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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.

- Taximetrics Laboratory

April 27, 1967

Miss Elena M. Genova
Bulgarian Academy of Sciences
Botanical Institute
Sofia 13, Bulgaria

Dear Miss Genova:

In reply to your letter of March 24, 1967, I recommend that you examine the following literature sources to discover the exact type of information which interests you in the problems of plant resources of nature. The publications which I recommend are largely lists of the scientific literature of the world published in all languages. These publications are:

1. Bibliography of Agriculture published by the United States Department of Agriculture.
2. Biological Abstracts published at 3815 Walnut Street, Philadelphia 4, Pennsylvania, U.S.A.

These two publications tell you what types of information about plants is being published today and from them you may determine the most important literature for your purposes.

In addition to these, I recommend strongly that you read the journal of ECONOMIC BOTANY published by the New York Botanical Garden, Bronx Park, Bronx, New York 10458. This serial publication is one of the primary sources of information about plant uses. I expect that this journal may be found in the library of your own institute.

I trust that the information given above will help you get started on the interests you have.

Sincerely yours,

David J. Rogers
Professor of Botany

DJR:ch

- Taximetrics Laboratory

April 24, 1967

Dr. Franklin W. Martin
Federal Expt. Station
Mayaguez
Puerto Rico 00708
Puerto Rico

Dear Frank:

It was a pleasure to have met you in Trinidad. I trust that we will have a chance to meet again on your home grounds.

I'm sure that you would profit from reading the book entitled "The Plant Sciences Now and in the Coming Decade." This book was prepared under the auspices of the National Academy of Sciences and the National Research Council. It is available from the Printing Office of the National Academy of Sciences, 2101 Constitution Avenue, Washington, D.C. 20418. Its publishing number is 1405. The particular chapter of interest to you will be Chapter 10 which is devoted to various important crops, particularly on page 105 where sweet potatoes and cassava are both mentioned. Perhaps some sort of a push can be made either in U.S.D.A. or somewhere else in order to foster recommendations made in this book by some very prominent botanists.

I trust that you will be able to settle the various problems facing you in the continuation of your interests there in Puerto Rico. I also hope that you will be able to take up the suggestion that we make a collaborative study on the systematics of sweet potatoes. I hope that you have a chance while on home leave to stop in Colorado and see us. As you know, my address will change from the one given on this letterhead to: Department of Biology, University of Colorado, Boulder, Colorado 80302, on July 1.

Best regards,

Sincerely,

David J. Rogers
Professor of Botany

DJR/ch

- Taximetrics Laboratory

April 24, 1967

Mr. Carlos G. Moscoso
Agricultural Expt. Station
University of Puerto Rico
Río Piedras
Puerto Rico

Dear Carlos:

It was a great pleasure to renew acquaintances at the Tropical Root Crop Symposium. I was sorry that you had to leave so soon.

I can give you more detailed information about the proposal made by a committee of the National Academy of Sciences that I mentioned to you at the meeting. The name of the book in which the proposal appeared is "The Plant Sciences Now and in the Coming Decade." This book was prepared under the auspices of the National Academy of Sciences and the National Research Council. It is available from the Printing Office of the National Academy of Sciences, 2101 Constitution Avenue, Washington, D.C. 20418. Its publishing number is 1405. The particular chapter of interest to you will be Chapter 10 starting on page 100 to 114. There is mention of the two crops, sweet potatoes and cassava, on page 105. Other comments of interest to you, I'm sure, are made in that chapter.

I trust that the information in this book will be of interest to you.

Best regards to you and your wife.

Sincerely yours,

David J. Rogers
Professor of Botany

DJR/ch

- Taxometrics Laboratory

April 24, 1967

Mr. C. Shepheard-Walwyn
Production Department
Wing one - seventh floor
Academic Press Inc. Limited
Berkeley Square House
Berkeley Square
London, W.1, England

Dear Mr. Shepheard-Walwyn:

We have had unprecedented requests for George F. Estabrook's paper entitled "A Mathematical Model in Graph Theory for Biological Classification" which appeared in: J. Theoret. Biol. (1966) 12, 297-310. Please advise us about the possibility of obtaining a new supply of reprints.

Sincerely yours,

David J. Rogers
Professor of Botany

DJR/ch

- Taxinmetrics Laboratory

April 21, 1967

Dr. Stephen S. Tillett
Comision Fulbright del Peru
Maximo Abril 599
Lima, Peru

Dear Steve:

Your long letter of October 20 arrived last week in our hands. I guess the length of your letter caused people to spend lots of time on it. I hope by now things have quit shaking in Peru and you are enjoying yourself.

