to name it, but we will give it a local name if we have to do so.

In your letter, you urge that we try to keep the nomenclature of our fruits straight. I believe you agree with my plea at that meeting in Miami last year - not this year. I have been kicked all over the lot for this paper because I seemed to be criticising (as I was, and I meant it) some of the modern horticultural scientists who misinterpret the meanings of the term "systematic pomology". I have just received a letter from that old master, H.B. Tukey, who has always backed me in trying to keep these varietal names straight. The trouble is, people up there in the States dont have to worry about it like we do in the "developing countries".

We are still horribly messed up here regarding the pears. I shall keep on plugging away at this problem. Right now I am mainly interested in a fine pear which we have in Quezaltenango and which we are going to propagate on a fairly large scale - for us. Perhaps 3000 or 4000 trees next year. I suspect it may be Clairgeau. The only way we can make sure is to introduce grafted trees of Clairgeau (where can we get them) and wait five years. I did this with Wealthy apple and it worked. We did it with Winter Banana too. We must do it with the pears, but who is going to do the job? If I were 25 years younger I wouldnt have to worry.

You mentioned, in your letter of 9 November, the Anna apple from Israel. In going over Arturo's files yesterday it appears we got it, several years ago, probably through you. It hasnt done much yet because his place Concepcion is not apple country, in spite of 6900 feet elevation. Probably too sandy and too dry. But we will get behind this and see if we can not get Anna into a better ecological complex, as we say today. Or isnt that just the way to put it?

We cant tell you how we appreciate all you have done and do for us.

Faithfully yours,

Antigua, Guatemala, 21 February 1971

Dr Ralph H. Sharpe
University of Florida
Gainesville.

Dear Ralph:

Yesterday we spent the afternoon with Arturo Falla and I have a good deal to report. As a starter, I enclose a memorandum he has prepared for you. He says it does not cover everything but I think it does include a list of most things in which you are interested.

On the mountainside at Concepción, 6800 to about 7000 feet, he is completing the planting of about 100 acres in orchard form, about two thirds in pears and one third in peaches, including your Sunred nectarine (of which he gave us about 50 fruits yesterday - please note that this is February 21. These fruits are small, about an inch and a half in diameter.

The pears are - about half of them - on Crataegus rootstocks two years old, grafted in permanent positions in the field - you know that they do not graft this rootstock in the nursery. The rest are on Pyrus calleryana grafted in the nursery or bench-grafted and kept in cold storage for a while before going into the field. Arturo is doing some fine work on this propagation business. He is the only man in Guatemala for this sort of work.

Some of the peaches he also has growing at San Sebastian, down near his house, about 4800 feet. We have agreed that it is important in connection with peaches especially, to compare behavior at the two elevations. Sunred has done well at both; also Flordawon. But we feel that the higher level is going to be best, and probably many things will not be well adapted at the lower elevation.

As to rootstocks, he is still going to use Crataegus for pears to a certain extent. He is delighted with the behavior of callervana up to now, but of course we must have more experience with it. But 50 Baldwins we imported from Glen Sant Mary seven years ago, which we assume are on callervana are growing beautifully at Concepción and right now are for the first time, producing quite a few flowers and there some fruits half an inch long. For peaches, he has been disappointed with Nemaguard, which he imported in quantity more than two years ago; he says it does not grow well. Okinawa has done better and he has about 100 seedlings in fruit, but as I think I have told you, the fruits he got last season contained very few viable seeds. He is using local peach seedlings more than anything else. I might add that he has about a thousand seedlings of Pyrus betulaeifolia, from seeds which we receive from Oregon a couple of years ago, with which he is going to experiment. So far, he feels that they are not growing nearly as well as callervana.

Arturo showed us some two-year-old grafts of "Pera Larga" and Tennessee 37-20 which are carrying quite a few fruits. Incidentally, you asked us to put a name on that Tennessee pear of which you gave me the original scions. Some months ago I told Arturo about this and he has been thinking about it. He says his men are labelling the grafts "TENN" and they will probably use this name for it.

You will note from his memorandum that we received a few scions of Early Amber in 1968. These have not done at all well. About a month ago we got a lot of scions of this variety and Arturo topworked them on three year old trees of Floridaqueen and Floridaawn. He showed me yesterday a number of these grafts which are already six inches high.

Tejon has borne fruit and Arturo likes it. Two years ago we had fruits of what was said to be Suwannee from Huehuetenango and we all liked it. We looked at the trees of "the California varieties" which were planted in 1966 and as he notes in his memorandum they are hopeless. Bonita and Maygold are not going to do anything. All these varieties are at Concepción, about 6900 feet. You will note the list of peaches which he believes merit further propagation.

