



Hunt Institute for Botanical Documentation
5th Floor, Hunt Library
Carnegie Mellon University
4909 Frew Street
Pittsburgh, PA 15213-3890
Contact: Archives
Telephone: 412-268-2434
Email: huntinst@andrew.cmu.edu
Web site: www.huntbotanical.org

The Hunt Institute is committed to making its collections accessible for research. We are pleased to offer this digitized version of an item from our Archives.

Usage guidelines

We have provided this low-resolution, digitized version for research purposes. To inquire about publishing any images from this item, please contact the Institute.

About the Institute

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.

EXPERIMENTAL PLANTATIONS INC.
FINCA EL NARANJO
CHICACAO, SUCH.

January 29, 1940.

Dear Dr. Popenoe:

I enclose some recent reports regarding the Cinchona. The Inventory over which I had been perspiring has finally been finished. You will receive a copy from Rahway as soon as this can be arranged.

Everything is going along about the same as usual; Hoehn and I plan to make the trip to Barillas on Saturday. Frankly, I have the greatest hope for this region.

I hope that you are having an interesting and delightful time in Cuba. There is no use in telling you about how we miss you here.

The other day, a chap named James Weir from Venezuela, whom Col. Ruehl characterized as being a "Slick Article" paid a call on us at Naranjo. Mr. Perkins happened to be here at the time, and Weir, who had apparently come with the hope of getting some Cinchona Material from Naranjo had to be content with some seeds of Quina Hybrida which were distributed to him by the Dirección General de Agricultura. I believe he said that he knew you.

My very best regards to you and Mrs. Popenoe,

Sincerely,

Fritz.

NURSERY RECORD

SEED NUMBER: *Kukoff 7* || KIND: *Calisaya* || PARENT TREE: % *Quinine Sulgate* 6.6 || BARK THICKNESS mm. *1.6-1.8*

NURSERY BED LOCATION	BED NO.	SEEDLINGS COMING FROM	SPACING	DATE OF SOWING SEED	DATE OF TRANSPLANTING	NO. OF PLANTS TRANSPLANTED	REMARKS
<i>Naranjo</i>	<i>A 1</i>	<i>Washington</i>	<i>6" x 6"</i>	<i>Jan. '40</i>	<i>Nov. '40</i>	<i>425</i>	<i>+3.5</i>
<i>Naranjo</i>	<i>B 6</i>	<i>Panamá</i>	<i>3" x 3"</i>	<i>March '40</i>	<i>Dec. '40</i>	<i>850</i>	<i>+3.5</i>
<i>Naranjo</i>	<i>SEEDBED 22</i>	<i>Naranjo</i>	<i>3" x 3"</i>	<i>March '40</i>	<i>Dec. '40</i>	<i>1080</i>	<i>+3.5</i>
<i>Panamá</i>	<i>SEEDBED 6</i>	<i>Panamá</i>	<i>2" x 2"</i>	<i>March '40</i>	<i>Dec. '40</i>	<i>1266</i>	<i>+3.5</i>
							<i>+</i>
							<i>3</i>
							<i>INCHES</i>

Apartado Postal, Guatemala, #284
September 23, 1940.

Dear Dr. Popenoe:

Enclosed are letters to Messrs. Lukens and Zoller that need no explanation.

I will send the chosen films along to you as soon as possible. The total bill for these films, of which I had 3 copies made, plus what you already had charged against you at Biener's was \$ 11.85, which sum I paid to-day and will put on my expense account.

It is really difficult for me sufficiently to express my gratitude for all that you did for me this summer.

Wishing you the best of luck and good health, and my best regards to Mrs. Popenoe,

Sincerely,

Fritz.

COPY

Guatemala, 23 de Septiembre de 1940.
Apartado Postal 284.

Sr. Dn. Enrique Zoller:
Finca El Porvenir, Ayutla, Guat.

Muy Sr. mio:

Tengo mucho gusto en enviarle los resultados de las muestras de cáscara que tomamos en El Porvenir hace siete semanas, gracias a su bondad. Los resultados vienen de los laboratorios de Merck & Co. en Rahway, New Jersey, E.E.U.U. Usted puede ver que ninguna muestra contiene suficiente porcentaje de quinina para interesarnos comercialmente.

Al mismo tiempo, creemos que hay una distribución de material tan grande en Porvenir que mas tarde tal vez valdría la pena estudiar los arboles nuevamente, y tomar mas muestras. Si esta idea le gusta, nos gustaría regresar a su finca en el año que viene y llevar a cabo este plan.

Dr. Popenoe y yo quedamos sumamente agradecidos a Ud. por su amable hospitalidad del mes pasado, y por su cortesía en el asunto de las muestras.

Deseando a Ud. y a su esposa toda prosperidad y felicidad en el futuro, quedo de Ud. atento y s.s.

F. R. jr.
[F. Rosengarten]

La Lima, Honduras, 27 Sept 1940

Mr Frederic Rosengarten Jr.,
Apartado 284, Guatemala.

Dear Fritz:

Your note of the 23rd, with copies of letters to Messrs Lukens and Zeller, has just come. I will be glad to see the photos when they are ready; no hurry. The manuscript of the proposed bulletin is being copied today and I will send it up to Mr Lukens for approval.

After talking with my chief Mr Turnbull I have been able to formulate what I believe are fairly definite plans. These involve my return to Guatemala about October 15th, and remaining in that country until after New Year's. I shall be glad to visit Naranjo with you as soon as I get back there again, and can probably arrange to work in several other visits before the end of the year.

I note that you have been able to get photostatic copies made by Eichenberger. This is going to be a great convenience.

The results of the Finca Samac bark samples should be coming in soon. I am very keen to see them, and hope we are not disappointed in our expectations. If they come to you, I suggest you send them on up to Don Gustavo, telling him (if the results warrant) that you and I will probably drive up there in November to talk with him about further arrangements.

When talking with Franke about his future, I told him I would take up the matter with our people. As you probably know, our Company has told him several times that they would be glad to take him back as Overseer. The international situation has altered things considerably, and when I mentioned the matter on this recent occasion, Franke said he very much doubted that the Company would feel free to re-employ him under present circumstances. I told him I had the same hunch, but would bring up the matter anyway. I did so, and Mr Turnbull said he thought it would be unwise for the Company to re-employ Franke right now. If he asks, you can tell him this; but from what he said to me about his plans I feel sure he expects nothing, and in fact would rather proceed along the other lines he has in mind.

Drop me a line at any time you think I can be of service, and remember that October 15th is not far off. It will be a great pleasure to see you again and to visit Naranjo with you. The work this summer has been so interesting it is hard to get away from it.

Helen joins in best regards.

Sincerely yours,

Apartado 284, Guatemala City.
September 29, 1940.

Dear Dr. Popenoe:

Enclosed are two letters to Mr. Lukens, and one to Donald Hodgson that are self explanatory.

I am also sending you the Cinchona Photos which came out very well indeed. I got ~~three~~ sets made, one of which I am sending along to you: the rest I will divide among Rahway, Don Mariano, and others.

Mr. and Mrs. Benitez and son arrived at the finca last week, and she seemed very blue and fed up at first. I do hope she gets over this feeling. If not, I am afraid that I may have to call on you for a psychological push in this matter. As you suggested, I am offering Benitez the use of the camioneta on some Saturday nights, in case he should care to take his wife to Mazatenango, etc. Let us hope that she doesn't kick up too much of a fuss.

How do you feel about a small house for Don Pancho as discussed in my letter of Sept. 28 to Mr. Lukens?

Your parting words about the possibility of seeing Capt. June re. my joining up with the Naval Reserves interest me tremendously--- I would greatly appreciate it if you could help arrange this.

I hope that you and Mrs. Popenoe are in the best of health; with kindest regards,

Sincerely,

Fritz.

Apartado 284, Guatemala City.
September 29, 1940.

Mr. Donald Hodgson
Finca Pacayal,
Pochuta, Guatemala.

Dear Mr. Hodgson:

I am very sorry that we did not have more opportunity for a chat the other day.

I do hope that we might arrange a meeting sometime soon. Perhaps you might be interested in making a trip to the Finca El Naranjo to see the Cinchona?

During the next month I expect to be very busy with various details, but perhaps at the end of that time, if you are not too occupied we might arrange to meet somewhere. Also, by that time I hope that Dr. Popenoe will be back from Honduras, and it would be fine perhaps if you could get his expert advice regarding your Cinchona possibilities at Pacayal.

Wishing you the very best of luck in the future and with best regards,

Sincerely,

F. Rosengarten Jr.

F. Rosengarten Jr.

COMUNICACIONES ELECTRICAS

GUATEMALA-AMERICA CENTRAL

Guat

Comunicacio



Dr. Wilson Popence.

Guatemala

Comunicaciones Electricas

TELEGRAMA

CKS

22/66 d. 8h45m.

DE 2 CG Guatemala 15. DE Octubre 1940.-- DE 19

RECIBIDO EN Antigua. A LAS 9h35m POR NG.

Acabo de llegar del campo, me gustaría visitarle Antigua mañana
por la mañana. aviseme Palace Hotel. saludolo y á su señora.

W. R. Rosengarten.

EL GOBIERNO NO ES RESPONSABLE POR ERRORES U OMISIONES EN LOS MENSAJES TRANSMITIDOS POR SUS TELEGRAFOS. PERO SI
DEVOLVERA EL VALOR RESPECTIVO CUANDO EL ERROR U OMISION DEPENDA DE SUS OFICINAS.

NOTA: SE RUEGA AL PUBLICO DAR AVISO A LA DIRECCION DEL RAMO DE TODA IRREGULARIDAD O ABUSO QUE SE NOTE EN EL SERVICIO TELEGRAFICO.

TIP. NACIONAL - GUATEMALA

Finca El Naranjo.
October 29, 1940.

Mr. C. Griesing Esq.,
10 Calle Poniente, No.8.
Guatemala.

Dear Mr. Griesing:

Many thanks for your very kind and courteous letter of October 26, 1940. Unfortunately Dr. Popenoe is no longer directing the Cinchona work of "Experimental Plantations Inc." and has returned to the United Fruit Co., so that I am now in charge of the Cinchona project.

Regarding Mr. Hoehn, of course we do not want to handicap your work in any way, and so we would be very glad to co-operate with you as you suggest. Accordingly, I shall inform Mr. Hoehn that he may consider December 16, 1940, as the date upon which he will commence his work at Finca "El Naranjo".

I know that you appreciate the potential importance of Cinchona in Guatemala at a time when the future of coffee may be said to be doubtful and the need for additional crops is so urgent; we feel that Mr. Hoehn can render important service in connection with the development of this young and promising industry which may prove highly valuable to the country.

It is with pleasure that I look forward to a most sympathetic continuation and cultivation of the friendly relationship that already exists between "Castaños" and "El Naranjo".

Thanking you once more for your courtesy and understanding in this matter, and wishing you the very best of good luck in the future,

Very truly yours,

F. Rosengarten Jr.

F. Rosengarten Jr.

copy

EXPERIMENTAL PLANTATIONS INC.
FINCA EL NARANJO
CHICACAO, SUCH.

GUATEMALA OFFICE
CIUDAD VIEJA
CALLE REAL N° 91. TEL. 4042
CABLE ADDRESS:
ANAPU

Finca El Naranjo,
Chicacao, Suchitepequez,
Guatemala, Central America.

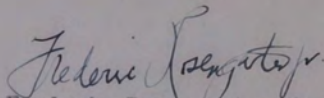
TO WHOM IT MAY CONCERN;
this letter will serve to introduce Mr. Hans Franke.

Mr. Franke began to work with Experimental Plantations Inc. on February 23, 1934, and for over six and one half years has rendered most valuable services to this concern. He was a pioneer in the introduction of Cinchona in Guatemala, and by dint of his unselfish and praiseworthy character was able most commendably to withstand the innumerable and trying hardships that were involved in starting seed-bed experiments in various parts of this country.

Mr. Franke has been Administrator of the finca "El Naranjo" from the time it was purchased by this company to the present date. This finca is the site of a large scale development of Cinchona in Guatemala, and Mr. Franke has proved himself to be a capable, industrious and intelligent Administrator. He has been most successful in dealing with not only Coffee and Cinchona culture, where he has capably demonstrated his horticultural skill, but also with the various and sundry problems that confront the man who is in charge of building dwellings, seed-beds, labour camps and automobile roads in the midst of virgin forest.

I regret very much that Mr. Franke is leaving this Organization, but I am equally sure that he will succeed in whatever line of endeavor he may choose to undertake; and I cannot recommend him too highly, so impressed am I with his courage, loyalty, ability and determination.

Nov. 1, 1940.



Frederic Rosengarten Jr.
Manager, Experimental Plantations Inc.

Finca El Naranjo,
November 6, 1940.