One fellow you definitely should look up in Peru is Dr. Jorge Leon who works for the Inter-American Institute of Agricultural Sciences, Andean Zone, and whose address is: IICA, Zona Andina, Apartado 478, Lima, Peru. I think his office is out at LaMolina. Jorge is a very good friend of mine. I have known him for years. His knowledge of tropical cultivated plants is absolutely amazing. He got his Ph.D. under Woodson at St. Lewis. He is one of the most sympatico persons I know.

I would indeed be pleased to have specimens if you have an opportunity to get them. There are some interesting wild species along the eastern slopes and Ramon Ferrera should be able to tell you where they are. Cesar Vargas in Cusco also knows where a number of these plants are. You will be pleased to know Vargas, I'm sure. They say he is very rich but also sympatico. Good luck and happy hunting.

Sincerely yours,

David J. Rogers
Professor of Botany

DJR/ch

P.S. Our address after July 1 will be: Department of Biology,
University of Colorado, Boulder, Colorado 80302.

- Taximetrics Laboratory

April 20, 1967

Dr. C. Gordon Bell
Department of Computer Science
College of Engineering and Science
Carnegie Institute of Technology
Schenley Park
Pittsburgh, Pennsylvania 15213

Dear Dr. Bell:

Other than the three references given below*, we have little to say about the compiler system developed by Mr. Mark Halpern whose address is: Department 52-40, Bldg. 201, Lockheed Missiles and Space Co., Palo Alto, California 94304. We have not begun the development of the TAXIR system and have only given the broad outlines of its features to the National Science Foundation in a grant proposal and to some people at the Smithsonian.

I am sending three papers to you from which you may be able to gather the information which you requested concerning "general articles on taxometrics." Perhaps these will give you the input necessary to discover our direction and aspirations, though incompletely. I have asked that my secretary place your name on our mailing list so that when anything does appear, you will receive copies. Since our grant has not yet been announced, it is not certain that we will be able to flesh out the bones of our ideas.

I am sorry that we cannot say anything definite yet but I think you can understand that we are somewhat reluctant to make any claims before we have done work ourselves.

Sincerely yours,

David J. Rogers
Professor of Botany

DJR/ch

Enc.

* References attached

References:

HALPERN, Mark I. Machine Independence: Its Technology and Economics. Research Laboratories, Lockheed Missiles & Space Company, Palo Alto California. 12 pages.

HALPERN, Mark I. XPOP: A Meta-Language Without Metaphysics. Proceedings-- Fall Joint Computer Conference, 1964. pages 57-68.

HALPERN, Mark I. Evolution of the Programming System. Datamation, July, 1964. Pages 51-53.

- Taximetries Laboratory

April 20, 1967

Harper & Row, Publishers
49 East 33rd Street
New York, New York 10016

Dear Sirs:

Please send me an inspection copy of Biological Techniques: Collecting, Preserving, and Illustrating Plants and Animals by Jens W. Knudsen.

Thank you.

Sincerely yours,

Henry S. Fleming
Assoc. Professor of Botany

HSP:ch

- Taxinmetrics Laboratory

April 18, 1967

Dr. J. F. Danielli, F.R.S.
Chief Editor, Journal of Theoretical Biology
The University Health Center
414 Michael Hall
Buffalo, New York 14214

Dear Dr. Danielli:

We have had unprecedented requests for George F. Estabrook's paper entitled "A Mathematical Model in Graph Theory for Biological Classification." which appeared in: J. Theoret. Biol. (1966) 12, 297-310. Please advise us about the possibility of obtaining a new supply of reprints.

Sincerely yours,

David J. Rogers
Professor of Botany

DJR/ch

- Taximetrics Laboratory

April 18, 1967

Mr. Harold K. Voris
Division of Reptiles
Chicago Natural History Museum
Roosevelt Road and Lake Shore Drive
Chicago, Illinois 60605

Dear Harold:

We are anxious to hear from you as soon as you have had a chance to analyse the results, but, of course, you have to work at your own pace. Good luck on your language exams.

Very truly yours,

George F. Estabrook

GFE/ch

- Taxinmetrics Laboratory

April 17, 1967

Dr. Frederick L. Wellman
1504 Ridge Road
Raleigh, North Carolina 27607

Dear Fred:

First, let me say that there have been some internal problems at Doubleday which have caused extreme delay. The man in charge of your manuscript has turned out to be a dud. He apparently cannot function as an editor and that is the reason Klein had to take on the finishing of it. My own manuscript is behind yours and I am getting upset about the delay myself. We are hoping for some improvement in the Natural History Press personnel soon.