In 1969 you sent us the following pears: Surprise, Packham Triánph and Mericourt. Fred Hough also brought down Mericourt. Arturo has these three established but of course it is too early to know anything about them. I have been especially interested in Mericourt. Arturo is completely sold on Tenn 37-20 and has propagated several hundred trees and has given some scions to the Ministerio of Agriculture which are growing on calleryana in the nursery at Los Aposentos near here. I have seen them, and they look well. Altitude 5900 ft.

You know that the pears which being propagated commercially here right now are the following: "Larga" which we believe to be Clapp Favorite, but I am afraid there are several varieties are called Larga and not all of them are Clapp. "Redonda" we have been calling "Lincoln" but we can not be sure about it. Another good pear which we have been watching at Quezaltenango we are calling "Clairgeau" and there will be a lot of it planted this year. I am not at all sure it is Clairgeau. Hood is being propagated extensively and Baldwin will begin to be this year. And "Tenn" as far as the scions will permit.

It has just occurred to me, a few months ago, that we have been terribly slow in trying to clear up this nomenclature business in connection with pears. I think you will recall that seven or eight years ago we came to believe that the "Juarez" apple is really "wealthy" but we could not be sure, so I got some trees of Wealthy from Bountiful

Ridge. One of them bore two fruits in my garden and I was able to compare them with fruits of "Juarez" and there could be no doubt that this variety is Wealthy. Now, I have asked the folks at Beltsville to send us some scions of Clapp, Lincoln and Clairgeau, if we get them, Arturo will put them on calleryana of which there are not more than 25,000 seedlings ready for grafting. There is another pear here which they are calling "Mexicana" because they got it from Mexico. I don't know what it is, but it pretty obviously pure communis. Arturo is propagating it on quite a large scale.

Just one last item: We are naturally much interested in Early Amber because of its importance in Florida. It seems to me when I was up there I saw a leaflet which the owners of the patent has put out and which showed the fruit in colors. Maybe this is still available; maybe other advertising literature has been put out. You will know what might be had. I wonder if you would phone Mrs Chris Gallagher in Hugh's office, tell what to get and where, and ask her to write for it, and if she gets anything to send it down to me by airmail.

In the government nurseries at Aposentos they are making good progress with apples (mostly Winter Bananas) and with pears, and they are propagating a lot of "melocotones" canning clings of the kind they have at Santa Maria de Jesus. You know all about them. They are taking scions from any tree which is known to be a "melocoton". We all know that melocotones require more elevation than the smaller melting flesh peaches which are so abundant here, and we all know that the melocotones, so far as we have observed them, do not bear the heavy crops that the duraznos do. I am afraid we are heading for trouble.

With regards and best wishes,

Faithfully yours

Antigua, Guatemala 10 March 1971

Prof Ralph H Sharpe
University of Florida
Gainesville, Fla.

dear Ralph:

Last year, I believe it was, I wrote you that Arturo Falla has one of your numbered peaches which he thinks is good. This morning I was at San Sebastian and he gave me a specimen to sample. He says it is your number 16-33 and that budwood was received here on 5 December 1957 (this seems too early to me). The fruit we sampled is a melting flesh clingstone, about two inches in diameter, without the objectionable beak of Flordawon and evenly ripened over the whole fruit. Lots of red color on the surface. Flesh very juicy, flavor spicy, plenty of acid; quality very good by our standards. Arturo says the tree is productive and you will note that the season is very early, though you know that peaches and other fruits are inclined to lose their seasonality here. It was grown at Concepción, altitude about 6800 feet.

Faithfully yours,

Wilson Popenoe

Antigua Guatemala, 8 Sept 1971

Prof. Ralph H. Sharpe
University of Florida
Gainesville.

Dear Ralph:

Yesterday morning I plowed through the mud in my Volkswagen down to Finca San Sebastian and had an interesting visit with Arturo Falls. I gave him your letter in which you asked for seeds of one of those peaches when he has them. Perhaps 3 yrs from now.

His man Saul had just come down from Concepción with a basket of Tennessee 37-20, or TENN in our language. We examined them, sampled them and enthused about them. Arturo doesn't want a better pear, and to show us that he means business, he has grafted about 4000 and is planting them in his new, big, orchard at Concepción, 6900-7000 feet. This pear is a fine size for our market. Lots of red on the cheek, over a deep yellow base. Flesh very juicy, flavor delicious, Arturo thinks better than Bosc tho I won't go quite that far. But it is a really good dessert pear.

