



Hunt Institute for Botanical Documentation
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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.

July 14, 1957

Dr. C. R. Southwell
Acting Scientist-in-Charge
U.S. Naval Research Laboratory
Box "B", Rodman, C.Z.

Dear Dr. Southwell:

It was good to have your recent letter and to hear that the Navy program of testing tropical American woods is being continued, and that my modest work on the Rain Forests of Golfo Dulce has been of some help.

As you probably already know, we have seven of the approximately eighty species of *Eschweilera* in Central America, where they range, mostly at low elevations, from eastern Panama to northern Honduras. All are, insofar as my personal experience is concerned, rather infrequent elements in areas of undisturbed rain forest and have, as would be expected, their greatest concentrations along the Atlantic seaboard, with local extensions onto the Pacific side in places such as Golfo Dulce, parts of Chiriqui Province and Darien, wherever conditions of soil and rainfall are right for them. While such generalizations are easy, it is often, as I well know, quite another matter to locate specimens when needed for some specific project. I at one time knew the location of individual trees near Remedios, in Chiriqui and also near Esquinas, in Costa Rica, but could not, of course be sure that these still exist. My first reaction, perhaps, would be to contact the Engineering Department of the United Fruit Company in Puerto Limon, Costa Rica or at Almirante, in Bocas del Toro Province, since both of these locations are in the center of known stands. G. Procter Cooper, for example, collected numerous specimens in Bocas del Toro, and Henri Pittier described several new species from the vicinity of Puerto Obaldia, on the San Blas coast.

In the event that none of the above leads prove successful, I might be able to come down for a brief period on loan from the School, and would feel fairly optimistic about finding material in one or the other of the known distributional centers. Nothing of interest to you is to be had in our immediate vicinity, I am afraid, since the School is located in the midst of the vast highland zone of pine and oak so characteristic of northern Central America, with no rain forest stands much nearer than Lake Yojoa or the north coast.

I have always very much regretted that my survey of the timber woods of Panama, begun in 1934 under the auspices of the Missouri Botanical Garden and continued, with brief interruptions until 1948, failed to reach publication due to lack of funds. This project embodied explorations in nearly all parts of the Republic and brought to light

literally hundreds of undescribed species and extensions of range, which are to this day unlisted in any manual. Approximately five thousand cards remain in my files from this abortive venture, together with voluminous notes and innumerable photographs of individual species. Needless to say, it would be a source of great personal satisfaction to see all of this put to some use, preferably in the form of a field manual similar to that done for the Golfo Dulce area.

I have wondered a number of times if the Navy might be willing to back such a project in view of the very advanced state in which it now rests. It would seem to me that some sort of cooperative agreement might be worked out by which the United Fruit Company would be willing to allow me the use of the excellent herbarium and library here at the school for the completion of keys and botanical descriptions, while the Yale School of Forestry would, as in the past, verify sterile or doubtful material by means of wood analysis. This, coupled with the results of your own tests would provide a unique body of information of an intensely useful character which would be probably the greatest single step ever taken to complete our knowledge of the tropical American forest resources.

It would be my guess that a grant, to be administered by the Navy might be fairly readily obtained, say from the National Science Foundation, which would simply mean that the Navy, and indirectly the Escuela Agricola Panamericana would have the responsibility of seeing that the funds were wisely spent.

If this possibility appeals to you, or if I can be of any assistance in other ways, I hope you will feel free to call on me.

Most sincerely yours,

Paul H. Allen



DEPARTMENT OF THE NAVY
OFFICE OF NAVAL RESEARCH
WASHINGTON 25, D. C.

IN REPLY REFER TO
ONR:446:SRG:asb
30 August 1957

AIR MAIL

Mr. Paul H. Allen
Escuela Agricola Panamericana
Apartado 93
Tegucigalpa, Honduras

Dear Mr. Allen:

Recently, I had the privilege of reading a copy of your letter of 14 July 1957, addressed to Dr. C. R. Southwell, which Mr. B. W. Forgeson forwarded to me along with a copy of his acknowledgment to you of 7 August 1957. Please be assured of our sympathy with your desire to publish the results of your survey of timber woods in Panama. It is my personal conviction that there is a real need for more scientific information regarding tropical woods.

Unfortunately, the Office of Naval Research is not in a position, at this time, to provide financial support for scientific publications. However, we would be quite willing to receive for consideration a formal proposal, detailing your interests in this matter. Should you submit such a proposal, we would be glad to have it reviewed in this Office as well as by an appropriate advisory committee. If, after review, the proposal is found to be scientifically acceptable in this Office, we would then wish to discuss the proposal with other federal and private research supporting organizations in the hope that one or more of these organizations could find the financial support which you require. We both realize that there is no assurance of success in obtaining such support; nevertheless, we would be pleased to explore this matter with other appropriate agencies.

I am taking the liberty of enclosing a brochure which presents some of the interests and activities of the Office of Naval Research. You may wish to refer to the suggested guide for the preparation of research proposals which you may find helpful in the event that you decide to submit a formal proposal for consideration by this Office.