I also have your letter of February 21 including the note from Lucas with the discouraging information about the lack of interest of the granting agencies in the International Center of Tropical Phytopathology. With respect to the phytopath center at North Carolina State, I got some second hand information from a pathologist on sweet potatoes at LSU, Dr. Martin, that the project was doomed. How Martin knew about it or what his part in it was, I was not able to discover. I met him recently at a meeting in Trinidad. I still like the idea of your center. I would encourage Lucas to spend some more time wiring it down. I would certainly think that you have perfect justification in requesting from the approached agencies the reasons why they turned it down. I believe that Rockefeller would indeed be interested if the project was tailored with their foundation in mind. I know that Ralph Richardson of the Rockefeller Foundation is a very sympathetic chap. It would profit somebody to spend a few days with him informally talking it over. I hope these words have some meaningfulness and usefulness.

The big news from here is that we are moving again. This time only a short distance, over to the Boulder campus, the University of Colorado. There are several good reasons for the move. It will not change our plans but should enhance our work. This move is to be accomplished July 1, so on that date would you please send all your mail to me at the Department of Biology, University of Colorado, Boulder, Colorado 80302. Our information retrieval project is still

Dr. F. L. Wellman

- 2 -

April 17, 1967

in the mill at NSF. I may be building false optimism but I think it will be funded. I will keep you informed in the event you folks again start to move.

Sincerely,

David J. Rogers
Professor of Botany

DJR/ch

- Taxinetrics Laboratory

April 18, 1967

Dr. Richard M. Klein
New York Botanical Garden
Bronx Park
Bronx, New York 10458

Dear Dick:

I have a copy of Fred's letter, most of which concerns the illustrations. I have a clear and distinct remembrance that these illustrations were given to Jake Page at the American Museum in his office. I distinctly remember giving them to him. If it has been their mismanagement to have lost these, I recommend that an addition payment be made to Fred to recompense him for his time, effort, and energy.

I am glad to hear that the manuscript is complete and ready to go.

Sincerely,

David J. Rogers
Professor of Botany

DJR/ch

cc: Dr. Frederick L. Wellman

- Taxinmetrics Laboratory

April 18, 1967

Dr. Robert Menzies
Duke University Marine Laboratory
Beaufort, North Carolina

Dear Bob:

I don't think that I would bother putting in internal connections beyond L25. Do just the R sets. I have subgraphed up to L24 (notice notes on shift of red circle rule). Much information is lost under the rule of 3, of course, but avoids spaghetti drawings. It might be wise for you and Bob and George to redo the subgraphs to check on me as I have done them rapidly and because they may provoke questions. You will notice that cluster 14, 15, and 16 all join 12 and that 14 also joins 34. It may mean something that I don't have the knowledge to give significance to (level 24).

Species 20 may belong to this genus but I would take a sharp look at it. It is 52% or more different from everything else.

If after working this over, you wish to change the characters, do so. The whole operation is to give the taxonomist feed back and information. This is the start.

You might give us the data-address etc. of Slater in Washington and any pertinent information on his Max Planck Institute idea.

Best to Lucille--expect to see you both out here soon. Haul along George and his wife--Kerala is a long ways from the Himalyas and these will do well as second best.

As ever,

Henry S. Fleming

HSF/ch

- Taxinmetrics Laboratory

April 17, 1967

Dr. Jerome H. Maner
Rockefeller Foundation
Apartado Aereo 58- 13-
Bogota, Colombia

Dear Jerry:

I can't remember if the above epithet for addressing you is correct or whether you called yourself by some other name. Anyway, herewith is the list of references on Manihot. The price for this job, including the cost of sending it air mail is

If there is any kind of literature on the development of this new institute in Colombia, I would like to hear about it.

It was a pleasure to meet you and chat with you during the meeting in Trinidad. I hope our tracks cross again.

Sincerely yours,

David J. Rogers
Professor of Botany

DJR/ch

Enc.

- Taximetrics Laboratory

April 13, 1967

Dr. B. D. Ainscough
Department of Zoology
University of the West Indies
St. Augustine, Trinidad

Dear Brian:

I look back with great pleasure on my visit to Trinidad. It was indeed a pleasure to make your acquaintance and that of others who were so generous and friendly. Coming back to the frozen north country was no fun. I am sending under separate cover another copy of the flow charts for the similarity-clustering method along with several other papers which you may or may not have already.

I do hope that you will have a chance to visit with us at length sometime. Let me know if there is anything I can do to help out in that direction.

Once again, let me express my pleasure for your kind hospitality.

Cordially,

David J. Rogers
Professor of Botany

DJR/ch

- Taximetrics Laboratory

April 13, 1967

Dr. Charles A. Rosen
Applied Physics Laboratory
Stanford Research Institute
Menlo Park, California

Dear Dr. Rosen:

We thought you might be interested in the enclosed paper in relation to the article of yours in Science entitled "Pattern Classification by Adaptive Machines." May we please have a reprint of this paper when it is available?

Sincerely yours,

David J. Rogers
Professor of Botany

DJR/ch

Enc.