What now interests me is this: How far below 7000 feet can we grow this pear commercially? I assume it has quite a bit of serotina blood. How much, do you think? We can grow some of the Oriental pears fairly well as low as 5000 feet, sometimes even lower. It will be wonderful if we can grow TENN as low as 5500 or 6000.

Arturo showed me some ANNA apples at San Sebastian, grafts on common apple; scions you sent down with me about 3 yrs ago. The altitude is 4800 ft. The grafts are strong, healthy, 6 ft high and stems and foliage don't look like any of our US apples. This may prove to be an interesting thing.

Faithfully yours,



ESCUELA AGRICOLA PANAMERICANA

TEGUCIGALPA, HONDURAS

Antigua, Guatemala, 27 January 1972

Dr Ralph H Sharpe
McCarthy Hall,
Gainesville, Florida 32601.

Dear Ralph:

Fred Hough was here last week and went over the material he brought down some three years ago. He found, as I suspected and as you would have expected, that not all of it has received good care. As you also would have suspected, Arturo has done better than most others, except with apples for which his location has not proved at all satisfactory. The apples he brought are looking very promising at Eduardo Matheu's place near Tecpan, 7500 feet. The apricots are a total loss.

What I want to write about at this time are those Tennessee pears which were made by Dr Drain. I wrote him that 37-20 is doing so well here, and is such a good dessert pear, that Arturo Falla is planting 6000 trees at his upper-level property, Concepción, 6800 to as high as you want to go up the slopes of Volcano Acatenango. At Christmas time Arturo brought me two fruits he had kept in cold storage since August. They were still pretty good, though they had dried out a bit. Incidentally, Dr Drain verifies what I believe have told us, that this variety is Avres and Arturo is going to use this name if he has any luck in getting his employes to stop calling it Tenn.

Doctor Drain thinks we ought to try his other varieties - Dabney, Mooers, Hoskins, Morgan, Carrick. In his paper of which you sent me a copy he speaks of Orient which my old friend Dr van Fleet produced,

and which we have fruited for about 10 years at Escuela Agricola Panamericana. We have not thought it as good as Baldwin and have not propagated it.

I am a bit shaky about his Dabney and Carrick because they have Seckel blood, and Seckel seems to have a high chilling requirement, at least we have not had any luck with it down here; but just the same, I agree with Dr Drain that we should try all of the varieties I have mentioned above. The problem is, how to get budwood sent down here? Dr Drain says he could get it for us, or we could probably get it from the Tennessee Experiment Station, but neither one is going to like the idea of facing what they think are the formalities in connection with sending scions down here. You have had experience; you know that all you have to do is to put scions in those polyester bags, which you always use, and ship them to me by first class airmail. You know the kind of wood we need - we use a side veneer graft rather than a shield bud; scions 8 inches long will give us about 3 grafts each. Ten scions of each of the varieties would be fine, and Arthur has lots of fine calleryana seedlings on which to graft.

Is it too late to do anything this year? If not, I wonder if you would be willing to get from Tennessee the necessary material, and mail it to me. The postage will be high, but I shall be more than glad to reimburse you. I think if the little bundles of 10 scions each are put in large manila envelopes, about three varieties to an envelope, they will come through in fine shape. There should not be any inspection certificates on the outside - they could be included inside - but probably are not necessary since they don't bother about budwood or scions; the only thing which worries our inspectors is plants with soil on the roots, about which they are right.

We wure will appreciate anything you can do for us. Best regards

always.

Faithfully yours

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

February 3, 1972

Mr. Wilson Popenoe
Antigua, Guatemala
Central America

Dear Wilson:

Enclosed are copies of all the original records of my "pear test" correspondence with Dr. Drain. You'll note we have 2 separate listings where Tennessee 37S20 number was used in reference to the test material we received from him. This is the source we sent to you. You'll note a letter (1953) in which 'Ayres' was given the number 37S21. Unfortunately the test number was not given in the circular description of 'Ayres' but was given again as 37S21 in listing for A.S.H.S. register.

Dr. Sherman does not think much of the Tennessee varieties other than 'Mericult' and 37S20. You have 'Mericult', I believe, along with 'Surprise' from us a year or two ago. May I suggest you ask Dr. Drain for enough wood to establish 'Ayres' and forget the rest of them. None of them have caught on in the U.S., despite release in 1954 and 1957.