Dear Dr. Popenoe:

Enclosed is a form for the Nursery Records that I have drawn up; I would appreciate any comments you may have about it. I feel that the page should be perhaps three inches wider, and that we might get a special loose leaf book made at Amos & Anderson. Eventually I feel sure that we will need a separate Field Record Book as well.

I acknowledge receipt of your interesting letter of November 5 to Mr. Lukens. The problem of Plant sickness at Naranjo and elsewhere is certainly of paramount importance.

Enclosed please find my last letter to Mr. Lukens.

By the way, I do hope, if it is not too much trouble, that the next time you happen to see Capt. June you will bring up the matter with him that you mentioned to me at the Airport as you were leaving for Honduras.

Sincerely,

Fritz

COMUNICACIONES ELECTRICAS

GUATEMALA-AMERICA CENTRAL

Comuni



Dr Wilson Popenoe.

Guatemala
Comunicaciones Electricas

26/18 dpdas15h4om.

TELEGRAMA

DE 7 mc. Guatemala 12, DE Diciembre 1940. DE 19

RECIBIDO EN Antigua G. A LAS 16h POR MG.

Viaje a Quiché aplazado; arreglo hecho para entrevistar los Herreras
 lunes dieciseis diez de la mañana Guatemala ojalá que venga usted
 importantísimo avíseme Palace saludes.

Federico Rosengarten.

EL GOBIERNO NO ES RESPONSABLE POR ERRORES U OMISIONES EN LOS MENSAJES TRANSMITIDOS POR SUS TELEGRAFOS, PERO SI
 DEVOLVERA EL VALOR RESPECTIVO CUANDO EL ERROR U OMISION DEPENDA DE SUS OFICINAS.

NOTA: SE RUEGA AL PUBLICO DAR AVISO A LA DIRECCION DEL RAMO DE TODA IRREGULARIDAD O ABUSO QUE SE NOTE EN EL SERVICIO TELEGRAFICO.

TIP. NACIONAL-GUATEMALA

General Program, January 20, 1941

- (1) Keep pushing Krukoff transplanting.
- (2) Keep in touch with Helmrich regarding the Original Ledger Seeds at Cobán. Cuttings from these desirable trees will not be taken until May, in order to insure the greatest possible success with our grafting of this very valuable material. L.L. Pettersen will be given about 25 of these cuttings. When seed is collected in February, March, we will sow most of the seeds likely to be free from undesirable cross-pollination ourselves at Naranjo, giving a few of these also to the Smiths, Pettersen and the Herreras. The rest of the more dubious seed will be given for the most part to Don Mariano, to distribute to Guatemalan finqueros.
- (3) Sow monthly enough Succirubra seeds to obtain approximately 10,000 plants for grafting purposes. This total is *apart* from the large amount of Succirubra seed that should be sown for grafting in May and June 1942.
- (4) Trip to Barillas to start experiment there.
- (5) Trip to Porvenir to take carefully selected samples (no rush).
- (6) Experimental plantings with Krukoff seedlings will be started at 1000 feet (probably with Manuel Herrera at "Velasquez"), at 2000 feet (probably with Owen Smith at "Panamá"), at 3000 feet (probably at "Mocá") at 4000, 5000, 6000, 7000 and 8000 feet (probably at "Naranjo").
- (7) Experimental Planting to be made with "runts"
- (8) Experimental Planting to be made clearing the minimum of forest.
- (9) A new grafting book to keep comparative grafting records will be used. This has been discussed with Owen Smith. It will be printed in Spanish so that one of the more careful Agrucultural Apprentices can keep running month by month entries of grafts that have died, which classes have had the most success, who grafted them etc. All available grafting data of the past will also be entered in this book for future reference.
- (10) An Experimental Planting will also be started at Cobán with about 10,000 Krukoff seedlings. (With W. E. Dieseldorff at the Finca Sachamach if it is clearly established that he is anti-Nazi; otherwise probably with Hempsteads at one of their fincas).
- (11) Careful records will be kept regarding the progress of the Krukoff seedlings by camera, *as well as by written records.*
- (12) Further employment of Photography for historical purposes.
- (13) Grafting will be pushed in May-June with the most carefully selected material from Samac, Helvetia, Naranjo and Zapote. The trees from which we desire one half of the material will be clearly marked before April 1, 1941. We will have only about 10,000 Succirubra stock for May-June which we must utilize to the utmost.

(14) Bark-sampling will be commenced on March 20 in Helvetia. All Original Ledgers which are deemed of a size large enough to warrant being sampled (1 and three fourths inches in diameter at 18 inches from the ground) and which were not sampled in 1940 will be sampled. In addition, a few carefully chosen trees from Zapote, Panamá and Samac will be sampled at this time. During 1941, we will continue to use the "Individual Tree Record" form drawn up by Dr. Popence in 1940.

(15) Contacts will be maintained as suggested by Dr. Popence in September 1940.

F R Jr.

Opening up of Areas.

In general, this work may be divided into 2 headings:
 (A) Opening up of Nursery Areas, and (B) Opening up of field areas.
 The work on (A) will be commenced after a careful estimate of available space in the Nursery Areas already opened up has been compared with the space necessary for the number of Krukoff seedlings which we shall have to transplant to Nursery Areas in the near future. The work on (A) will be concentrated on the Upper Nursery Area (Area on way up to "Loja") for the irrigation of which space we have already purchased a pump.

In general, (A) would naturally take preference over (B) if a decision in favor of one or the other had to be made.

Our proposed work on (B) requires immediate attention in that it is estimated that we may have 10,000 seedlings of Krukoff Calisaya which may have to be planted in the field during 1941. We propose to handle this work in the following fashion:

- (1) At 7000 ft. to clear about 2 acres completely.

Also at 7000 ft. to thin about 2 acres completely.

In each of the above cases the idea is to clear enough forest to give the effect of a complete clearing, which, of course, may be more or less than 2 acres, depending on the condition of the land. The areas having been cleared, it is then proposed to plant out 1000 Krukoff seedlings in the center of both of the areas, which will probably be adjoining, in order to get an idea of the method of clearing we should employ in the vast areas we shall have to clear in the future.

- (2) At 6000 ft. the procedure noted above will be followed.

- (3) At 5000 ft. the procedure noted above will be followed.

(4) This will leave us with an estimated 4000 seedlings of Krukoff Calisaya to be planted out during 1941. We will probably plant these at a lower altitude of 4000 ft.

(5) Original Ledger Grafts, grafted during 1940, will be planted out during 1941 in certain picked areas, at "Naranjo". At the most, we will probably have 500 grafts to plant out from the "Loja" Nursery at Naranjo, and 700 from the Merck Area at Panama, "Los Andes".

The work of opening up areas for the planting out of 1941 having been completed, attention will then be given to the opening up of areas at Naranjo for the 1942 rainy season. If, let us say, the opening up of areas for 1941 planting out is completed in July 1941, we will then begin the clearing work for 1942 by clearing about 250 acres (or roughly one half of remaining land available for cultivation) in the following manner. (1) By thinning out underbrush, (2) Staking holes. (Although this particular point merits further investigation). (3) Cutting down the biggest trees, leaving the smaller forest trees to provide shade temporarily at least. If at a later date it is so decided, these smaller forest trees will be ringed and eliminated little by little.

The above plan, of course, is tentative and may be altered as we go along according to practical experience which we meet in the field. Mr. Enrique Hoehn will be in charge of the opening up of areas at Naranjo until further notice.

To recapitulate, it is proposed to open up during 1941, (not counting the work relating to planting out in 1942) 4 acres at 7000 ft. (more or less), 4 acres at 6000 ft., and about 4 acres at 5000 ft., planting out more or less 2000 Krukoff seedlings at each altitude.

In addition enough land will be opened up at 4000 ft. to take care of the remaining Krukoff seedlings to be planted out in 1941.

Apartado Postal 284, Guatemala.
February 17, 1941.

Dear Dr. Popenoe:

Hoehn and I have just returned from the trip to Barillas which took 14 days in all. We took 1000 plants up there, (950 Krukoff & 50 African Ledger) and had lots of difficulties. But I hope that some day this experiment may prove something. I have a feeling between ourselves that it may. I will send along to you a copy of a report I have written as soon as it is ready by regular mail.

Unfortunately my father, who was planning to come down here in early March has been sick recently, so the trip has been called off.

I want to congratulate you again on your suggestion to me, "Why not get Hoehn as Administrador?" After having been on this trip with him, I can tell you that we have a jewel. He is a man who is not afraid to punish himself working. This is something that cannot be said for all the employees that have been connected with Experimental Plantations Inc.

Sin otro particular, and with my very best regards to you and Mrs. Popenoe,

Sincerely,

Fritz

Barometer

STATUS OF KRUKOFF SEEDLINGS AT FINCA EL NARANJO AS OF
MARCH 19, 1941.

To clarify the situation with regard to these Krukoff Seedlings, it seems best to divide them into 3 general groups:

- (A) The 304,544 that have been transplanted to the "Lower Nursery", as of this date.
(B) The 150,000 that it is estimated will be transplanted during April, May and June 1941 to the "Lower Nursery" from the Seed Beds at El Naranjo.
(C) The estimated 600,000 that will still remain in the Naranjo Seedbeds until November 1941.

To discuss these 3 groups in more detailed fashion:

- (A) The 304,544 seedlings that have already been transplanted to the "Lower Nursery" have been transplanted as follows:

A (1) 8,007 at 2 by 2 inches.
A (2) 281,273 at 3 by 3 inches.
A (3) 15,264 at 6 by 6 inches.

These seedlings will be treated as follows:

(A) 1. In June, July 1941, some will be left at 6" by 6" in the "Lower Nursery"; most will be transplanted at 6" by 6" in the "Esterlina Nursery" (i. e. the Nursery near the Esterlina boundary.) These plants should then be ready to be planted in the field in June '42.

(A) 2. Some will be left at 6" by 6" in "Lower Nursery". Most will be transplanted at 6" by 6" in "Esterlina Nursery" in June, July 1941. These plants should be ready to be planted in the field in June 1942.

(A) 3. These will be transplanted for the most part to field positions from June-September 1941. (Some 2000 at 7000 ft., 2000 at 6000 ft., 2000 at 5000 ft., 2000 at 4000 ft. Also some of these may be planted between the rows at "Loja" if it seems advisable.)

(B) There will be ample space in the "Lower Nursery" to receive these 150,000 seedlings at 3" by 3" in April and May, 1941.

In all probability, these 150,000 seedlings will be then transplanted to the "Upper Nursery" (i. e. the Nursery Area irrigated by pump, near "Loja".) in November 1941, at 6" by 6", and should be ready to be planted in the field during the rainy season of 1942.

(C) It is estimated that about 600,000 seedlings will remain in the Naranjo Seedbeds until November 1941. At that time, a part of these seedlings will be moved at 3" by 3" to the "Lower Nursery"; a part at 3" by 3" to the "Upper Nursery"; and a part will be left in the Seedbeds at 3" by 3", the soil having been changed. Probably a part of these 600,000 estimated seedlings will be planted out during the rainy season of 1942, a part during the rainy season of 1943.

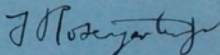
ESTIMATED TOTAL KRUKOFF SEEDLINGS AT NARANJO, MARCH 19, '41.

1,054,544

Of the 56,894 seedlings of Krukoff Calisaya that I estimated as existing ^{at Panama} as of January 31, 1941, some 4,000 have been moved to Naranjo.

This leaves approximately 52,000 of which Pettersen and Owen Smith will take about 31,000 between them, let us say. This would leave approximately 21,000 seedlings at "Los Andes", Panamá. It would seem more prudent to leave these 21,000 at Panamá, with an eye to giving them away or selling them to co-operators at a later date, rather than move them to Naranjo.

Finca El Naranjo,
March 19, 1941.



F. Rossngarten Jr.

(6) Average diameter
(7) Leaf outlines of three typical
For example:

Finca El Naranjo,
Chicacao, Suchitepequez.
Guatemala, C. A.
March 22, 1941.

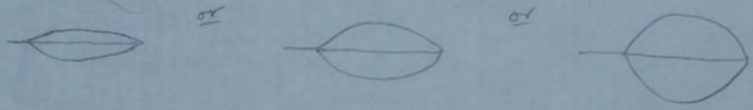
Dr. Nutter,
American Legation,
Tegucigalpa, Honduras.

Dear Dr. Nutter:

The fact that you have spotted some Cinchona in Honduras which may be of excellent quality is naturally very interesting.

I would appreciate it very much if you could supply me with the following information:

- (1) Location of the Cinchona trees.
 - (2) Altitude.
 - (3) Wet or dry climate. (Approximate annual rainfall if possible.)
 - (4) Approximate number of trees.
 - (5) Average height of trees.
 - (6) Average diameter of trees. (At 18" from ground.)
 - (7) Leaf outlines of three typical trees.
- For example:



From these data we could get a better idea of what the situation is with respect to this Cinchona, and whether it may be of interest to us.