- Taximetrics Laboratory

April 13, 1967

Mrs. Kay Rhine
Librarian
Computing Center
Graduate School
University of Colorado
Boulder, Colorado 80302

Dear Mrs. Rhine:

Enclosed are a listing of the program we are submitting to SHARE, a new copy of the write-up, a new SHARE submittal form, and a new deck of catalog cards.

We hope that this revised information will be acceptable by the SHARE librarian.

Yours truly,

R. C. Brill
Programmer

RCB/ch

Enc.

- Taxidmetrics Laboratory

April 11, 1967

Dr. Peter H. Raven
Department of Biological Sciences
Division of Systematic Biology
Stanford University
Stanford, California 94305

Dear Peter:

I have just discovered that a young man by the name of Montoya is putting together a collection of cultivars of Manihot esculenta. I am sure he would be happy to have cuttings of the varieties that your people are collecting in Chiapas. I note that your boys are off already but perhaps you could communicate with them. Thanks for your help. Montoya's address is as follows:

Mr. L. A. Montoya
IICA, Oficena en Mexico
Londres 40
Mexico 6, D.F.
Mexico

Sincerely,

David J. Rogers
Professor of Botany

DJR/ch

- Taxinmetrics Laboratory

April 11, 1967

IR. J.H. de Bruyn
Centre Neerlandais O.R.S.T.O.M.
Adiopodoume
Cote d'Ivoire

Dear Mr. de Bruyn:

Dr. Bolhuis of Wageningen gave me your name while we were together at the Tropical Root Crop Symposium in Trinidad. He also gave me the interesting information that you are studying the production and concentration of HCN in the roots of Manihot esculenta. I am very much interested in this from the standpoint of the comparative production of this substance in various varieties of cassava. If you have done any work which has been published along these lines, I would be pleased to have a copy of it. If not, I would be pleased to be placed on your mailing list to receive any of your future work which you may do. I am sending copies of my own work which may be of interest to you.

Sincerely yours,

David J. Rogers
Professor of Botany

DJR/ch

Enc.

- Taximetrics Laboratory

April 11, 1967

Dr. Donald F. Squires
Deputy Director
Museum of Natural History
Smithsonian Institution
United States National Museum
Washington, D.C. 20560

Dear Don:

At the moment, I see no conflict for the dates of your meetings in Mexico December 18 through the 20th and accept your kind invitation to present a paper suitable to the occasion. If you are looking for a tentative title, say something along the following lines "A Computerized IR System for Taxonomy." I look forward to getting information about costs and so forth later.

Sincerely,

David J. Rogers
Professor of Botany

DJR/ch

- Taximetrics Laboratory

April 11, 1967

Dr. Donald F. Squires
Deputy Director
Museum of Natural History
Smithsonian Institution
United States National Museum
Washington, D.C. 20560

Dear Don:

At the moment, I see no conflict for the dates of your meetings in Mexico December 18th through the 20th and accept your kind invitation to present a paper suitable to the occasion. If you are looking for a tentative title, I suggest something along the following lines "A Computerized IR System for Taxonomy." I look forward to getting information about costs and so forth later.

Sincerely,

David J. Rogers
Professor of Botany

DJR/ch

- Taximetrics Laboratory

April 11, 1967

Mr. Alvaro Montaldo
Facultad de Agronomia
Universidad Central de Venezuela
Maracay
Venezuela

Dear Mr. Montaldo:

It was a pleasure to make your acquaintance at the root crop symposium in Trinidad. As promised, I am sending a bibliography of yuca. Please be aware that this listing has not been thoroughly checked for its accuracy. It might be well if you have some assistance to discover how correct the entries are. I am also sending copies of my yuca reprints which you may find interesting.

Would you please let me know when you have received this material?

Sincerely yours,

David J. Rogers
Professor of Botany

DJR/ch

Enc.

- Taximetrics Laboratory

April 3, 1967

Dr. Paul G. Smith
Department of Vegetable Crops
University of California
Davis, California 95616

Dear Dr. Smith:

Thank you kindly for sending your negatives. They are returned herewith. I am sorry that these do not supply the kind of illustrations I am looking for.

Sincerely,

David J. Rogers
Professor of Botany

DJR:ch

Enclosures

- Taximetrics Laboratory

May 31, 1967

Mr. Frank Mackeever
New York Botanical Garden
Bronx Park
Bronx, New York 10458

Dear Mac:

I guess you must have given up on trying to get me to send you copies of the loan slips. I frankly can't find the things. If at all possible, please have copies made of your records on my loans and I will sign them. If any time or effort can be charged to this job, I will be glad to pay it.

As you know, we are moving from Fort Collins to the University of Colorado at Boulder. That is the outfit Bill Weber is with. We look forward to a profitable sojourn there. Unfortunately, things didn't work out too well here. Give my best to one and all there and especially to you.