Dr. Sherman is going to write Dr. Overcash at Mississippi State where all the Tennessee selections and varieties were tested to see if there were both numbers 37S20 and 37S21 sent out from Tennessee. Dr. Drain did not indicate he thought Tenn. 37S20 was 'Ayres' in his recent letter to us but the current Department head at Tennessee said we must have 'Ayres' and it was tested as 37S26. So you can understand our confusion. We will also ask for 'Ayres' from Mississippi State to establish here. I'll send along a couple sticks from this source if received in time. We'll also let you know anything further we learn. Dr. Sherman thinks we can also inquire at Purdue University where most of the Tennessee selections were tested.

We're having the warmest winter in my experience for checking peaches. We should be able to give you some to grow at 4000', if the fruit quality proves satisfactory. However, we've got a good chance of killing frost yet.

Sincerely,

R. H. Sharpe
Horticulturist

Enclosures

RHS:jb



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

March 31, 1972

Dr. Wilson Popenoe
Antigua
Guatemala, C.A.

Dear Wilson:

We have pursued the identity of the pear 37s20 and can now assure you without much doubt that it is not 'Ayres'. We have had conversation or letters with Dr. Overcash at Mississippi State, Dr. Janick at Purdue, Mr. Correll at North Carolina State and Dr. Pickett, the current head of Horticulture at Tennessee. The latter wishes to have the discussion dropped, and especially to avoid further exciting Dr. Drain. He does not want to be concerned with naming of another pear, as all the previous ones have not been of credit or have not been recommended or planted in the South. He thought use of 'Tenn' as a name would be all right, as you previously suggested.

We found that cooperators in Mississippi and Indiana received test selections 37s20, 37s21 and 37s26. The one called 'Ayres' was 37s21. It differs significantly from 37s20 in having prominent whitish lenticels or dots on the fruit while 37s20 has rather inconspicuous dots. Also 'Ayres' is more russeted. Shape and reddish blush are similar. Purdue no longer has 37s20 but did not consider it or 'Ayres' of merit for their area.

This is of confidential nature, and not to be pursued with Dr. Drain for obvious reasons, but Dr. Pickett stated the original records show 37s20 and 'Ayres' to be 'Anjou' X 'Seckel' not 'Garber' X 'Anjou'. This means, to me, that the parentage is at least uncertain, and the only thing that agrees is that 'Anjou' was one parent. I know you would be happy to think that the other parent might be 'Seckel'.

With this, let's drop the problem of identity, and may 37s20 (Tenn) and the others thrive and prosper in Central America, even if they don't receive much commendation in southern U.S.A.

Best regards,

R.H. Sharpe
Horticulturist

RHS:jb

Antigua, Guatemala 1 May 1972

Prof. Ralph H. Sharpe
University of Florida
Gainesville.

Dear Ralph:

Just back from a month over in Honduras and find your letter of 31 March with the last word regarding the Eyres pear business, the last word being that we will drop the matter and just go on calling the one we have "Tenn". But I am doubtful that this variety is Anjou x Seckel. The latter has not done well here, so far as I have observed. I have the feeling that it requires a lot of chilling. Maybe like Bartlett. But I'd better not bother to raise any more questions. "Tenn" is carrying a good crop at Arturo Falla's upper property, 6900 feet and he has several thousand grafts coming along, some of calleryana, some on Crataegus. He told me the other day that the material you have sent recently, some from Dr Drain and some from you, seems to be coming along alright. I am particularly interested in getting Mericourt established here.

Arturo was driving over to the City a couple of weeks ago, blew out a tire, and his car turned over a time or two. He got pretty badly bruised and a few bones broken I guess, but he came to our house on crutches last week so is well on the road to recovery. He is not getting a good crop of peaches this year.

Best regards always,

Cordially



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DEPARTMENT OF FRUIT CROPS

1172 A MCCARTY HALL
GAINESVILLE, FLORIDA 32601

June 8, 1972

Dr. Wilson Popenoe
Antigua, Guatemala
Central America

Dear Wilson:

I'm just now getting around to answering correspondence of the past month, due to rush of fruit selection. I can't figure out the peach selection you refer to as 12-24 in your May 4 letter. There was a 10-24 we sent down some time before 1969. It made large fruit, but was too late and not as highly colored as we need. It was freestone here. Perhaps it was this selection? If so, we don't have it here anymore, as it has been pushed out. It ripened for us about mid June, but I don't suppose that would mean much.

We also liked a clingstone, number 12-36, ripe May 23 in the 1969 season, and distributed some buds. I don't have a record of it being sent to you, but then my older records aren't complete. Tell Arturo to check closely a selection 15-39 which we sent down in July, 1971. This has looked very good again this season when we had less chilling. It rates as our best candidate for a new variety when we can get it tested more widely. We also had another seedling of promise this season, number 13-98, which you will have to take down on your next visit. Also the apple seedling, out of 'Anna', and 'Anna' itself came thru our mild winter in excellent shape. These buds were sent down in July 1971 and he should make sure they get a good test.