Thanking you for your attention and interest in this matter,

Very truly yours,

F. Rosengarten Jr.

F. Rosengarten Jr.
Manager Experimental Plantations Inc.
Guatemala, C. A.

Finca El Naranjo,
March 25, 1941.

Dear Dr. Popenoe:

Since I last wrote you, I have decided to step off the deep end and get married on June 21 next in New York to Miss Miriam Osterhout, who, you will remember, was studying painting with Mrs. Tudor in Antigua. I do hope you and Mrs. Popenoe will be able to come to the wedding.

I feel truthfully that I am undeservedly lucky to connect with Miriam. She is a fine girl, and says she will be glad to live anywhere I indicate.

Getting married, rather than interfere with my part in the Cinchona Project should help in that I hope to return to Guatemala in August for a year more or less, or until such a time that it appears I am no longer needed here.

Frankly, I have come to the conclusion by this time that Pennock simply isn't going to work out here permanently, principally because of his complete lack of energy, among other reasons. These damn delicate situations are a shame as far as the project is concerned; also because Bill is a decent sort of a fellow, but we might as well face the facts, and not delude ourselves any longer, thereby hanging ourselves up worse later on.

It would be fine if you and Mrs. Popenoe could meet my father and mother in Chestnut Hill, Pa. I know how much they want to meet you!

I feel like knocking on wood because everything at the finca is going so well, thanks to Hoehn and Benitez. The Krukoff plants in the Nursery are doing beautifully, thanks to Jorge's rare touch.

Among other items, I enclose a photo of an old friend! If all works out well, and I return here in August, I would still like very much to get a commission in the Naval Reserve. I have talked to Capt. June about this, although not very recently, and the prospects don't seem so good. However, I haven't given up hope, and would appreciate any suggestions you might make to me as to whom I might see if I am in Washington in June etc.

Best regards to Mrs. Popenoe,
as ever,

Fritz

Apartado Postal 284,
Guatemala, C. A.

April 9, 1941.

Dear Dr. Popenoe:

Many thanks for your
kind letter! And many thanks also to
Mrs. Popenoe for hers!

Have just seen Don Marcano to-
day - and at last the copies are off the
press. They seem most beautiful. I have not
yet had time to read it, but enclosed please
find one.

I will send 10 to you by
regular mail to Boston.

Miriam is certainly a grand girl,
and I am probably luckier than I deserve to be -

We certainly do intend to return to
Guatemala - to help out as long as it appears I am
needed.

That is why, to harrass you again.
I wish I could fix something up re. some job I
could do with the Navy here at the same time - at
least being a reserve - for frankly I don't like to
feel I am shirking military duty.

Adios, and with very best regards
to you both.

Sincerely
Fritz.

401 Sligo Ave, Silver Spring, Md.
15 April 1941

Mr Frederic Rosengarten, [Sr.]
500 West Chestnut Avenue,
Chestnut Hill, Philadelphia.

Dear Mr. Rosengarten:

Thank you heartily for your invitation of the 11th. Mrs. Popenoe and I have been very anxious to meet Mrs. Rosengarten and yourself because of our real affection for your boy Fritz. We have just made arrangements to go up to Philadelphia on the 25th to talk with David Burpee about some plans he has for work in Guatemala, and if it would suit your convenience, we could lunch with you on that day, then go out to Fordhook Farms in the afternoon.

We share your happiness over the good fortune Fritz has had in meeting and winning Miriam. We have seen her on several occasions in Antigua and took a great liking to her even before we had any idea that Fritz was interested. I believe you will be pleased with your daughter-in-law.

Sincerely yours,

EXPERIMENTAL PLANTATIONS INC.
FINCA EL NARANJO
CHICACAO, SUCH.

April 23, 1941.

Dear Dr. Popenoe:

Enclosed are some letters which I hope will be of interest.

The most amazing thing has happened here recently in that we have gotten results of "Monterey Succirubra" sampled by me in March that have gone as high as 8.7 % Q. S.

They are:

Z-628 6.6 %
Z-629 8.7 %
Z-630 7.75 %
Z-631 7.35 %

Two of these gave 4.7 %, when sampled in June 1940. They are seedling trees, sown in 1936, planted in the field at Monterey, Plantation # 3, in 1938.

Quite interesting, verdad?

I am very busy indeed getting things in shape here so I can go away in the end of May for a while with a clear conscience.

With very best regards to you and Mrs. Popenoe,

as always,

Fritz

April 21, 1941.

Mr. R. P. Lukens,
Merck & Co, Inc.,
Rahway, New Jersey.

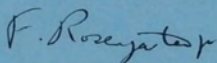
Dear Mr. Lukens:

I acknowledge receipt of yours of April 14, with the most interesting and encouraging results from the "Monterey Succirubra" trees at Zapote. A few more trees of this type will be sampled as soon as possible. I see no reason to believe that there was a mix-up in these samples, (at least at this end of the line), as I was most careful when I took them.

We are busy now with our grafting at Panamá, and an active grafting campaign has been worked out for Benitez and his helpers during the next few weeks.

By the way, due to various reasons which I am sure you understand, I have made the rule here at Naranjo that until further notice Germans, in general, are not welcome as sight-seers. I felt this necessary, as the other day a certain chap dropped in when I wasn't around who is known as a "fifth-columnist", and it seemed wisest to make our attitude clear for the future, that is that we don't at all desire visitors of this type. To avoid any possible misunderstanding in the immediate future, the general rule was made to cover all such cases. I am sure that you approve of this rule, as such visitors certainly can do us no good, and there is always a possibility of some unpleasant ulterior motive on their part, etc.

Very truly yours,



F. Rosengarten Jr.

April 23, 1941.

Mr. R. P. Lukens,
Merck & Co., Inc.,
Rahway, New Jersey.

Dear Mr. Lukens:

(1) Enclosed please find instructions to Benitez re. the Cobán grafting material, to be grafted at Naranjo with the greatest possible care, in order to establish clones of each one of the promising Original Ledgers in Helmrich's field at Cobán.

(2) Enclosed also please find the Minutes of the first and second Cinchona Conferences.

(3) We are from now on going to exchange rainfall statistics with the fincas Mocá, Panamá and Helvetia. *(and Patzulín)*

(4) I was planning to go to Cobán on April 27, but rather than delay this important trip to get cuttings and take bark samples, Mr. Pennock will go with Benitez and be responsible for the completion of the work to be done there, while I help Dr. Walti get his bearings at El Salto, Panamá and Naranjo.

(5) Enclosed please find some recent photos of the Cinchona at Naranjo.

(6) Perhaps it would be best to wait until you come down here next month to decide definitely about the following new constructions which Hoehn and I think are definitely needed at Naranjo.

(a) A small stone structure to house lime.

(b) Several new ranchos. We have built our rancharía up from 18 to 25 permanent families since Hoehn has come, and there are more desirable permanent workers we could obtain at present, but we have no place to put them. There are several carpenters, masons etc., living in ranchos that ultimately will be for permanent laborers, but at present, of course, these ranchos are not available for mozos.

2 ranchos might be placed to advantage on the upper part of the "Pump Nursery" just below Loja, to guard that area.

Perhaps 10 more could be built on a slope behind "Huasibamba".

We would then have 49 ranchos, which buildings really are essential in order to have a good supply of permanent laborers always on hand, these mozos being the "backbone" of the finca work and life, as you know.

(7) Will you please advise me whether you wish to have the church built of wood or stone. Following the design which you sent down recently, a stone church would cost (it is estimated) \$ 1,024.

A church built of wood, \$ 743. The stone church would probably be

more attractive, but as you note, quite a bit more expensive. Both would be sturdy and practical.

(8) I have not yet heard from you as to whether you approve making 2 bathrooms (instead of one) where the old kitchen used to exist. The old kitchen is 18' 5" by 10' 6"; so there is ample room for 2 bathrooms of 10' 6" by 9'. As previously noted, this arrangement would be a great convenience for my future wife and myself, as we could then live comfortably in the old building after it has been repaired. The 4 new first class rooms in this building made where the two large old rooms used to exist (in which we used to sleep) are now just about completed. As mentioned before, the 2 rooms overlooking the barranco plus a private bath would be entirely adequate for our needs. There would then remain 2 first class rooms plus a private bath for overflow guests in that building.

(9) I have moved all of my files to Naranjo, and have explained to Mr. Penneck how they are arranged.

(10) The finca school will officially open on May 15th. The school teacher, an ugly girl from San Bernadine will come on May 1st to get her affairs organized. She will be paid \$ 6 plus rations monthly, on the condition that she will teach in the morning and then help with the laundry, washing etc. in the big house during the afternoon. Her mother will probably come with her.

I am looking forward to seeing you soon, as are your many other friends in Guatemala.

With best regards,

Very truly yours,

F. Rosengarten Jr
F. Rosengarten Jr.

Vástagos a la finca Samac, Cobán, deben cortarse en la siguiente manera: un promedio de veinte vástagos deben cortarse de los siguientes árboles (si se puede hacerlo sin hacer daño a las madres.)

<u>Arbol.</u>	<u>% Q. S.</u>
S 1	10.3
S 7	10.3
S 9	11.2
S 12	9.5
S 18	10.0
S 19	10.57
S 20	9.1
S 30	10.3
S 34	9.8
S 39	13.3
S 42	10.0
S 55	10.0
S 60	9.7
S 62	12.4
S 63	9.1
S 98	9.1

Además, un promedio de diez vástagos deben cortarse de todos los otros Original Ledgers en el campo con excepción de número S 86 (que va a botarse.)

25 vástagos de las mejores clases arriba de 9% deben estar regalados al Sr. L. L. Pettersen al regresar de Cobán a Naranjo. Hay que avisarle a Sr. Pettersen un día antes por telegrama que venga encontrarles Hotel Aurora Antigua a una cierta hora para recoger sus vástagos.

PRESUPUESTO.

Así, de las clases arriba de 9%, 20 vástagos de 16 arboles...	320
De las otras clases, 10 vástagos de 73 palos	730

TOTAL VASTAGOS.....	1,050
Menos 25 para Sr. Pettersen..	25

TOTAL VASTAGOS PARA NARANJO.....	1,025

Sería magnifico si se puede regresar de Cobán a Naranjo cuanto antes, para injertar lo más pronto posible estos vástagos valiosísimos.

23 de Abril de 1941.
Finca El Naranjo.

F. Rosengarten Jr.

F. Rosengarten Jr.

Minutes of Cinchona Conference held in Finca Mocá on
Tuesday, February 25th. 1941.

The session was opened at 8.30 a.m., the following being present:
Messrs. W.Pennock, F.Rosengarten, L.L.Pettersen, P.O.Davies, A.E.Bianchi,
F.W.O.Smith, G.P.Smith and E.H.Lewonski.

1. Mr. G.P.Smith in opening the session said that the idea behind the meetings is to exchange information on everything connected with the planting and cultivation of cinchona, thus allowing all to profit from the experience of each. No questions of policy would be touched on, these being of course entirely the business of each concern represented and of no interest to the remainder.

2. After discussion it was decided that meetings be held in rotation on the various properties where cinchona was being cultivated, the place and date of one meeting to be arranged at every meeting in a legally authorized book and in both English and Spanish. Copies of the minutes are to be sent to all those attending the conferences and to those others who are also interested.

3. Mr. Smith proposed that Mr. Rosengarten should be Chairman at succeeding meetings and Mr. Lewonski Secretary, this being passed unanimously.

4. Passing to specific discussion of the matters connected with planting of cinchona and difficulties encountered, Mr. Davies addressed a number of questions to Mr. Pennock, the following being the important points worthy of recording:

With regard to transplanting of seedlings between seedbed stage and planting out to field, Mr. Pennock stated that the policy so far planned and carried out as far as circumstance permits, is to transplant two to three times, firstly at two inch centres, later to six inch centres and from here directly to the field. In dry weather, he agreed that transplanting should not be attempted till the seedling is from three to four inches high. At the same time it was agreed that smaller plants are inferior to the larger ones in a seedbed, probably not in heredity but rather owing to poorness of seed, poor rooting or other reason. In Naranjo planting of seedlings is carried out with a dib or stick, all roots being left intact, though in the case of *Succirubra* the main root may apparently be cut without danger of damage resulting.

The discussion having turned to questions of manure, Mr. Pennock said that in El Naranjo experiment is being largely confined to inorganic or chemical manures. He knows no reason why stable manure should not be satisfactory though this has the same drawback as coffee pulp and similar manures which contain large amounts of fungi which may be expected to cause trouble. Again, cinchona being similar to coffee, it is possible that diseases of coffee might be transmitted to the cinchona, these manures forming the carrier. Bone meal, ~~urine~~, guano and dried blood were all suggested as possibilities for manuring, the first being procurable from Max Augustynski and the second from Messrs. Toepke & Co., both of Guatemala. Mr. Pennock said that by the time of the next meeting he hopes to have some definite data on manures to impart.