I sincerely hope that we can be of assistance to you in this matter.

Sincerely yours,

S. R. GALTNER
Head, Biology Branch
By direction of the
Chief of Naval Research

Enclosure
Copy to:
Mr. B. W. Forgeson



U. S. NAVAL RESEARCH LABORATORY
CANAL ZONE CORROSION LABORATORY
BOX ~~3001~~ "B", RODMAN, C. Z.

IN REPLY REFER TO
CZCL Serial:108/57:BNF:ej

7 August 1957

AIR MAIL

Mr. Paul H. Allen
Escuela Agrícola Panamericana
Apartado 93
Tegucigalpa, Honduras

Dear Mr. Allen:

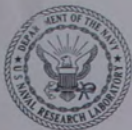
Your letter of 14 July to Mr. C. R. Southwell received and we were most pleased to hear from you. Your information regarding Eschweilera in Central America was noted with interest, however, since the collection phase of our program is drawing to a close it seems doubtful that we will be able to pursue the specie of Eschweilera further at this time. As Mr. Southwell pointed out to you in his letter of 10 July, Drs. Stern and Chambers from Yale University spent a month here in Panama and we are presently receiving wood samples that they arranged for. I would estimate that we will initiate exposure of the species we have within a two-months period. It is unfortunate that we had not contacted you earlier in this study so that we might have been able to arrange a short term contract with you to spend some time with us on this project.

Your ideas regarding the information you have collected on the timber woods in Panama since 1934 are very interesting and I too believe that this information should be published if at all possible. The Office of Naval Research, in the person of Dr. Sidney Galler, Head of the Biology Branch, has been subsidizing part of these tests on tropical woods and is at all times very interested in the publication of scientific information. Their specific interest in this instance is in extracting and analyzation of the constituents of tropical woods that are naturally resistant to marine borers. Whether or not their interest would go so far as to finance a publication regarding identification and collection of Panama woods is doubtful, however, Dr. Sidney Galler is very well connected with persons in various fields of scientific endeavour and should be able to advise you on the matter. Thanking you again for your kind interest in our program, I remain,

Sincerely yours,

B. W. Forgeson
B. W. FORGESON
Scientist-in-Charge

Copy to:
Dr. S. Galler, ONR



U. S. NAVAL RESEARCH LABORATORY
CANAL ZONE CORROSION LABORATORY
BOX ~~2004~~ 8, RODMAN, C. Z.

IN REPLY REFER TO

CZCL Serial:86/57:CRS:ej

10 July 1957

Mr. Paul H. Allen
Escuela Agrícola Pan-Americana
Apartado 93
Tegucigalpa, Honduras

Dear Mr. Allen:

The Naval Research Laboratory in the Canal Zone is undertaking a rather exhaustive study to determine the durability of the many tropical timbers of Panama when exposed to natural environments on the Canal Zone. Comparisons will be made to States fir and pine untreated and with several different preservative treatments. Special emphasis is being placed on determination of the resistance of the tropical timbers to marine borers.

As you will appreciate, collection of the many different species desired to make the test complete has been the difficult phase of this investigation and I would like you to know how very helpful your book, "The Rain Forests of Golfo Dulce", has been in this connection.

From each tree to be tested we are cutting 15 samples 1-3/4" x 3" x 18", eight of which will be exposed underwater in quadruplicate at two locations (Miraflores Lake and Pacific Ocean). The balance of the samples will be used for termite and decay resistance tests and for save material. For each specie represented we are endeavouring to test two separate trees. The Yale School of Forestry is assisting us by correctly identifying the many wood species which have been collected under common names.

Dr. William L. Stern from the Yale School of Forestry and Dr. Kenton Chambers from the Yale Department of Botany, have been in Panama for the last month for the purpose of identifying and collecting many of the desired wood and herbarium specimens. During the course of their visit we traveled to the extreme ends of Panama and have now about 90 varieties of trees collected for testing. Unfortunately a few of the species we considered most desirable, because of probability of resistance to marine borers, eluded us completely.

Central American Eschweilera is one genus we have not been able to obtain that we feel should definitely be included in the test. I wonder if you possibly could suggest some method whereby Central American samples of wood of this genus could be obtained. Desired samples would be two pieces of 20 board-feet each from different trees, heartwood from butt logs if possible.

Your assistance in obtaining this wood would be greatly appreciated and will certainly add to the completeness of the investigation. If there are other species from your area that you consider to be resistant to marine borers we would certainly like to include them also in the tests.

Of course we will send you copies of all the reports concerning this investigation.

Sincerely yours,

C. R. Southwell
C. R. SOUTHWELL
Acting Scientist-in-Charge

Dr. R.C. West (Geographer) suggests that it might be well to contact Miss Evelyn Pruitt, Geography Branch, Office of Naval Research, Washington 5, D.C. in regard to the possibility that they might be willing to back a survey of Central American timbers. He believes that grants are never made to individuals, but must be administered by some well known institution, who should probably make the application.