I'm planning on going to the Lima, Peru meetings in August.

Best regards,

A handwritten signature in blue ink that reads 'Ralph'.

R. H. Sharpe
Horticulturist

RHS/cp

Antigua, Guatemala 29 June 1972

Prof. Ralph H Sharpe
University of Florida
Gainesville.

Dear Ralph:

Many thanks for your letter of 8 June. Since receiving it I have been to Arturo Falla's place a couple of times and have gone into matters as fully as possible. Before talking about the peaches, I want to say that he seems to have practically all of the pears safely established, including Surprise and Packham's Triumph (in which I am much interested) as well as Mericourt and the several varieties from Dr Drain which were sent through you. I believe he also has Clapp and Lincoln which I got from Beltsville and which we are anxious to fruit here, to see if we have correctly determined the two varieties which are so popular here - and have been for years - and which are still being propagated extensively. I am not at all sure about these varieties; in the first place, there are several varieties ~~mis~~ called "Larga", only one which can be Clapp if we really have that variety, and we are handicapped by the difficulty in getting fruits in the market which were picked at the proper time. The "Tenn" pear, which we think we rec'd as 37-20 and which we like so much, will not be ready for another month or probably more.

Now as to peaches: I have just been eating your 10-24 (which we mistakenly called 12-24 in my last letter) and it is Arturo's pet of the new peaches which have fruited here so far. He has named it Flordalis which I think he got from Fleur de Lys but I am not sure. This was received here in December 1967. You say it is too late for you and not sufficiently colored. As you know season is not given any consideration here as yet. Color of 12²-24 looks good to us; plenty

of red on one side. The size is good - about 2-1/4 inches or a bit more. The quality we like very much. We consider this peach very promising.

Another variety which ^{we} have been eating these last few days is your L-27-12, also received in December 1967. The quality we do not think quite as good as 10-24, but the flesh is more firm - it might make a canning peach? Both this and 10-24 seem to be clingstones though I have not checked many specimens. L-27-12 is larger than 10-24; about 2-1/2 inches in diameter, yellow with much less red on it. Season maybe a couple of weeks later than 10-24; it is being harvested right now, which I assume would be far too late for you.

Arturo had a few fruits this year on Early Amber - ripe two of three weeks ago, maybe a month. I saw very few fruits because there were very few of them, on trees budded in January or February 1971. This fruit impressed me very favorably but I can't say much on the basis of what I have seen.

Arturo gave me, from his records, a list of what I brought in December 1967, which I am going to copy here in case you don't have it complete:

Flordasun
S-109
W-1826
16-33
26-31
W
10-24
L-27-12
Q-202-8

I wonder if we are up against a new problem in connection with these new peaches. For example, Flordawon, the first variety we planted here, bore a big crop the first season, fair one the next and practically nothing from then on - with minor exceptions.

And it looks as though Sunred Nectarine is heading the same way. Then we have been hearing that the orchard planted for Kern's up on or near the road to Guatemala City, at about 6800 feet, produced well the first couple of years and since is not "behaving well. This was grafted from local seedlings, I dont know ^{how} many different ones but it looked as though it was just one variety. Now, the local seedling duraznos (small peaches, you know them well) seem to remain in good production quite a few years. I have never tried to watch them to see how many but I have had them in my own garden and it seems to me they continued bearing for ten years or so. But the "canning clings" - melocotones - which again you know all about, - I wonder how they behave? I have suspicion they dont continue bearing heavily for many years - in fact they do not seem, in general, to bear heavily from the start, and this worries me in connection with the many ~~thousand~~ selections we have been making - quite a few of us - on the past four or five years and which the Ministerie is propagating and selling by the ten thousand or more every year.

I wonder if it is lack of sufficient color weather? Some peaches just dont seem to drop their leaves at all, at some elevations. This business has me bothered, and I dont know what to do about it. Have you had experience along these same lines? How does Red Ceylon behave at Homestead? Does it keep on bearing year after year?