Mr. Owen Smith stated that he had made a rough trial with flowers of sulphur, after having read that this has been used to combat damping-off in seedbeds. His experiment was quite inconclusive though he is satisfied that damping-off was less pronounced in that part on which flowers of sulphur was applied.

Minutes of Cinchona Conference 25/2/41

It was agreed that this should be tried further, application being made after germination of seed. With reference to damping-off, Mr. Pennock maintained that the ideal to work for is to avoid this disease, thus saving trouble in its combat and after-effects in the development of the plants and trees. He also said that in El Naranjo planting of seed is still being carried out at an approximate density of two grammes per square yard, taking into consideration that seed is not selected and part of that sown does not germinate. With regard to the selection of seed he said that he prefers not to select as bulk is advantageous in procuring an even distribution of seed over the area to be planted. In connection with the same question of seedbeds, Mr. Bianchi stated that he intends to sun leafmould and humus on the coffee patios with the intention of thus killing fungi which abound in this vegetable matter. Mr. Pennock agreed that this would be a most useful step to take while pointing out that the spore of fungi would not be destroyed by such sunning. Mr. Pennock said, with reference to the picking of seed, that there is a definite amount of latitude with regard to the ripeness of seed and that it can be collected at any time within a period of about two to three weeks before the pod dries and opens on the tree. If the thumbnail does not easily penetrate the capsule it may be taken that the seed is mature. Mr. Rosengarten offered to write to Dr. Krukoff and ask him for a memorandum on his methods of collection in South America. Turning to matters of grafting, it was stated that Benitez does not recommend that flowering wood be used for scions as, in his opinion, the percentage of takes is lower. Returning to the question of manuring, it was here agreed that green manuring is not as successful in practice as in theory and that the results to be achieved do not repay the trouble.

5. During the general discussion on points of interest it was decided that it is important to select suitable *Succirubra* trees from which to procure grafting stock, the important point being disease-resisting qualities and, if possible, good quinine content as the roots provide perhaps as much as one third of the bark. It was also agreed that an eye should be kept open by all interested parties with a view to training suitable human material for grafting and other of the more important works.

6. At a later meeting a decision should be taken about calling together all the boys for grafting practice, as was done in Panamá and El Naranjo last year. They can thus learn a lot from watching one another at work and see the technique to be employed.

7a. A vote of thanks to Mr. Pennock for his helpful attitude and the information he imparted was proposed and passed unanimously.

7b. A vote of thanks to Mr. Gordon Smith for his energy in getting the meeting started, and for his intelligent manner of handling it.

8. It was arranged that the next meeting should be held in El Naranjo on Wednesday, April 16th. next at 9.30 a.m. and

9. There being no other matters to discuss, the present meeting closed at 11.15 a.m.

Signatures follow:

Minutes of Cinchona Conference held in Finca "El Naranjo" on Wednesday,
April 16th, 1941.

1. The meeting opened at 1.15 p.m. with Mr. F. Rosengarten in the Chair, the following being present: Messrs. W. Pennock, L.L. Pettersen, F.W. Owen Smith, A.E. Bianchi, P.O. Davies and E.H. Lewonski.

2. The minutes of the previous meeting were read and approved.

3. Mr. Rosengarten read extracts from a letter sent to him by Mr. Bianchi in which the growth of certain plants was mentioned and suggested that some method be devised for measuring such growth to enable comparisons to be made. The erection of a stick alongside the plant on its transference to the field was not considered satisfactory as a risk is run of the stick being disturbed by the labour in the course of cleaning and other works. It was decided that the safest method would be to measure the height of the plant with a yardstick and that a start be made with the measuring when the Krukoff plants and last season's grafts are planted to the field this season.

4. Mr. Bianchi enquired whether there is any recommended treatment for wounds caused by the removal of suckers but it was accepted that from previous experience no danger need be anticipated, particularly if the suckers are rubbed off by hand while still small.

5. Mr. Rosengarten then read a letter received from Mr. Davies advising of the damage caused in Patzulín by an application of Bird Guano. He said that letters like those received from Messrs. Davies and Bianchi are just the type which should be exchanged as they impart useful information and provide material for discussion.

6. Mr. Rosengarten called to the attention of those present the importance of making seed gardens and stated that in El Naranjo and Pa namá a start is to be made with what little high content material is available. As it is not yet known what the minimum distance should be between a seed garden and the nearest cinchona planting to avoid cross-pollination, the seed garden should at least be made as far away as possible.

7. With regard to the suggestion made at the previous meeting that the grafting boys be given a practice session, grafting will begin at Panamá in the week beginning the 21st. inst. As Mr. Smith had offered that the next meeting take place at Panamá those interested can take their boys and these could stay over under supervision of Benitez. At the same time they can learn something of the preparation of grafting material, after-care of the grafts etc. It was decided after discussion that Mr. Rosengarten find out what Benitez considers to be the cardinal points to be observed in grafting and that these points be drawn up in writing for the benefit of learners. At this point Mr. Pettersen said that his experience in El Zapote is that grafts made close to the ground show big losses compared to those made higher, due to a rot forming at the union. In view of this he is grafting at Zapote at a height of nine inches from the ground. Answering a question from Mr. Owen Smith he said that in Zapote the successful grafts average about 50% over the year with 90% of takes in some cases. Following on this discussion of grafting it would seem that the best time for this work is the wet season though it might be extended into the early part of the dry season by watering. The reason for this is that in the wet season

Minutes of Cinchona Conference of April 16th. 1941

the stock shows vigorous growth while the humidity in the atmosphere does not permit the scion to dry out before the union is effected.

8. Mr. Rosengarten said that some Coban seed is in course of drying out for separation and cleaning and that he expects to be able to distribute it in about two weeks to those who are interested.

9. Mr. Pennock said that at the last meeting he had expected to have some data on manures prepared for the present conference but he had found that the results were not yet sufficiently apparent.

10. Mr. Smith said that he has been experiencing trouble at Panamá with "Gallina Ciega", both in his own seed beds and in those of Wxperimental Plantations Inc. Mr. Pennock said that he is getting a preparation but he thinks it might be rather expensive and suggested that the better course might be to reduce the amount of vegetable matter in the soil replacing it with inorganic manures. Mr. Bianchi said that in Mocá his method is to trap the June Bugs, of which the Gallina Ciega is the larva.

11. It was agreed that the next meeting be held at Finca Panamá on Tuesday, June 17th. at 9 a.m. Mr. Rosengarten said that he would not be present and relegated the Chair to Mr. Owen Smith for that meeting.

12. Mr. Smith proposed a Vote of Thanks to Experimental Plantations Inc. for the hospitality extended by them, this being passed unanimously.

13. The meeting was brought to close at 2.40 p.m.

COPIES OF TWO AGREEMENTS MADE WITH L.L. PETERSEN, April 24, 1941.

(A) Experimental Plantations Inc. (Merck) hereby advise L.L. Pettersen that they will desire one half the cuttings available as per agreement from the Cinchona Trees located in Plantation #2, Monterey, El Zapote, during 1941.

(B) L. L. Pettersen, in return for the seedlings of Krukoff Calisayaa that will be given him in May 1941 from the Merck Seedbeds at "Los Andes" Panama, will grant to Experimental Plantations Inc. one half the cuttings available (without damage to the mother tree) from all Monterey Succirubra trees located in Plantation #3, Monterey, El Zapote, that have been or will be bark-sampled in 1941, said cuttings to be available for Experimental Plantations Inc. up to December 31, 1941.

Signed: F. Rosengarten Jr.
For Experimental Plantations Inc.

L. L. Pettersen.

Finca El Naranjo,
April 30, 1941.

Dear Dr. Popenee:

I am so glad to hear from my father that you and Mrs. Popenee came over to Philadelphia!

My plans at present are to sail on May 25 for New York, and get married on June 18.

I have heard nothing definite from Mr. Perkins or Mr. Lukens as to what they expect me to do after June 18.

Incidentally, everything here is going along fine. Benitez is doing a grand job with the Krukoff seedlings, (some of which are extremely large now, up to 3 ft.) We are also busy with grafting.

I trust the enclosed letters will be of interest. I hope this was handled in a way that suits New York. In any event I did the best I knew how, thanks to the good advice you used to give me.

With best regards to you and Mrs. Popenee,

Sincerely,

Fritz.

P. S. Bon Voyage!

Finca "El Naranjo", Mayo 12, 1941

Las siguientes plantas de Cinchona estarán listas para plantarse al campo raso durante el invierno de 1941:

Mayo 16 y 19

1940 Injertos de "Los Andes", Panamá	450
African Ledger, P.I. 118797, de Almácigos en Loja ...	443
Philippine Ledger, P.I. 124381 " " "	35
African Succirubra, P.I. 133019 " " "	38
African Robusta, P.I. 133018 " " "	3
Ceylon Calisaya " " "	12
	<u>981</u>

Junio 2 a Junio 7

1940 Injertos del Almácigo en Loja	267
K-13 del Almácigo Bajo	292
K-40 " " "	446
K-28 " " "	232
K-30 " " "	54
K-35 " " "	354
K-33 " " "	112
K-45 " " "	405
K-7 " " "	16
K-24 " " "	250
K-31 " " "	477
	<u>2,905</u>

Julio 21 a Julio 26

K-13 del Almácigo Bajo	60
K-40 " " "	242
K-28 " " "	32
K-30 " " "	50
K-35 " " "	1,488
K-33 " " "	50
K-45 " " "	185
K-7 " " "	8
K-24 " " "	262
K-31 " " "	20
K-116 " " "	1,395
K-1 " " "	3,039
African Ledger, P.I. 133017 del Almácigo Bajo	27
	<u>6,858</u>

TOTAL: Mayo 16 y 19	981
Junio 2 a Junio 7	2,905
Julio 21 a Julio 26	<u>6,858</u>

TOTAL: 10,744

Jorge M. Benitez

Hay ahora disponibles los siguientes agujeros en los siguientes lugares en Naranjo:

<u>Lugar</u>	<u>Altura</u>	<u>No. de agujeros</u>
Acongagua	7,000 piés	2,010
Jardin de semillas # 2	6,500 piés	59
Chimborazo	6,000 piés	773
Chimborazito	6,000 piés	2,090
Loja	5,000 piés	600
Lojita	5,000 piés	2,006
Huasibamba	3,850 piés	82
Huasibambita	4,000 piés	3,000

TOTAL: 10,620

Además los siguientes agujeros van a prepararse en Huasibambita para Julio 1,500

SUMA TOTAL: 12,120

Como se nota en la lista adjunta de don Jorge Benitez, tendremos 10,744 plantas listas para trasplantarse al campo raso en Naranjo durante el invierno de 1941.

Se propone trasplantar estas 10,744 plantas al campo raso durante 1941 en la siguiente manera:

Mayo 16 y Mayo 19

<u>Clase</u>	<u>No.de plantas</u>	<u>a posición indicada</u>
Injertos de Panamá de '40, arriba de 10% Q.S.	21	Jardín de semillas #2
Injertos de Panamá de '40, menos de 10% Q.S.	429	100 á Chimborazo 329 á Loja
African Ledger, P.I. 118797	443	100 á Aconcagua 343 á Chimborazo
Philippine Ledger, P.I. 124381	35	Chimborazo
African Succirubra, P.I. 133019	38	Chimborazo
African Robusta, P.I. 133018	3	Chimborazo
Ceylon Calisaya	12	Chimborazo
Total:	981	(de acuerdo con la lista de don Jorge)

Junio 2 a Junio 7

<u>Clase</u>	<u>No.de plantas</u>	<u>a posición indicada</u>
Injertos de Loja de '40, arriba de 10% Q.S.	33	Jardín de semillas #2
Injertos de Loja de '40, menos de 10% Q.S.	229	Lojita
K-13	292	Aconcagua
K-40	446	Aconcagua
K-28* para el Sr. Pennock (232)		
K-30	54	Aconcagua
K-35* para el Sr. Pennock (354)		
K-33	112	Aconcagua
K-45	405	Aconcagua
K-7	16	Aconcagua
K-24	250	Lojita
K-31	477	Lojita
Total:	2,319	

* NOTA: De las 232 plantas de K-28 y 354 plantas de K-35, Total 586 plantas apuntadas por Don Jorge para Junio 2 a Junio 7, 512 van usarse por Sr. Pennock Junio 14; las 74 que quedan van plantarse Julio 21 a Julio 26.