Sincerely,

David J. Rogers
Professor of Botany

DJR/ch

- Taxidmetrics Laboratory

May 31, 1967

Mr. James Venette
200 Johnson Dr.
Fort Collins, Colorado

Dear Jim:

If you are interested in a possible research assistantship for your graduate work next year, let me know. I think I have something you might be interested in.

Sincerely,

David J. Rogers
Professor of Botany

DJR/ch

Taximetrics Laboratory

May 29, 1967

Dr. E. B. Worthington
Scientific Director
Central Office for the Programme
International Council of Scientific Unions
7 Marylebone Road
London, N.W.1
England

Dear Dr. Worthington:

Please put me on the mailing list for the two publications:
IBP News and The Biosphere. These should be addressed to me at
the Department of Biology, University of Colorado, Boulder, Colo-
rado, 80302.

Thank you.

Sincerely yours,

David J. Rogers
Professor of Botany

DJR/ch

- Taximetrics Laboratory

May 29, 1967

Dr. Charles L. Remington
Department of Biology
Osborn Memorial Laboratories
Yale University
New Haven, Connecticut 06520

Dear Dr. Remington:

Thank you for your reprint request for our paper in Evolutionary Biology. I would be very interested in any "feed-back" which you or any students might care to make concerning this paper. The reason for this request is that we are gathering ideas for continued application of computers in evolutionary studies, and frankly need all the input we can get from students of evolution to make the most reasonable types of computer programs. Any comments or suggestions you care to make will be appreciated.

Sincerely yours,

David J. Rogers
Professor of Botany

DJR/ch

- Taximetrics Laboratory

May 26, 1967

Dr. Hugh Cutler
Missouri Botanical Garden
2315 Tower Grove Ave.
St. Louis, Missouri 63110

Dear Hugh:

Glad to hear the topic for the Missouri Botanical Garden's annual symposium. Mine and Fleming's reservations are enclosed. Fleming is writing a check for both fees. You note that we will be moving to Boulder July 1, and that is the reason the address is given as University of Colorado and not Colorado State University.

If you haven't fixed the program entirely, I would very much like to report on our completed computer classification of the cultivars of M. esculenta. The computer has given us a number of new insights into how groups of these types of plants may be classified and offers a chance to see the overall variation that exists in a cultivated group. I think the model and the method offer some significant advances in cultivated plant taxonomy.

We will hopefully have produced by that time a fair sized paper for the Annals (I have already been in correspondence with Lewis on this), so I should have a good sound contribution to make. I hope you can arrange it.

Best regards,

David J. Rogers
Professor of Botany

DJR/ch

Enc. 2 reservation forms
1 check (\$10.00)

- Taxine rics Laboratory

May 26, 1967

Dr. David M. Prescott
Scientific Editor, BIOSCIENCE
Institute for Developmental Biology
University of Colorado
Boulder, Colorado 80302

Dear Dr. Prescott:

We submit the enclosed paper for inclusion in BIOSCIENCE as a research report. I trust that it is in good order and acceptable.

You will note that we used the address Department of Biology, Boulder, Colorado, although officially we will not be a part of the department until July 1. Since this paper probably will not appear before July, I trust that it is all right to use this address.

Sincerely yours,

David J. Rogers
Professor of Botany

DJR/ch

Enc. 1 manuscript with figures
1 carbon copy without figures

-Taxinmetrics Laboratory

May 23, 1967

Dr. Richard A. Reymont
Geologiska Institutionen
(Biometriska Laboratoriet)
Stockholms Universitet
Stockholm 45
Sweden

Dear Dr. Reymont:

If reprints of the following papers are available, I would greatly appreciate receiving a copy:

1. Upper Cretaceous fossil molluscs in South America and West Africa. *NATURE*, 207(5004): 1384. 1965.
2. Quantitative morphologic variation and classification of some Nigerian Paleocene Cytherellidae. *MICROPALAEONTOLOGY*, 11(4): 457-465. Illus. 1965.
3. Observations on the variability of *Sagrina circumspinos*a. *NIGERIAN J. SCI.*, 1(1): 65-70. Illus. 1966.

Thank you.

Sincerely yours,

David J. Rogers
Professor of Botany

DJR/ch

- Taximetrics Laboratory

May 23, 1967

Mr. C. Shephard-Walwyn
Academic Press Inc. (London) Limited
Production Department
Wing one, Seventh Floor
Berkeley Square House
Berkeley Square, London, W 1
England

Dear Mr. Shephard-Walwyn:

You have my authority to charge the cost of air mailing
copies of Estabrook's reprints. Thank you for your considera-
tions.

Sincerely yours,

David J. Rogers
Professor of Botany

DJR/ch

- Taximetrics Laboratory

May 23, 1967

Mr. Frank N. Paparello
Asst. Vice-President - Editorial
Encyclopedia Britannica
Educational Corporation
425 North Michigan Avenue
Chicago, Illinois 60611

Dear Mr. Paparello:

I am agreeable to the arrangements that you recommend in your letter of May 19.