We shall be glad to have further material from you, whenever you have anything you think we should try. It looks right now as though this is our situation: Unlike yourself, we dont worry about season. We havent gone that far yet. We worry about that break which breaks down before the base of the fruit is eating-ripe. We dont worry much about clingstone vs. freestone, but we probably will be ² before long. But what we are beginning to worry about, is varieties

which will give us good crops, year after year, for at least 6 or 8 years. We will be satisfied with 10 years - not really satisfied with 6 or 8. It seems to me you expect 15 years productive life in the State. Fifteen years of good commercial production. Is this right? In Maryland, for example, you have a well-marked dormant season but they don't grow 250 hour peaches as we are trying to do - in some places. And here is another point - Okinawa, which has been in bearing here for five years or more, and bearing good crops, is turning out fruits in which there is no viable seed in 50% or even more of the fruits.

Why don't you stop here on your way back from Peru this summer and spend a week or two studying this peach business. I think you are the only one who can save us!

With warmest regards,

Horticulturally yours (as a guy up in Oregon has put on a recent letter to me, first time I have seen it),

Wilson Peence

Lista de material recibido
el 5 de Diciembre 1967.

FLOR DASUN

S - 109

W - 1826

16 - 33

26 - 31

W

10 - 24 — (FLORDALIS)

Q - 202 - 8

L - 27 - 12 — (Fruta grande
light yellow.)

Antigua, Guatemala, 15 Nov. 1972

Prof. Ralph H. Sharpe
College of Agriculture,
University of Florida, Gainesville.

Dear Ralph:

Arturo Falla and I have had two very interesting talks about the Temperate Zone fruit business, and especially the material you have so generously furnished us in past years, and it has occurred to me that you might be interested in some of the matters we have discussed.

In the first place, we both feel that we are getting on pretty solid ground, here in Guatemala, as far as apples and pears are concerned but we sure are worried about peaches.

The Ministerio has been pushing apples hard, over in the highlands. I believe they have distributed more than 10,000 grafted trees. They are using the veneer graft, no shield budding. Rootstocks are what we call crielle, an apple introduced presumably from Europe many years ago. It is propagated vegetatively. Malling Mertons have almost gone out of the picture. MI 109 is said to be the best, but Dr Tukey was right when he told us that Malling Mertons have to be treated like incubator babies. They are not for the average Guatemalan planter. I am sure they will continue to be used, but probably less and less.

Winter Banana continues to be the leader, by far. Next is Wealthy, or what we believe to be Wealthy, known here as Juarez in most places. Its weakness appears to be that it is not a good keeper, in comparison with Winter Banana, but somewhat better as a dessert apple. It is about like Winter Banana in chilling requirement. Red Delicious and Golden Delicious are planted to a small extent, more because of their reputation than anything else. They do not bear as heavily as Winter Banana and Wealthy.

The exciting thing, so far as apples are concerned, is ANNA which you remember you gave me when I was in your office a very few years ago. We saw Arturo's original trees this morning. A good ten feet high, beautiful foliage, but like some other apples, at low elevations (Arturo's finca San Sebastian is 4800 feet only) there is mighty little branching and you don't even need to mention fruit spurs. My Kew West apple here in Antigua, same elevations, behaves the same way; nice clean shoots with flowers and fruit borne at the tips. Key West is 8 or 9 years old, from Homestead; ten feet tall; bears every year a few fruits - about ten hanging now - which are pretty fair in quality. They mature very late - December. Anna matured quite a few fruits at least two months ago; has a few hanging now, almost fully grown, and a few flowers opening. Temperate Zone fruits sure lose seasonality down here. Arturo thinks so highly of Anna that he has planted 100 crâelle rootstocks at San Sebastian, and will veneer graft them to Anna. These are in orchard form. He will start a nursery and can graft perhaps 1000 trees from these which are now in fruit - grown from the scions you sent down by me.

Pears are doing well at 6500 feet, up to 8000, the oriental hybrids such as Hood thrive at 6500, the communis pears need a little more elevation, Bartlett being a failure until you get up toward 8000. The market now is full of the hybrid orientals and we just simply can't be sure what they are, except for Hood and Pineapple and Keiffer. You will remember that I brought down a lot of Baldwin 7 or 8 years ago because it has done so well at Zamorano, 5900 feet. It has grown beautifully here, and the trees have come into bearing but so far the fruits are few and small. And this at 6800 to 7000 feet. The trees I got - 100 of them - are on calleryana and are fine tall specimens with trunks 3 or 3-1/2 inches thick. Because Arturo has 50 of them, and they

are so slow coming into bearing, Arturo has topworked 20 or more; he cuts them back to stubs about 2 inches thick and crown grafts, 3 scions to each stub, and lost very few scions. He has put on these trees several varieties you sent us, Mericourt, Packham's Triumph, Surprise, and some ten varieties that Fred Hough brought down. These are numbered NJ 1, NJ 2, and so on; we have brief descriptions of them which Fred gave us but no history as to the parentage. I think I may write Fred to tell us more about them, for they are growing well, but at 6900 feet.