Ensayo del Sr. Pennock - Junio 14

K-28	48	Huasibambata
K-35	80	Huasibambata
K-28	48	Lojita
K-35	80	Lojita
K-28	48	Chimborazito
K-35	80	Chimborazito
K-28	48	Aconcagua
K-35	80	Aconcagua
Total:	512	

Julio 21 a Julio 26

<u>Clase</u>	<u>No. de plantas</u>	<u>a posición indicada</u>
K-13	60	Aconcagua
K-40	242	Chimborazito
K-28 (incluyendo 40 que vienen de Junio 2 - 7)	72	Aconcagua
K-30	50	Chimborazito
K-35 (incluyendo 34 que vienen de Jun. 2-7)	1,622	82 a Huasibamba 226 a Huasibambita 922 a Loja 290 a Aconcagua
K-33	50	Chimborazito
K-45	185	Chimborazito
K-7	8	Aconcagua
K-24	262	Chimborazito
K-31	20	Chimborazito
K-116	1,395	Chimborazito
K-1	3,039	Huasibambita
African Ledger, P.I. 133017	27	Aconcagua
	<u>6,932</u>	

RESUMEN:

Mayo 16 y Mayo 19	van al campo raso	981	plantas
Junio 2 a Junio 7	" " " "	2,319	"
Junio 14 (Sr. Pennock)	" " " "	612	"
Julio 21 a Julio 26	" " " "	<u>6,932</u>	"
		10,744	plantas (de acuerdo con la lista de don Jorge)

Así, de los 2,010 agujeros en Aconcagua	2,010 se usan
de los 59 agujeros en Jardín de semillas # 2	59 se usan
de los 773 agujeros en Chimborazo	773 se usan
de los 2,090 agujeros en Chimborazito	2,090 se usan
de los 600 agujeros en Loja	329 se usan
de los 2,006 agujeros en Loja	2,006 se usan
de los 82 agujeros en Huasibamba	82 se usan
de los 4,500 agujeros en Huasibambita	<u>3,395 se usan</u>

Así, de los 12,120 agujeros disponibles en Marañón 10,744 se usan

Por consiguiente tendremos 1,376 agujeros adicionales en Marañón para 1941 (271 de Loja, 1,105 de Huasibambita). Estos agujeros pueden usarse para otras plantas suficiente grandes para irse al campo raso durante este invierno, como plantas de Washington, plantas que crezcan muy rápidamente en los Almacigos etc.

RECAPITULACION DE PLANTAS PARA IRSE AL CAMPO RASO DURANTE INVIERNO 1941
SEGUN LOCACIONES

Acconagua (2,010 agujeros)

K-28 (Sr. Pennoek)	48
K-35 (Sr. Pennoek)	80
P.I. 118797	100
K-15 (Junio 2)	292
K-40	446
K-30	54
K-13 (Julio 21)	60
K-33	112
K-7	24
P.I. 133017	37
K-45	405
K-35	290
K-28	72

Total: 2,010

Jardin de Semillas # 2 (59 agujeros)

Injertos de Panama, arriba de 10%	21
Injertos de Loja, arriba de 10%	38
Total:	59

Chimborazo (773 agujeros libres)

Injertos de Panama, menos de 10%	100
P.I. 124381	35
P.I. 133019	33
P.I. 133018	3
Ceylon Calisaya	12
P.I. 118797	343
K-40	242

Total: 773

Chimborazito (2,090 agujeros)

K-28 (Sr. Pennoek)	48
K-35 (Sr. Pennoek)	80
K-116	1,395
K-30	50
K-33	50
K-45	185
K-24	262
K-31	20

Total: 2,090

Loja (600 agujeros libres)

Injertos de Panama, menos de 10%	329
--	-----

Lojita (2,006 agujeros)

K-28 (Sr. Pennoek)	48
K-35 (Sr. Pennoek)	80
Injertos de Loja, men. 10%	229
K-24	250
K-31	477
K-35	922

Total: 2,006

Huasibamba (82 agujeros libres)

K-35	82
------------	----

Huasibambita (4,500 agujeros)

K-28 (Sr. Pennoek)	48
K-35 (Sr. Pennoek)	80
K-1	3,039
K-35	223

Total: 3,395

Finca "El Naranjo"
Mayo 13, 1941.

F.R.
F. Rosengarten Jr.

In addition to the Krukoff seedlings, we have the following plant material (apart from Succirubra stock) in the seedbeds and nurseries at Naranjo at this time:

<u>KIND</u>	<u>LOCATION</u>	<u>NO. OF PLANTS</u>	
1940 Grafts	"Loja Nursery"	267	#
African Ledger P.I. 118797	" "	443	#
Philippine Ledger P.I. 124381	" "	35	#
African Succirubra P.I. 133019	" "	38	#
African Robusta P.I. 133018	" "	3	#
Ceylon Calisaya	" "	12	#
African Ledger P.I. 133017	Lower Nursery	27	#
High-yielding Coban Grafts of May '41,	"Loja Nursery"	1,428	(attempts)
Federated Malay States Ledger Type,	Seedbeds	2,926	
H-1283	(10.7%)	4,400	
H-1133	(13.3%)	4,620	
H-1229	(12.6%)	3,300	
H-1210	(11.1%)	22,440	
Note: # to be planted out in field during 1941.	Total	39,937	

The following is interesting to note: Jorge Benitez says the "Original Ledger" seedlings of H-1283, H-1133 etc. germinated much better and are in much healthier condition than the seedlings he had seven years ago from the Ruehl Java seeds were at a corresponding stage in their development.

Our Succirubra Stock is distributed as follows:

Available stock for June 1941 at Naranjo	4,000
Available stock for June 1941 at Panamá	5,000
Available stock for September 1941 at Naranjo ..	11,000
Available stock for 1942 at Naranjo (at least)	65,000
Available stock for 1942 at Panamá	20,000

In our seedbeds at Finca Panamá we have the following:

Krukoff # 100 (not yet transplanted, to be given to L.L. Pettersen & Owen Smith.)	25,000 (est.)
Various other classes of <u>Krukoff Calisaya</u> other than K-100, transplanted in seedbeds at 2" by 2", and 3" by 3".	20,765
TOTAL	45,765

In the Nursery Area at Panamá are 3,911 Grafts attempted in May 1941 with choice material from Naranjo and the Merck Area Panamá.

Finca El Naranjo,
May 13, 1941.

F. Rosengarten Jr.

copy

Finca El Naranjo,
Chicacao, Such.
18 de mayo de 1941.

Señor Ministro de Agricultura,
Su Despacho.


Estimado Señor Ministro:

Con referencia a su apreciable oficio de fecha 11 de mayo en curso en que se sirve inquirir si estamos en situación de proporcionarle vástagos y almácigos de quina, tenemos el gusto de manifestarle que gustosamente, tratándose de Ud., hemos dispuesto darle cincuenta matas de la variedad de Sur America y también semillas de la variedad ledgeriana, cuales plantitas y semillas dejaremos dende la secretaría de Agricultura viernes de esta semana.

Desgraciadamente no estamos, de momento, en situación de darle vástagos de la variedad ledgeriana; esta planta es tan difícil de propagar que la cantidad que nosotros tenemos sembrado es insignificante en relación a las pérdidas y difíciles circunstancias de su propegación, y ha sido y es nuestro propósito, en general, esperar a que tengamos nosotros ya desarrollada la plantación en forma y en la escala que nos hemos propuesto, antes de proporcionar vástagos de esta variedad.

Aprovechamos esta oportunidad para saludar al Señor Ministro y subscribirnos con toda consideración, sus deferentes servidores,

Per Experimental Plantations Inc.


F. Rosengarten Jr.

May 23, '41

Dear Dr. Popenoe:

Well, I'm off
tomorrow for the U. S. A.

Everything
should be under control at
Naranjo. Jorge's nursery work
looks better than ever, and
Kocher is also doing a fine job
on the field areas and general
administrative work.

Enclosed are
some notes that are self-explanatory.

Mr. Likens and I
visited your house in Antigua yester-
day. Everything including Maria and
Tiburcio is thriving.

Muchas saludos to
you both,

as always,

Fritz.

(over)

P.S. If all goes well,
Moran and I plan to
return to Guatemala toward
the end of July.

Dr. P. J. ...

SUCCIRUBRA SUMMARY

(as of September 20, 1941)

<u>Present Location</u>	<u>Ready for when?</u>	<u>Estimated number of seedlings</u>	<u>TOTALS</u>
Below Seedbed 21	October, November 1941	<u>1,675</u>	1,675
Lower Nursery J	March, April 1942	2,000	
Graft Nursery	March, April 1942	<u>5,767</u>	7,767
Seedbed 24	May, 1942	15,000	
Lower Nursery H-7	May, 1942	375	
Lower Nursery H-8	May, 1942	1,391	
Lower Nursery H-9	May, 1942	1,683	
Lower Nursery J	May, 1942	2,858	
Graft Nursery	May, 1942	<u>13,000</u>	34,307
Graft Nursery	June, 1942	<u>10,000</u>	10,000
Seedbed 6	Aug., Sept. 1942	4,000	
Seedbed 7	Aug., Sept. 1942	9,450	
Los Andes, Panamá	Aug., Sept. 1942	<u>20,000</u>	33,450
Seedbed 10	Oct., Nov., 1942	10,500	
Seedbed 11	Oct., Nov., 1942	<u>9,900</u>	20,400
Seedbed 6	December, 1942	<u>12,000</u>	12,000
Seedbed 6	March, 1943	<u>8,000</u>	8,000
Estimated Total number Succirubra Seedlings available from October 1941 to March 1943.*			----- 127,599 -----

* Note: To increase this total, more Succirubra seed is being sown each month. Seed sown now may roughly be calculated to be available in 18 months as Succirubra stock ready for grafting.

Finca "El Naranjo"
September 20, 1941

F. Rosengarten Jr.

~~Rubus~~
Dr. Rose

Finca El Naranjo,
September 21, 1941.

Mr. L. L. Pettersen,
Finca El Zapote,
Escuintla.

Dear Pete:

Upon consulting with Jorge Benitez, and investigating our old files, I find that when Merck took their share of plants away from Zapote in 1939, ten classes of Helvetia grafts remained in Monterrey as your share.

I regret I am not in closer touch with 1939's activities; if I were, I surely would have written to you sooner about these grafts. But in any event, in case you do not already have these results, I submit herewith the latest quinine Sulfate results of the Mother Trees in Helvetia from which your ten classes of grafts were propagated.

<u>Mother Tree</u>	<u>Grafts Remaining in Monterrey, 1939.</u>	<u>% Q. S. mother tree.</u>	<u>% Cinch- onidine S.</u>	<u>Wt. per sq. cm. grams.</u>
H-1244	24	8.6	1.0	.11
H-1259	6	9.8	1.2	.17
H-1227	4		not yet analyzed	
H-1257	9	8.3	1.0	.15
H-1282	18		not yet analyzed	
H-1256	25	9.7	0.7	.10
H-1138	27	12.1	0.8	.12
H-1086	13	8.5	0.4	.09
H-1077	34		not yet analyzed	
H-1239	25	17.8	0.8	.14

As I am uncertain as to whether or not you are aware of these results, I call them to your attention in a friendly and cooperative spirit; with best regards as always,

Sincerely yours,

F. Rose
F. Rosengarten Jr.

Dr. Popenoe.

Finca El Naranjo,
September 21, 1941.

Mr. Percy O. Davies,
Finca Helvetia,
San Sebastián, Reu.

Dear Don Percy:

In the first place, I do want to thank you and Mrs. Davies, on behalf of my wife and myself, for your very kind hospitality the other day,

On Thursday September 25, I would like to come over to Helvetia during the after-noon to show to Mr. Zapata, a representative of the Colombian Government, the Ledger trees at El Nil.

Mr. Zapata is in Guatemala at this time to get an idea as to what methods of Cinchona cultivation we are using. He comes recommended by Dr. Popenoe, and more or less as a guest of the United Fruit Co.

My wife will accompany Mr. Zapata and me, and if it will not be inconvenient, we will stay over until early Friday.

Mr. Zapata, who has already studied our efforts at Naranjo, would like very much to see the trees at El Nil. He comes to us, recommended diplomatically, so to speak, and seems to be a very decent chap anyway, so I am sure you need have no qualms about having him see the Cinchona at Helvetia.

Hoping this plan meets with your approval, and with best regards,

Sincerely yours,

F. O. J.
F. Rosengarten Jr.

P. S. I would appreciate a wire at Naranjo, letting me know if Thursday will be convenient for you.

Dr. R. W. Hempstead

Finca El Naranjo,
September 22, 1941.

RECORD OF CINCHONA MATERIAL DISTRIBUTED IN GUATEMALA OUTSIDE OF
NARANJO.

For Mocá, Helvetia, Patzulín, Zapote, Panamá, Samac and Porvenir, see Inventory of January, 1941.

As noted in the above inventory, Krukoff seedlings also exist from seeds given during 1940 to:

- (1) Don Mariano Pacheco (many seeds).
- (2) Dr. R. Aguilar (United Fruit Co.) (a few grams).
- (3) Dr. Ernesto Marroquin G. (Sanidad Publica) (few grams).
- (4) Finca Castaños. (a few grams).

The material mentioned in the above inventory as having existed at Patziapá, has since died out.

The seeds given to Mr. Hector Cofiño and Mr. Eduardo Diaz have also met with little or no success, according to reports.