Please note that my address will change July 1 to Department of Biology, University of Colorado, Boulder, Colorado 80302.

Sincerely yours,

David J. Rogers
Professor of Botany

DJR/ch

- Taximetrics Laboratory

May 23, 1967

TAB Products Co.
1815 Federal Blvd.
Denver, Colorado

Gentlemen:

I would appreciate very much receiving a copy of your catalog
"Data Processing Auxiliary Equipment." Please include the price
list for this catalog.

Thanking you in advance.

Sincerely yours,

Henry S. Fleming
Associate Professor of Botany

HSF/ch

- Taximetrics Laboratory

May 22, 1967

Ing. Agron. Oscar Chacón
Universidad de Oriente
Jusepin, Estado Monagas
Venezuela

Dear Ing. Chacón:

I have received your letter of May 11 concerning the possibility of graduate study. I am not certain at the moment but there may be some possibility for an assistantship. First, however, we must determine your status and eligibility to do graduate work. For this purpose I am asking the Department of Biology, University of Colorado to send you the necessary forms to apply.

I strongly suggest that you contact the Organization of American States, Washington, D.C. to determine the possibility of financial assistance through them. If you have not become familiar with the Rockefeller Foundation, I strongly suggest that you contact their international offices in New York. Their address is: Dr. Ralph W. Richardson, Jr., The Rockefeller Foundation, 111 West 50th Street, New York, N.Y. 10020. As you indicated, with your strong background and your interest in the agriculture of the American tropics, I think the Rockefeller Foundation will be a good source of funds for your work. You should address a letter to them. In that letter, you might mention that you are thinking of working under me for a degree.

I trust we will be able to make some arrangements which will be mutually agreeable.

Sincerely yours,

David J. Rogers
Professor of Botany

DJR/ch

cc: Miss Margaret Staples

- Taximetrics Laboratory

May 22, 1967

Miss Margaret Staples
Department of Biology
University of Colorado
Boulder, Colorado 80302

Dear Miss Staples:

Attached is a copy of a letter to a fellow who has applied to me for graduate work. I would be very pleased if you would send him the necessary application forms for work there in the Department of Biology.

Sincerely,

David J. Rogers
Professor of Botany

DJR/ch

Enc.

May 22, 1967

Mr. Richard Barnes
Associates for International Research, Inc.
Eight Elliot Street
Cambridge, Massachusetts 02138

Dear Mr. Barnes:

I am enclosing a sample of the output produced by the similarity-clustering program. In converting to the IBM 360, you should take note of the following problems.

(1) DMATA table (whose structure is described in the write-ups and in the listings) is unpacked and edited by a routine written in MAP (7044 assembly language). The editing function could easily be rewritten in FORTRAN. The unpacking function could be rewritten in FORTRAN too, but it would operate rather inefficiently. FORTRAN is not designed to manipulate information in less than full work modules. It can be tricked into so doing, sometimes quite effectively, but in this case, the performance would be a clumsy one. I would suggest rewriting the editing function in FORTRAN and rewriting the unpacking function in 360 assembly language. Watch out for the change from a 36-bit word to a 32-bit word.

(2) All FORMAT statements for output assume a printer with 132 characters per line. If your 360 printer has fewer characters per line, you must reformat the output.

(3) The carriage control characters work on the 7044 as follows:

Carriage control character	Action before printing	Action after Printing
blank	none	1 space
0	1 space	1 space
1	eject page	1 space
+	none	none

If the 360 carriage control characters function differently, the carriage control character which begins each output FORMAT statement must be checked and in some cases changed. When working in this area, study the sample print-out enclosed for the desired print effect.

May 22, 1967

(4) In the 7044 operating system (IBSYS), the standard input tape is tape 5 and the standard output tape is tape 6. All READ 5 and WRITE 6 statements will have to be changed to fit the requirements of the 360 operating system.

(5) The statements CALL CHAIN(1), CALL CHAIN(2), etc., CALL CHNXIT, are peculiar to the 7044 method for permitting program overlay (the facility for calling in and executing sections of the program one at a time). The 360 operating system may employ different conventions for this feature.

(6) All statements prefaced with \$ are directives to the 7044 operating system and will have to be replaced by their equivalents in the 360 system.

(7) Limits on table sizes will depend on the amount of core storage available to you. This may require changes in DIMENSION and COMMON statements and tests for overflow of tables.

I think that all statements not affected by the above considerations can stand as they are, but program conversion being the nasty job it is, you will in the course of your efforts probably discover other areas of incompatibility. I wish you success in your efforts and if I may be of further assistance, please contact me.

Sincerely,

R. C. Brill

RCE/ch

Enc.