Arturo has a nursery of several thousand trees of "TENN" the true name of which has been discussed so much between you and me and Dr Drain. This variety has borne well now for two seasons and we like it very much. The point which we do not know much is its altitudinal requirement. Arturo has it only at Concepción, 6900 feet.

I think we are up in the air, worse than ever, regarding the identity of the pears which have been grown here for so many years - Larga and Redonda. I am sure there are least five varieties which are called Larga, the one of them is commonly called Mexicana. We have or I, at least, have been feeling that the Larga which bears abundantly and looks like Clapp in Hedrick's Pears of New York. But to try to find out, I got scions of Clapp from Beltsville and Arturo says the foliage doesn't look like our Larga, or one of our Largas. There is a variety in the market right now which looks like Lincoln, but it is so late, and a little bit too gritty, so I do not feel too sure of it. I could not get Lincoln from Beltsville for growing as we are growing Clapp, for comparison.

We are making real progress in pear growing, no doubt about that. Our real headache now is the peaches. I have written you about the short life in production of the ones we have had from you and from California. Arturo was saying this morning that Florard, Florabelle

Flordawon, and Sundred Nectarine grow fast, wome into bearing the sec
 or at latest the third year, give us one big crop, a second good crop
 and then produce almost nothing. As you know, we have had Flordawon he
 for seven or eight years and it just simply doesnt continue to produce
 f uit. You wrote me that you were beginning to figure on a 7 or 8
 year productive life in Florida; we are not getting that by any means.
 And I am paryicularly afraid of these melocotones we are getting from
 local sources; they stay in production longer but dont produce heavy
 crops at any time. I am afraid the Ministerie may be making a mistake
 in propagating and distributing these by the thousand.

You know that our little native duraznos remain in production
 for 10 years or so - as far as we can make out. I cant see why your
 new varieties dont do it. I wonder if we can do anything by developing
 a pruning program? Arturo has done some pruning these last few years
 but it hasnt seemed to change the have of Flordawon. Have you hit upon
 anything in Florida which will make these new peaches keep on bearing,
 as Dorothy N and Hall's yellow have done down here?

We have had news from Herbst Brothers. No crop of calleryana
 seed this year. To make it worse, Out of 2 lbs of seed I got for the
 ministerie last spring they grew 400 plants; our of 1 lb they got in
 Costa Rica they got 100 plants. The seed the Ministerie got here was
 stratified by Arturo Falla and chilled for two months, then sent to the
 nursery at Aposentos and planted in the seedbeds. All I can figure is
 that there may have been too many holidays right after the see was
 planted and it didnt get enough water. Arturo has been getting about
 4000 good plants out of a pound of seed.

I hope I have not bored you with this long letter. But as my
 Spanish inspector at Zamorano used to say when he came in to consult
 me every morning, "Ay doctor, problemas, problemas, problemas."

With all yours,



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June 6, 1974

Dr. Wilson Popenoe
Antigua
Guatemala, C. A.

Dear Wilson,

I'm glad to hear from you about fruit in Guatemala. Is this peach you describe from the selections you took down in July, 1971 or from a previous group of numbered selections in 1969? This might help in identification. The only L-27 I sent was L27-12 which is a white flesh, now named 'Flordared', so it isn't that one. Of the ones you gave Arturo in 1971, the one that is highest quality, yellow-fleshed and clingy is 15-39. It ripens here about May 15 to 20. It could be identified from the leaf which has globose glands, while the others have reniform (kidney-shape) glands. The tree is also distinctly more compact growing than any of our other selections. We think 15-39 is worth naming but we've had little fruiting of it yet in new test blocks, are delayed in making a decision. It would be very worth knowing if your peach is this one and whether it crops satisfactorily.

I think we have some new 1972 and 1973 selections that would be very worthwhile testing. If you know of anyone coming this way, I'll be glad to furnish buds.

How are 'Anna' apple and the other selections you took to Arturo in 1971? Is 'Tenn' pear still looking good? I think you told me the fruit selections from Dr. Hough were rather neglected. Have you any recent information about them? I look forward to your general report on varieites being tested.

We had a very poor peach season here. All our low chilling selections bloomed in very warm January weather, then fruit were killed February 25. The higher chilling things never did bloom well and set no normal fruit. We have a fair crop of 'Tenn' pear and a few seedling apples, also 'Anna' apple.