Since the January 1941 Inventory, Cinchona material from Naranjo has been planted in the following locations:

(1) Santa Margarita Marbal, zone of Barillas. In February 1941, 950 Krukoff seedlings and 50 African Ledgers were taken here and planted. In addition, about 75 grams of seed of Krukoff Calisaya, and 75 grams of Original Ledger seed from Helvetia were sown. The latest reports from this hacienda indicate that all of this material is doing well.

(2) Finca Velasquez. 500 Krukoff seedlings from Naranjo were planted out here in September, 1941, at an altitude of 910 ft.

(3) Finca Helvetia. In September, 1941, 250 Krukoff seedlings from Naranjo were planted out here at an altitude of 3,000 ft.

(4) Seeds of the Original Ledger trees at Helvetia and Samac have been given to the following, since January 1941:

- (a) Mr. C. Whitehead of finca Saint Joan, Patzulín. In August 1941.
- (b) Mr. W. E. Dieseldorff of Cobán. In September 1941.
- (c) Mr. Alan Hempstead of finca Mocca, Alta Verapaz. In September 1941.
- (d) Mr. George Koester of finca Seamay, Senahú, Alta Verapaz. " " "

In addition to the above, and not mentioned in the Inventory of January, 1941, the following are to be found:

- (a) At Chicoyou, Cobán. (Mrs. R. W. Hempstead). 32 broad-leaf grafts.
- (b) At Los Alpes, La Tinta, Alta Verapaz. (Mrs. R. W. Hempstead).
2 large "Cobán Ledgers".
- (c) Finca Sachamach, Cobán. 2 old hybrids known as the "Original Cobán Ledgers". Also many sprouts from old hybrid trees cut back years ago.

FRJ
F. R. Jr.

2 de octubre de 1941.

Estimado don George:

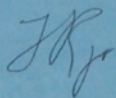
En su artículo sobre los semilleros y almácigos de la quina, tenga la bondad de asumir que Ud. está dando instrucciones a una persona que no sabe nada respecto de la quina. Vamos a asumir que estamos dándole semillas a este señor Fulano, y queremos entregarle al mismo tiempo instrucciones para ayudarle con sus esfuerzos en los semilleros y almácigos.

Por esto, entre otros puntos que sin duda, le gustaría incluir en su artículo, tenga la bondad de contestar las siguientes preguntas, más o menos típicas:

- (1) Cómo se construye un semillero?
 - A. El tamaño.
 - B. La tierra y arena que deben usarse, y como se meten en el tablón.
 - C. La mezcla de arena y tierra.
 - D. El techo.
 - E. Los lados del tablón.
 - F. Drenaje entre tablonés.
- (2) Cómo se siembra la semilla?
 - A. Riego de la tierra?
 - B. 2 gramos por metro cuadrado.
 - C. El arte de sembrar la semilla.
 - D. Riego y tratamiento de las semillas después de sembrarlas. El efecto de echar tierra en cima de las semillas después de sembrarlas.
- (3) Cuidado en los semilleros.
 - A. Riego y luz antes de la germinación.
 - B. Cuando viene la germinación?
 - C. Riego y luz después de la germinación.
- (4) Cuando deben las plantitas trasplantarse al almácigo, y cómo?
 - A. Cómo se construye el almácigo?
 - B. La tierra en el almácigo.
 - C. Cómo se trasplantan las plantas? A que distancia al principio?
 - D. El cuidado en el almácigo; riego, luz etc.
- (5) Como las plantas deben endurecerse.
- (6) ~~Varios~~ métodos y finezas que pueden usarse en el almácigo para adelantar el crecimiento etc.
- (7) Cuando pueden las plantas trasplantarse al campo raso?
- (8) Enfermedades peligrosas del almácigo, y del semillero, y como se combaten.

- (9) Consejo general al señor que va a emprender el cultivo de la quina.
- (10) Por fin y al cabo, (y de la máxima importancia), otras ideas que tiene Ud. sobre los semilleros y los almácigos, que no se encuentran en estas preguntas. Por ejemplo, dibujos, consejo sobre las herramientas que deben usarse en los trabajos del semillero y del almácigo etc.

Gracias!

A handwritten signature in dark ink, appearing to be 'J.R.' or similar, written in a cursive style.

Dr. Poppend.

Finca El Naranjo,
2 de octubre de 1941.

Sr. Don Julio Fernandez,
Los Andes, Panamá.

Estimado don Julio:

Para continuar nuestra conversación de hoy,
tenga la bondad de dar preferencia y cuidado especial a las
siguientes clases de Krukoff, al trasplantarlas:

249	113	229
108	111	228
236	139	231
152	107	301
148	101	225
226	119	211
240	149	203
238	215	201
246	230	133
242	252	501
125	204	502
103	227	128
245	202	102
244	515	510
45	218	217
30	112	109
207	212	216
237	209	141
255	106	222
220	224	503
126	210	200
507	208	
151	254	
104	110	
241	244	
143	205	
233	213	
221	302	

atto. y S. S., Sin otro particular, me quedo de Ud. su

F. Rosengarten Jr.

c. c. Don Jorge Benitez.

Finca El Naranjo,
October 10, 1941.

Dear Dr. Popenoe:

In Mr. Lukens' letter to me of October 2, 1941, he states: "The Company has recently become interested in the possibility of raising Ryania. It is believed that there is not enough of the wild plant and that in order to obtain sufficient supplies, it will probably be necessary to cultivate. This is a lowland plant requiring a great deal of rainfall and we are of the opinion that the climate and soils of the Barrios area may be satisfactory. There may be a need of some 50 to 100 acres. Abandoned banana lands may prove satisfactory. Without commitment of any kind, will you please investigate the possibility of obtaining this quantity of land in the area in question and also get some idea of the price. You may have a chance to see Dr. Popenoe before we arrive, who can perhaps give you some ideas on the subject. We will discuss the problem further when I am in Guatemala."

I enclose a letter from Dr. Krukoff on this subject which is self-explanatory.

I have not as yet heard from you, but still have hopes you may be out here Sunday. In case you don't come, however, I will come to Antigua on Monday, arriving at your house about 5 P. M. I would then like to discuss certain points with you we have not yet had time to go over, including the Ryania.

I realize you will be busy preparing for Dr. Fairchild, so I will be on my way before dinner. I expect to visit Zapote on Tuesday.

With best regards to you and Mrs. Popenoe,

Sincerely,

Fritz.

November 28, 1941

Mr. Frederic Rosengarten, Jr.
Finca El Naranjo
Chicacao, Such.
Guatemala, C. A.

Dear Mr. Rosengarten:

I got together with the research group Wednesday, and discussed Erythrina. The program as outlined in the notes made at Naranjo on October 29, 1941 constitute a satisfactory basis for proceeding with the Erythrina.

I list below the known high yielders:

<u>Sample Designation</u>	<u>Altitude</u>	<u>Size of Tree</u>	<u>% Yield Crude Erythroidine Base</u>
O. Smith 9635/1 P ERY 1	2700	Large	2.14
" 9638/4 P ERY 4	3150	Large	1.94
" 9639/5 P ERY 5	3300	Large	2.25
" 9642/8 P ERY 8	2000	Large	1.78
" 9643/9 P ERY 9	2700	Large	2.15
J. Smith 9650/Moca 1	2600	Large tree, 12" d., cut back	1.60

It was agreed that we would get cuttings from these trees and place them in nursery position at Naranjo.

The program covering additional samples is satisfactory as listed in the notes, and if possible, obtain approximately 200 grams of each sample.

There are quite a few more samples here in Rahway that have not been assayed. As soon as we get results on these, and provided we find some high yielders, I will let you know. We are arbitrarily taking anything above 1-1/2% as being relatively high.

I wrote you recently about the corrugated paper coming down by regular freight. Our Traffic Department advised us this morning that this is going forward by air express.

Yours very truly,

R. P. Lukens

RPL:CS

copy by regular mail to
Apartado postal numero 284
Guatemala City

cc Mr. Perkins
Dr. Popenoe

March 9, 1942

Mr. Frederic Rosengarten, Jr.
Finca El Naranjo
Chicacao, Such.
Guatemala, C. A.

Dear Mr. Rosengarten:

I received back this morning my letter of February 17, 1942 covering the exportation of technical data. I have quite an accumulation of material to be sent to you, which is being held up for export permits. I certainly hope that it will not take much longer to get our export permit.

I talked to Mr. Perkins Friday about the Costa Rican property and the program as given in your letter of March 2, 1942 agrees with this understanding, and you are authorized to proceed as outlined. It would naturally be best if Experimental Plantations can receive a license to do business in Costa Rica in time to take title to the property in the name of Experimental Plantations, Inc. Failing this, you may want to follow the same procedure that we did with Naranjo, and would suggest that you talk to Mr. Sanchez about this. You will remember that we had Mr. Armstrong take title and in order to protect our interests, I took a mortgage for the full amount until such a time as the property could be turned over to Experimental Plantations, Inc. In the case of the Costa Rican property, Mr. Gongora would take title and you personally would take a mortgage. This is merely a suggestion to be talked over with Mr. Sanchez, and probably will only be necessary should there be a delay in registering Experimental Plantations, Inc. in Costa Rica. Incidentally have you ever had any indication of what the attitude of the Guatemalan Government might be on the exportation of plant material from Guatemala?

Under date of January 3, 1942 I wrote to you about the Owen Smith contract. My files do not disclose that this matter has ever been brought to a head.

I received the inventory of all plantings and will pass the copy along to Mr. Perkins and Dr. Krukoff for notation.

In your letter of February 12, 1942 you mentioned a shipment of *Succirubra*, Krukoff and Ledger

Mr. Frederic Rosengarten, Jr.

-2-

March 9, 1942

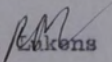
Seedlings. This material was received and the assays are partly completed. We have not been able to find any commercial quantity of Quinine.

Attached to your letter of February 12, 1942 was a scheme for the harvesting of large quantities of *Succirubra* within two years. This will be filed for future reference, until we know more about the Quinine content of the plants. At present it does not look promising.

I note on your inventory that there were about 1,000,000 seedlings of wild Costa Rican stock. I doubt if we will want to put very many of these in the nursery position in the light of the fact that they apparently contain little Quinine. My opinion would be a maximum of 5% or 10%.

I believe you raised the question with Mr. Perkins on his recent visit about plants of *Erythrina*. This matter has been reviewed and the program as outlined in your note of October 29, 1941 still stands.

Very truly yours,

R. P.  Cukens

RPL:CS

copy by regular mail to Apartado postal numero 284
Guatemala City, Guatemala, C. A.

cc Mr. Perkins
Dr. Popenoe ✓
Dr. Krukoff ✓

Antigua, 18 March 1942

Sr don Federico Rosengarten h.,
Finca El Naranjo, Chicacao.

Dear Fritz:

About Amado Pelén: When I was at Naranjo last Sunday he talked with me at length about his work and plans. He doesn't quite know what he wants to do, but feels that office work is more in his line than agriculture. He wants to "study" but doesn't know just what. He isn't kicking about the work he has been doing at the Finca but seems to feel that it is not leading him anywhere. Nevertheless he would like to keep his present job if possible, until something else turns up.

I had hoped the boy might take to agriculture, but it doesn't seem that this is going to be the case. If you want to keep him on, for what help he can be to you in any line, do so; but don't feel any obligation to keep him on my account. If you do not think he has been of any use to you, nor that he will be of any use in the future, let him go and send me a bill for what you have paid him up to date. But if you feel you are getting service out of him, and want him further, keep him and if I can later find anything for him which is more in line with his ambitions I will do so.

He seems to be very ambitious but without ornamentation. I believe the boy is intelligent and not lazy, but I think he has become somewhat unsettled by hobnobbing too much with the gringo tourists who have put rather impossible ideas in his head. I appreciate your cooperation in having given him this opportunity. Maybe we will yet find a good place for him; I always like to give these boys a chance, and once in a while you hit a good one like Rogelio. We'll simply have to write off the misfits.

Ever yours

Antigua, Guatemala, 21 March 1942

Mr Frederic Rosengarten Jr.,
Finca El Naranjo, Chicacao.

Dear Fritz:

The more I think it over, the more I am inclined to suspect that one cause of poor results in grafting has been the use of scions somewhat too long in proportion to their diameter. Perhaps too long without regard to diameter. This feeling has come about as a result of the experiment Benitez and I made at Naranjo in late December with short scions - an experiment suggested by the fact that some of the long scions used in the past have dried out and failed to grow, even after having united with the stock.

I have looked up this point in some of the publications we have available. Sands says the scion as prepared for insertion is about 4-1/2 ins. long, and consists of one internode and a half; the diagonal cut at the base is 2-1/2 ins. long, which would leave not more than 2 ins. of the scion exposed. Stoffels does not state the length of the scion but his illustrations show scions much shorter than we have customarily been using in the past. P.J. Wester, in whose skill as a propagator I had great confidence, says the scion used in Java is about 7.5 cm (3 ins.) long.