- Taximetrics Laboratory

May 22, 1967

Dr. George Hepting
Southeastern Station
United States Forestry Service
Asheville, North Carolina

Dear Dr. Hepting:

I was pleased to receive your cordial letter and the information on INTREDIS. As you suggest, I will give it careful analysis, discover questions of interest and hope that we may have a fruitful exchange of information later.

It is fairly certain that our information retrieval system grant request will be funded, but until we do receive the funds, I should not be overly optimistic. It is our ambition, amongst other things, to discover from a number of different workers the types of requirements of their systems such that when we write up our computer programs they will have "building blocks" to give individual information system users a maximum freedom in choice of retrieval methods.

Sincerely,

David J. Rogers
Professor of Botany

DJR/ch

- Taximetrics Laboratory

May 22, 1967

Dr. A. C. Smith
Department of Botany
University of Hawaii
Honolulu, Hawaii 96822

Dear Al:

You mentioned in your post card of May 9 that there are no students doing computer taxonomy there. Over the past year or so, I have been in correspondence with Miss Amy Jean Gilmartin who listed here address as Department of Botany, University of Hawaii. I note that after the 25th of February she is to be addressed in California. I was just wondering what her position is. She seems to be well grounded in the methodology.

Sincerely,

David J. Rogers
Professor of Botany

DJR/ch

- Taximetrics Laboratory

May 19, 1967

Dr. Jesse H. Shera
Dean, School of Library Science
Western Reserve University
Cleveland, Ohio

Dear Dr. Shera:

I had earlier planned to write to your school but I am glad I came across your paper "Librarians against Machines" in Science before doing so. My purpose in writing is to ask if any graduates from your school would be interested in working with me in a new information retrieval system beginning this summer. I was not able to write earlier because I have just been notified by the Office of Scientific Information Services of the National Science Foundation that our request for funds had been approved.

Very frankly, we are entering the field of information retrieval on what might seem to be amateur's standing. This is probably true in some sense but we feel some competence in that we have done work with computers and classification with some success for the biological sciences. Our approach is perhaps a bit different from the librarian's approach to information retrieval, but we feel a sufficient relationship exists such that we should definitely have working with us a person trained from the librarian's point of view. Our efforts will be experimental—not quite up to the development stage, at least initially. We would like to have working with us a young man or woman interested in the software aspects for the development of a generalized information retrieval system for biology. This team now has two biologists (myself and Henry Fleming), a mathematician and two programmers. We would like to have the expertise of a young and vigorous person trained with you.

If you have some person available, we can offer a position as a research associate at the University of Colorado, Boulder where we will begin this project July 1. We can offer up to \$9,000 per year for a 12-month appointment with a 10% increment the second year. While the grant which supports this effort is for only two years, we anticipate that the work will continue much longer and hopefully that there will be an opportunity for long-term employment at the University.

Dr. Jesse H. Shera

- 2 -

May 19, 1967

I will be glad to have your recommendations if you have someone willing and able to join our team.

Sincerely yours,

David J. Rogers
Professor of Botany

DJR/ch

- Taxidmetrics Laboratory

May 17, 1967

Dr. J. M. Gillett
Plant Research Institute
Canada Department of Agriculture
Ottawa 3, Ontario
Canada

Dear Jack:

Thank you for sending the reprints. I am glad to hear from you. I am afraid that we won't get any closer to Expo 67 than Ann Arbor, Michigan. Are you by any chance planning to attend the International Conference on Systematic Biology to be held in Ann Arbor on June 14-16? It would be nice to see you there.

Sincerely,

David J. Rogers
Professor of Botany

DJR/ch

- Taximetrics Laboratory

May 17, 1967

Dr. Franklin W. Martin
Federal Experiment Station
Crops Research Division
Agricultural Research Service
United States Department of Agriculture
Mayaguez, Puerto Rico 00708

Dear Frank:

I don't know that I can really make a good answer to the questions on (1) what can variation among sweet potato varieties hope to tell us about relationships, origins, etc., and (2) what part should the "cryptic variation" play in such an analysis? In stabbing at question (1), it is my estimation that Anderson's spindle is an oversimplification. We are dealing with the variance of cultivated complexes. If you recall, Anderson's methodology was carried out on populations of wild species. Though they were somewhat complex, the complexity of many of his studies falls very short of those variations which exist in a crop as old as sweet potatoes. Anderson assumed a complete sexuality with no barriers (or very few). With sweet potatoes like other root crops, very frequently the vegetative route of reproduction does interesting and different things when mixed with the sexual reproduction.

Now all this comment does is say that we need to extend some of Anderson's ideas with methodologies which permit analysis of variance along multidimensional routes (rather than a simple spindle). As far as origins are concerned, it is not clear that any methodology can give us a satisfactory picture. But I do believe that we can get a much better hypothesis given the computer aided studies. This has been the case with my work with the cultivars of Manihot esculenta and our knowledge of this group is much more primitive than that for sweet potatoes.