With best regards,

Ralph Sharpe

RHS/sw

July 7/1

Antigua, Guatemala, 29 June 1974

Prof. Ralph Sharpe
University of Florida, Gainesville.

Dear Ralph:

On coming back from three weeks in Honduras a few days ago I found your letter of 6 June. Yesterday we went down to see Arturo Falla. He looked up his records and found that he received material of peach 15-39 from you in July 1971. I brought down the bu'wood, apparently at the same time I brought the Anna apple which is making such a tremendous hit with Arturo at 5000 feet. He has recently planted 150 trees of this variety at his new place, Tempisque. Incidentally, he had given us some fruits from the original 1971 trees just before we went over to Honduras on 1 June. We had left three of these in the refrigerator, here in our kitchen, and yesterday I ate one of them. It was absolutely delicious, better than the Delicious parent, to my taste at least. Slightly more subacid - Delicious is too bland for me.

Now about that 15-39. We are delighted to hear that you think of naming it and putting it out to the public. Arturo says that this year's production has been very good. And as I have written you, the fruits are 2-1/2 to 3 inches in diameter, with no beaks at all, and we think the quality excellent. Arturo had given us a "flat" of about 20 fruits just before we left for Honduras on 1 June. Alice had left six in our kitchen refrigerator when we went away to Honduras. When we came back most of them were still in perfectly good condition and I had two breakfasts of sliced peaches and cream, on the 26th and 27th of this month. Arturo is going to propagate this variety as fast as he can. If you name it, give us the name so Arturo won't do as he usually does, put a name to it himself!

Of course Arturo would be glad to try any other selections which you think interesting. We will try to watch for an opportunity to get them down here. Hugh is so much on the run and his plans so indefinite that it is hard to get things lined up through him.

You ask about Anna apple and other selections I brought down in 1971. I have mentioned Anna above. It is hard to get details regarding introductions in general, because Arturo, who is pretty good about keeping records regarding receipt of new material, doesn't put much on the books afterward, and his men are always too careful about labelling things. But Arturo is better than most other folks here. You ask about the Hough introductions. I think Eduardo Matheu is the only one who has done anything with these. And so far, he has only one introduction which he thinks is a hit and this is an apple which he has named Vista Bella and is propagating. Eduardo's place is at 7500 feet so we don't know anything about the suitability of this apple for low elevations, though Eduardo seems to think it has promise in this regard. I have not seen the fruit as yet. Eduardo is the only one here who has tried to follow, more or less, the Hough introductions. I will see if he has been able to accumulate any further information. The things that were in the nursery at Aposentos near here have disappeared, so far as I know. There have been changes in personnel, and they shifted some of the stock to Quezaltenango. Some of the material was given to Peter Carlin at the latter place, but I understand nothing has come of it. About the only two places where we can count on getting some results are Arturo's and Eduardo Matheu's. And in both cases it is going to get some testing to determine the altitudinal limits. For example, Arturo and I often mention the "Tenn" pear which is still doing so well at 7000 feet and of which he has propagated a large number - two or three thousand I believe. Because

we were told by Dr Drain that "Tenn" is $3/4$ Anjou and $1/4$ Gerber it may not be any good below 6500 feet, But I must say the fruit looks to me as tho it has more oriental blood than it would have gotten from the combination mentioned.

Arturo has just sent a batch of grafts of Anna, peach 15-39 and The Tenn pear, which we are calling Ayres when it isnt called Tenn (because that is what Dr Drain thought it was) over to Zamorano, but I dont know just how much they can do with them right now; the work up on Uyuca is a most at a standstill for the moment. The boys will probably put them in pots in the nursery at Zamorano, 2500 feet, for the moment.

Incidentally, at Arturo's Tempisque, about 4800 feet, I ate a few Stover grapes yesterday. The plants are about two years old, I think, tho his man says less; the fruits are only half the size they were at Leesburg but the flavor is excellent. I ate this variety at Leesburg and was greatly impressed, because it tastes like a Muscat or Malaga. Maybe another year if the vines continue to grow well the fruit will be larger. Right now Arturo is all pepped up about a grape I got from a man over in Puerto Rico. He calls it Esperanza, and said the fruit is not terribly good, but the vine at Arturo's place is a very strong grower, looks much like Isabella, and is now hanging full of clusters of fruits which the size of BB shot. We will learn something about this variety in another 2 or 3 months. (I have just looked up the man's name who produced this variety; it is Frank Watlington, Santurce, Puerto Rico).

I hope to get out in the field a bit, from now until September, and will try to get some more information of interest to you.

Faithfully yours,