Following Krukoff's policy of placing blind trust in nobody - a mighty sound policy in the long run - I suggest we be a bit skeptical regarding Sands' figure for the time being at least, and lean towards a shorter scion than we have been using in the past. Especially in those cases where the scion is rather slender.

I do not mean that we should make any radical change without adequate experimentation on which to base it; I mean simply that I believe this point is worth keeping in mind and watching carefully. I suggest you talk it over with Benitez and make sure he is thinking about it.

Sincerely yours,

cc Mr Perkins
Mr Lukens

CABLE ADDRESS
ROFRED
PHILADELPHIA, PENNSYLVANIA

FREDERIC ROSENGARTEN, JR.
7700 ST. MARTIN'S LANE
CHESTNUT HILL
PHILADELPHIA, PA. 19118

215 CH 7-4138

COPY

February 14, 1970

Dear Dr. Popance,
Thanks for your
kind letter about the book,
Best wishes
Fred

Dr. R. Armour, Director
Escuela Agricola Panamericana
Apartado 93, Tegucigalpa
Honduras

Dear Dr. Armour:

A few days ago, at the suggestion of Dr. B. A. Krukoff, I mailed you under separate cover with my compliments a copy of The Book of Spices. I hope that this book may be useful to your students in your school library in Honduras.

At the present time we are experimenting with growing Macadamia on the Pacific Coast of Guatemala. In this connection I have a few questions about Macadamia cultivation and hope that you might be able to give me some information about your experiments with this crop at your school grounds in Honduras.

There is very little scion material available for grafting in Guatemala of the various selected clones of Macadamia such as numbers 246, 333 and 508.

Do you have these clones in Honduras? If so, more or less how old are your grafted trees?

Do you have any records of annual production by clone of these trees?

Do you have any disease problems in the Macadamia in Honduras?

As far as you know are the nuts produced of a satisfactory commercial quality?

What is your elevation, rainfall and latitude at the Escuela Agricola Panamericana in Honduras?

Would it be possible for me to make arrangements with you to purchase from your school some scion material from selected grafted Macadamia clones for shipment via air cargo from Honduras to Guatemala City?

FREDERIC ROSENGARTEN, JR.
7700 ST. MARTIN'S LANE
CHESTNUT HILL
PHILADELPHIA, PA. 19118
—
215 CH 7-4138

Dr. R. Armour, Director

-2-

February 14, 1970

I hope that you will excuse me for bombarding you with these questions about Macadamia but we know very little about this crop which some day may be important in Guatemala, and we are doing our best to develop its culture at this time.

Both Dr. Krukoff and Dr. Wilson Popence are old friends of mine. At the present time I am president of the Guatemalan corporation Monte De Oro, S.A. a company that for the most part dedicates itself to the production and export of cardamom.

I would certainly appreciate it if at your convenience you could write me at 7700 St. Martin's Lane, Philadelphia, Pennsylvania, 19118, U.S.A. in reply to my questions about Macadamia.

Wishing you the best of success with your school which is playing such an important part in the future of agricultural development in Central America, and with kindest regards,

Sincerely yours,

F. R. Jr.
Frederic Rosengarten, Jr.
(author of The Book of Spices)

FR, JR/jkb

cc: Dr. B. A. Krukoff
Dr. Wilson Popence ✓

New address: 800 Kimberton Road
Apt. D-1
Phoenixville, Pa. 19460
(effective June 8, 1970)

May 29, 1970

Dear Wilson and "Cousin" Liesel:

Thank you very much for your kind letters of May 21st. As Marty already wrote, I work now for SCM Corporation. Their Smith-Corona typewriters, calculating and copying machines, as well as their Glidden paints are probably well known in Central America. They hired me to work on electrosensitive copy papers even though I had no previous experience in that field. I welcome this opportunity since I feel that it keeps my mind young. Phoenixville is in a nice location only 4 miles from the well known Valley Forge State Park. Since American industry is reluctant to hire people above 40, and since there are many unemployed chemists, I consider myself lucky.

Wilson, thank you very much for sponsoring me for membership in the Explorers Club. Since I doubt that anyone among my friends is a member, could I ask you to select a co-sponsor? So far as bibliographical data are concerned, this is what American Men of Science says:

F.R., research chemist, B. Würzburg, Germany, July 4, 1911; s. Karl and Claire (Buschhoff) R.; student U. Würzburg, 1930-33; Ph.D., U. Bern 1935; postdoct. U. Geneva 1935-36; M. Marty Zellweger, March 13, 1938; children Esther, Marian. Chem eng. RCA, Camden, N.J. 1942-46; research dir. Nat. Plastics, Knoxville, Tenn., 1946-49; sr. Chemist, Nashua Corp. (N.H.), 1949-1954; project leader IIT Research Inst. 1954-56; dir. product development, Watertown, N.Y. 1956-68; sr. associate, Riegel Paper Corp., Milford, N.J. 1968-70; sr. chemist, SCM Corp., Phoenixville, Pa. 1970-. Member Am.Chem.Soc., Am.Inst.Chemists, Sigma Xi. Holder of U.S. patents.

So far my exploring accomplishments are concerned, I could ~~xxx~~ cite hiking in such places as High Tatra in Czechoslovakia and Poland, in Daitseuzan National Park in Hokaido, Japan, along the banks of the Amazon in Colombia and Brazil, and most recently, on Agua in Guatemala (let it remain our secret that I did not quite make it to the summit!).

Let me conclude this lengthy letter by wishing you a departure as scheduled and Bon Voyage on your transatlantic journey.

Sincerely yours,

FRL

800 Kimberton Road, Apt. D-1,
Phoenixville, Pa. 19460
November 7, 1970

Dear "Cousins":

Thank you very much for your friendly letter of October 28th and for the application blank for membership in the Explorers Club. I have just resigned from the New York Academy of Science and from the Sierra Club, and plan to resign from the American Institute of Chemists - all this helps to pay the dues of the Explorers Club which is more in tune of my interests than the organizations from which I resigned.

Two weeks from today I will land at Kloten Airport. A firm in Kanton wadt has asked me to help them starting production of chart paper for electrocardiographs, and I will spend a week there, returning to Phoenixville a week later, November 29th. This will give me the opportunity of visiting in-laws on the weekends before and after, but these visits will be matters of hours. It is not even sure whether I can include Au, St. Gallen in the itinerary because of the travel time involved. Marty will not come with me because of the shortness of the trip, and also because this trip is much more costly than the transatlantic charter flights which are now available, but which usually take three weeks.

Thank you once again for sponsoring me for membership in the Explorers Club and for your trouble in contacting a cosponsor. I am sure that this membership will stimulate future travel plans, which, hopefully, will be extensive after July 1976 when I reach mandatory retirement.

Marty asks me to convey to both of you her warmest regards!

Sincerely yours,

Phil [Rosengarten]

CABLE ADDRESS
ROFRED
PHILADELPHIA, PENNSYLVANIA

FREDERIC ROSENGARTEN, JR.
7700 ST. MARTIN'S LANE
PHILADELPHIA, PA. 19118

215 CH 7-4138

November 28, 1970

Dear Dr. Popenoe:

I appreciate very much your thoughtful letter of November 2, with reference to La Hacienda, and the possible review of "The Book of Spices."

Likewise thanks for sending me your interesting and well-presented article on "The Value of Systematic Pomology in Tropical Fruit Culture."

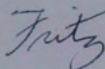
In cooperation with C. Brewer & Co., Ltd. of Honolulu, Hawaii, we (Monte de Oro, S.A.) are now starting to plant Macadamia nuts on a commercial basis on the West Coast of Guatemala. The first field planting of about 8 cabs. will probably be made at approx. 2,100 ft. of elevation -- between San Rafael Panan and Guatalón -- near that rocky road we knew so well years ago, at a property called "El Carmen" that we purchased recently.

Sometime, I would certainly like to show you what we are trying to do. Our old friend, Jorge Benitez, has been very helpful in our Macadamia grafting program, which is just getting started. The grafting will be carried out at nurseries at "Patzulin" and "Monte de Oro"; and then 12 to 15 months later the grafted plants will be transported by truck to the field planting areas at "El Carmen".

The selected scion material for grafting will have to be brought in from Hawaii by Air Cargo, every two weeks. So there is a lot of work ahead of us. Also 7 years to wait before the first commercial harvest. But, si Dios quiere, this Macadamia project may be worthwhile in the long run.

Merry Christmas and best wishes,

tu afmo. amigo,



CABLE ADDRESS
ROFRED
PHILADELPHIA, PENNSYLVANIA

FREDERIC ROSENGARTEN, JR.
7700 ST. MARTIN'S LANE
CHESTNUT HILL
PHILADELPHIA, PA. 19118

215 CH 7-4138

May 14, 1971

Dear Dr. Popenoe:

The Reference Services Division of the American Library Association has selected The Book of Spices as one of 8 outstanding reference books in the field of Sciences, published during 1970 (including late 1969).

See pages 1328 and 1329 of the LIBRARY JOURNAL of April 15, 1971, enclosed herewith.

I thought that you might be interested in the enclosed data.

Best wishes,

Fritz



LIBRARY JOURNAL

APRIL 15, 1971 / VOL. 96, NO. 8

Reference Books Of 1970

by GARY R. PURCELL

See pages 1328, 1329

A list of last year's outstanding reference books, prepared especially for LJ and recommended by a committee of the Reference Services Division of ALA

THIS YEAR there was a noticeable decrease in the number of reference books which were eligible under committee policies to be considered for this list. This was due in part to what members of the committee judged to be a change in emphasis in reference book publishing. This change is reflected in the fact that many of the newly published works were new editions of time-tested standard items, or reprints of older publications long out of print. Although there has been a trend in this direction for some time, this year it seemed to have a material effect on this list in that fewer titles than usual were eligible for inclusion.

The responsibility which rests with this committee is to compile a list of current reference books of high quality from among those published during the year (added to this are important titles published too late in the previous year to have been examined by committee members). The items selected should be appropriate for reference collections in small and medium sized public and academic libraries. Some reference works, although of high quality, were judged to be too specialized for these libraries and thus were not selected. All titles on the list have been personally examined by one or more members of the committee.

Each member of the committee has one or more assigned subject areas for which he or she is responsible. As in the past, this year's committee members were assisted in their surveillance of new reference book publishing by colleagues in their own or neighboring libraries.

The members of the committee who

participated in the preparation of this year's list are: Dr. Paul H. Spence, librarian, College of General Studies, University of Alabama, Birmingham; Larry Bone, assistant director for Public Services, Memphis Public Library; Roberta Cheney, director, Cass County Public Library, Cassopolis, Michigan; Mary Jean Duran, assistant reference librarian, University of Northern Colorado, Greeley; William Brace, associate professor, Graduate School of Library Science, Rosary College, River Forest, Illinois; Dr. Laurel Grotzinger, professor, School of Librarianship, Western Michigan University, Kalamazoo; and Gary R. Purcell, instructor, School of Library Science, Case Western Reserve University, Chairman.

The titles on this list will be displayed at the Reference Services Division booth at the Dallas Conference of the American Library Association, June 21-25. After the convention they will be available for loan to any interested group to exhibit at regional, state, and local meetings. The only cost of this service is payment of transportation charges. For further information write to Executive Secretary, Reference Services Division, American Library Association, 50 East Huron Street, Chicago, Ill., 60611.



Gary R. Purcell, chairman of the RSD LJ List Committee, is an instructor at the School of Library Science at Case Western Reserve University

TRIPP, Edward. *Crowell's Handbook of Classical Mythology*. 631p. Crowell. \$10
Encyclopedic articles dealing with the characters and events of Greek and Roman mythology. The accounts, drawn almost exclusively from the original sources—plays, epic poems, histories, travel writings—have references to these sources. In addition there are genealogical charts of mythological royalty and maps of the classical world. There is also a pronouncing index.

TRIPP, Rhoda T., ed. *International Thesaurus of Quotations*. 1088p. Crowell. \$8.95; thumb-indexed, \$10
Arrangement of 16,000 quotations under key concepts with references from author, source, and key word indexes. One-third of the quotations are from the 20th Century and the rest from all countries and time periods. Few quotations are over 50 words, and full citations are noted for the original sources when they are known.

WALL, C. Edward & Edward Przebienda, comps. *Words and Phrases Index*. Vol. 1. 390p. Pierian Pr. 1969. \$17.50
Intended to supplement the *OED, Dictionary of American English*, and other major English language dictionaries. It is a guide to

new words, new meanings of existing words, and newly coined compounds. More than 61,000 citations to sources of information about words are to be found here. Citations to passages where the words are used in context are to a selected group of reference sources found in most libraries. Although two additional volumes are planned, this volume covers the complete alphabet.

WATSON, George, ed. *The New Cambridge Bibliography of English Literature, Vol. 3: 1800-1900*. 1,948 cols., 8p. Cambridge Univ. Pr. 1969. \$28.50

The first completed volume in the planned revision of a bibliography produced in the forties. This volume deals with the century of literature which the editors believe has been most transformed by recent studies. The scope of the bibliography continues to cover works by authors from the period as well as "works about," in both primary and secondary materials.

Religion

BRANDON, S. G. F., gen. ed. *A Dictionary of Comparative Religion*. 704p. Scribners. \$17.50

Concise and authoritative articles which deal with a variety of aspects of the world's reli-

gions from prehistoric times to the present. One can find information on the religion of the Bushmen, the Hittites, and the Incas as well as on topics such as ancestor worship and existentialism. Articles are well written, and most are supplemented with a brief bibliography. There is a list of terms which relate to each major religion as well as a general index.

THE CAMBRIDGE History of the Bible. Vol. 1: From the Beginnings to Jerome. ed. by P. R. Ackroyd & C. F. Evans. 648p. 1970. \$14.50; Vol. 2: *The West from the Fathers to the Reformation.* ed. by G. W. H. Lampe. 565p. 1969. \$12.50. Cambridge Univ. Pr.

The final two volumes of the Cambridge history. Articles are contributed by prominent scholars and represent current Biblical scholarship and thought. Volume One covers the early history of the Bible, noting the role of the Bible in the early church. Volume Two traces the influence of the scriptures on European culture up to the time of Erasmus. Volume Three in the set was published in 1963.

GEHMAN, Henry Snyder, ed. *The New Westminster Dictionary of the Bible*. 1027p. Westminster Pr. \$10.95

Substantially revised and enlarged from the 1944 edition, this publication incorporates the historical and textual criticism as well as archaeological discoveries of the past quarter century. Maps and illustrations supplement the carefully written text. Entries cover the events, places, persons, and fauna and flora of Biblical times.

Sciences

BORROR, Donald J. & Richard E. White.

A Field Guide to the Insects of America North of Mexico. 404p. Houghton. \$5.95
A valuable reference handbook intended for general use. Five introductory chapters deal with collecting and preserving insects, study of living insects, structure, growth and development, and classification of insects. The bulk of the text consists of systematic coverage of 579 insect families. Attention is given to the characteristics which lead to quick identification. Text is profusely illustrated by line and shaded drawings as well as color delineations.

CHINERY, Michael. *A Science Dictionary of the Animal World: an Illustrated Demonstration of Terms Used in Animal Biology*. 288p. Watts. 1969. \$4.95

CHINERY, Michael. *A Science Dictionary of the Plant World: an Illustrated Demonstration of Terms Used in Plant Biology*. 264p. Watts. 1969. \$4.95

Two compact presentations which treat the zoological and botanical worlds. Definitions are clearly written and well illustrated with line drawings and over 120 pages of color plates in each volume. Simple A-Z organization with numerous "see also" references make information easily accessible. Valuable for high school and public libraries.

COCHRAN, Doris M. & Coleman J. Gojn. *The New Field Book of Reptiles and Amphibians*. 359p. Putnam. 1970. \$5.95

A concise handbook which provides a quick reference for the student or amateur herpetologist and serves as a complement to Siebens' *A Field Guide to Western Reptiles and Amphibians* (1966). Arranged by six major groups (salamanders, frogs and toads, turtles, crocodilians, lizards, and snakes) found



One of the many full-page illustrations which appear in full color in "The Oxford Book of Food Plants" by S. G. Harrison (Oxford Univ. Press). This one shows some of the varieties of edible mushrooms and truffles



A curious one from the sumptuous "Book of Spices" by Frederic Rosengarten (Macrae Smith): he's a medieval doctor warding off the plague by means of a breathing filter containing spices

in all 50 states, the text is easily understood and supplemented with 96 full-color and 100 black and white photographs. Glossaries in each category give recent nomenclature.

DORST, Jean. *A Field Guide to the Larger Mammals of Africa.* 287p. Houghton. \$8.50. The only currently available reference oriented tool which covers mammals of the entire African continent. Provides a "reasonably complete" guide to the identification of game, large carnivores, primates, and some of the more common smaller mammals. Forty-four color plates supplement the text which, in typical guide fashion, describes only those characteristics discernible in field settings. There are distribution maps for each species, a selected bibliography, and a general index.

HARRISON, S. G. & others. *The Oxford Book of Food Plants.* 206p. Oxford Univ. Pr. \$11

An attractive and original contribution to the reference literature which describes some 420 varieties of food and/or condiment-producing plants. Arranged in categories such as cereal crops, beverage crops, nuts, legumes, fruits, spices, etc., the text indicates origin, geographical distribution, and botany of the plant as well as the nutritional value and the parts used for food. Although somewhat weighted in favor of those plants located in the British Isles, the nature of the topic and its present importance gives this volume a special value. The entire book is marked by excellent color illustrations, and the brief glossary of botanical terms is also illustrated with line drawings.

ROGERS, Harold A. *Funk and Wagnalls Dictionary of Data Processing Terms.* 151p. F. & W. \$7.95

An easy to use and up-to-date dictionary which is intended largely for the novice in the field of data processing. Entries range from elementary equipment terminology to more sophisticated conceptual usage. The coverage is brief and includes such necessary topics as hardware, programming, software, logic, and Boolean algebra. Auxiliary fields (e.g. data communications) are given some coverage. The definitions are readable and reasonably precise with selected cross references.

ROSENGARTEN, Frederic, Jr. *The Book of Spices* 489p. dist. by Macrae Smith for Livingston. 1969. \$20

Beautifully illustrated in black and white and color, this comprehensive study of spices has information on their history, native habitat, cultivation, and preparation for market. The volume begins with an essay on the background of spices and follows with an alphabetical breakdown ranging from "allspice" through "vanilla." Entries often reproduce recipes as well as descriptive details about each spice. Several maps supplement the history. Appendixes include a bibliography and brief glossary.

Social Sciences

GOLDENSON, Robert M. *The Encyclopedia of Human Behavior, Psychology, Psychiatry and Mental Health.* 2 vols. Doubleday. \$19.95

Over 1000 terms are clearly defined and explained for the layman and student. Articles are concerned with various aspects of mental health and human behavior, including psychiatric disorders, and drug abuse. A number of articles have case histories appended. It is illustrated and has a good general index.

SEIDE, Katharine, comp. *A Dictionary of Arbitration and Its Terms: Labor, Commercial, International; a Concise Encyclopedia of Peaceful Dispute Settlement.* 334p. pub. for the Eastman Library of the American Arbitration Association by Oceana. \$15

Suitable for use by the layman, student or specialist, this work is concerned with the terminology and concepts of formal arbitration. Entries are alphabetically arranged, and many include references to statutes or court cases which relate to the topic of the article.

STRAUS, Murray A. *Family Measurement Techniques: Abstracts of Published Instruments, 1935-1965.* 316p. Univ. of Minnesota Pr. 1969. \$13.50

Provides 319 abstracts of attitude and value tests, rating scales, performance tests, and observation techniques developed over the last 30 years to measure family behavior. Each abstract indicates such information as variables measured, evidence of validity, sampling method, and availability. Abstracts are arranged alphabetically and indexed by test title, author, and subject.

Sports and Hobbies

THE BASEBALL Encyclopedia: the Complete and Official Record of Major League Baseball. 2337p. Macmillan. \$25

A statistical record of every aspect of this popular sport. It begins with a historical summary of the game and progresses through a compilation of the season by season and lifetime record of every man who ever played major league baseball. An important feature is a list of teams and their players in a year-by-year order of finish. There is also a complete register of players and managers, and a definitive record of the World Series and All-Star games. Three

appendixes list sources of information, decisions of the special baseball records committee, and major changes in playing and scoring rules.

HOLLANDER, Zander & Hal Bock, eds.

The Complete Encyclopedia of Ice Hockey. 623p. Prentice. \$14.95

This encyclopedia traces the heroes, teams, great moments, and records of the National Hockey League since its founding more than a half century ago in 1917. One chapter is devoted to the dramatic stories of hockey's most memorable moments; another covers the members of the Hockey Hall of Fame. Also included are all-time individual and team records, trophy winners, and a year by year history of the All-Star game.

HOLLANDER, Zander, ed. *The Modern Encyclopedia of Basketball.* 468p. Four Winds. 1969. \$12.95

Comprehensive record of one of the world's most popular sports, with emphasis on the modern era. It treats the history of the game, sketches of the great college and professional players and coaches, the story of the post scandals of the 1950's, and provides statistics on individual, team, and league play. There is also a unique all-time NBA register which lists season and career records for each of the more than 900 players in National Basketball Association history.

OBOJSKI, Robert & Burton Hobson. *Illustrated Encyclopedia of World Coins.* 512p. Doubleday. \$12.95

Hundreds of entries are to be found in this thorough treatment of coins which originated in every country and region of the world, from ancient to modern times. The authors carefully point out unusual features about important coins and disclose expert pointers for identifying counterfeit coins. Full of practical advice for the beginning coin collector.

SUNNUCKS, Anne, comp. *The Encyclopedia of Chess.* 587p. St. Martin's. \$10

An authoritative and attractive publication which touches on virtually all aspects of the game of chess. It ranges from the ancient beginnings of the game to current attempts which relate the computer to chess. One can find biographies of notable persons associated with chess as well as the results of major tournaments and recipients of national and international awards.



Nona Gaprindashvili, Woman World Chess Champion since 1962, from "The Encyclopedia of Chess" (St. Martin's)

Antigua, 26 November 1972

Dear Fritz:

This morning I was able to find the "Catalog of Plants Growing at Lancetilla Experimental Gardens at Tela Honduras" which was prepared by J.H. Permar and dated "La Lima, Honduras, 1945". On page 24 Permar has this to say of "Macadamia ternifolia":

" Seeds from Finca Mulgoba, Cuba, May 1927..... There are no plants at Lancetilla but a few trees are growing (and fruiting sparsely) at Quebrada Seca. Mr Alfred Butler states that this plant thrives and fruits freely in the region of Siguatepeque, Honduras. "

This account jogs my memory quite a bit. I recall that I sent Alfred Butler, a young Englishman whom I had engaged to assist me in the development of Lancetilla, to Cuba to get material for trial in Honduras. We were in contact, over there, with Robert M. Grey at the Harvard Botanic Garden, near Cienfuegos, and with H.A. van Hermann, who was manager of Finca Mulgoba at Santiago de las Vegas, about 12 miles south of Habana. Finca Mulgoba was owned by ^{an} American who was interested in growing mangoes and avocados and experimenting with things in general.

Obviously the trees at Quebrada Seca, an abandoned banana farm about four miles from Progreso, in the Uluva Valley north of Tela, were still alive in 1945. Before 1930 we had made Quebrada Seca a sub-station of Lancetilla, because it was in a much dryer region and we felt mangoes and several other fruit trees would do better than at Lancetilla, which is in an extremely wet valley right on the coast. I believe the rainfall at Lancetilla is about 125 inches per year while at Quebrada Seca it is only 40 or 45.

The soil at Quebrada Seca is a deep sandy loam, which had been considered good enough for bananas but had not proved very satisfactory and the farm had been abandoned shortly before ^{we} took over one section (20 acres) of it for experimental work. We abandoned it in the 1940s I think, and I don't know if any of the trees we planted are still alive or not.

Now about the trees Mr Butler took to Siguatepeque, a town situated on the road from the coast to Tegucigalpa, at an elevation of about 3400 feet. The soil here is poor; but in an attempt to help people in that area find something that could be grown profitably we established a small experimental plant of mangoes, avocados, citrus, macadamias and even several temperate zone fruits, pears and peaches. In 1972 I visited the station, which was taken over by the government years ago and is still maintained, after a fashion. The macadamia trees have grown pretty well in spite of the heavy, infertile, clay soil on which they are growing, and bear good crops. The nuts I picked up off the ground were not large, and were very thick shelled - certainly not worth propagating by grafting.

Siguatepeque has a climate of six months rainfall, totalling about 35 or 40 inches I would think, and six dry months - the typical climate of the Honduran uplands, and I feel sure the trees have received practically no cultural attention except to have grass and weeds around them kept under control.

Sincerely yours,

Wilson Popenoe

To

Dr. Wilson Popenoe
Antigua, Guatemala

From

FREDERIC ROSENGARTEN, JR.
7700 ST. MARTIN'S LANE
PHILADELPHIA, PENNA. 19118

MESSAGE

— SUBJECT Dear Dr. Popenoe:

DATE Dec. 7, 1972 ^{FOLD} —

Thanks very much for your interesting letter of November 26th concerning Macadamia in Honduras.

Following your suggestion, I hope to visit Mr. Robert D. Armour at Zamorano towards the end of next month.

I enjoyed very much seeing you again recently in Antigua. It was like "old times".

Miriam and I send our kindest regards to Mrs. Popenoe and yourself,

Sincerely,

Fritz

SIGNED

REPLY

DATE

SIGNED