We have come some distance in the analysis of data since Andy's work and we feel pretty sure that even though we fail to achieve a perfect classification, we can get an information-carrying classification of great value to people interested in breeding.

With respect to your second question on "cryptic variation", I am not just sure I know what you mean. I can't get much of a definitive answer under these circumstances. Let me know in a few descriptive words what you have in mind there.

Dr. F. W. Martin

- 2 -

May 17, 1967

I am pleased to hear that you are planning to get the Krochmal collection of cassava at Mayaguez. I hope I will have a chance to see it sometime.

Sincerely,

David J. Rogers
Professor of Botany

DJR/ch

- Taxidmetrics Laboratory

May 17, 1967

Dr. Helen Mecklenburg
Department of Chemistry
College of Letters and Science
Montana State University
Bozeman, Montana 59715

Dear Dr. Mecklenburg:

I am pleased to have your letter of the 11th concerning the possibility of work on chemotaxonomy. I have the reprint that Mr. Metcalf sent for you. The possibility for the job is still very much up in the air. I had hoped by now to have a definite answer from the National Institutes of Health on our grant request to them for a five-year project to make classifications of Cinchona. I should like to get someone as a chemotaxonomist to take the primary responsibility for the overall classification of this group. I would need, therefore, someone whose training and experience has been in taxonomy and whose chemical training has been partly oriented towards classification. The individual would work with the rest of this team (two taxonomists, mathematicians, and programmers) making a computerized classification after deriving chemical data. The job will entail a considerable amount of travel to herbaria in this country and abroad, perhaps as much as three to five months time within the five-year period. During these visits most of the effort would be in visiting large herbarium collections of Cinchona, perhaps some field work in northern South America. The last part (the field work in South America) is not yet certain.

We probably will not hear from this grant request before July because the panel which meets to consider this grant request will be meeting in June. I have no certainty that the grant request will be funded. The Vietnam war plays a big role in who gets money these days. If you have more interest in this possibility, I would like to have something about your qualifications and recommendations. But please understand that I can make no commitments until the money has been granted.

Sincerely yours,

David J. Rogers
Professor of Botany

DJR/ch

- Taximetrics Laboratory

May 17, 1967

Dr. Marshall C. Johnston
University of Texas Herbarium
Biological Laboratories Building
The University of Texas
Austin, Texas 78712

Dear Dr. Johnston:

First of all, I shall be pleased to write up the whole genus Manihot for the Texas flora. My opinion is that the only taxon occurring in the Texas flora is that very interesting plant along the Texas border with Mexico variously referred to as M. walkerae by Croizat and by others as M. angustiloba. My opinion is that there is a good case to call this a subspecies of Mexicana and it is largely through your collections in Mexico that I have been able to see the connections. I will, therefore, call the Texas plant M. mexicana ssp. walkerae comb. nov.

I really am embarrassed about keeping your specimens so long. The material has not been idle, however, and I have been doing my level best to get my hands on the generic variations in order to make a meaningful revision of the genus. Just chalk it up to my being rather dense in grasping the meanings of variations in this group. However, I trust you will bear with me and that it will not be too long before I make an honest man out of myself.

I would indeed be pleased to see the 10 Mexican specimens you have accumulated there. The Texan material you requested is on its way.

Sincerely yours,

David J. Rogers
Professor of Botany

DJR/ch

- Taxometrics Laboratory

May 17, 1967

Dr. W. Hardy Eshbaugh
Department of Botany
Southern Illinois University
Carbondale, Illinois 62901

Dear Dr. Eshbaugh:

I noted your change of address to Miami University after June 10. Perhaps you should note mine will change to the Department of Biology, University of Colorado, Boulder, Colorado 80302 after July 1.

We can certainly get together at the AIBS meetings. You may be interested to learn that I am chairing the symposium on "Taxometrics--Theory and Practice." You should find these papers interesting, I trust.

Looking forward to seeing you.

Sincerely,

David J. Rogers
Professor of Botany

DJR/ch

- Taximetrics Laboratory

May 16, 1967

Dr. Chilleen T. Prance
The New York Botanical Garden
Bronx Park
Bronx, N.Y. 10458

Dear Ian:

Glad you made it back in one piece. How was the trip—successful? The next natural question—any more Manihot? No hurry on that, however.

With reference to your questions on the forthcoming symposium, I'm glad you're willing to participate, and I have the following comments about your possible presentation. Since it would take much time for you to actually discuss the methods employed in terms of how they operate, I suggest that you make a statement very early in the presentation to the effect that your discussion deals with the results of the methods, not with the methodologies themselves. I would name the methods, give their source, and almost in the same breath, say that your discussion is to be empirical. If you care to, you can say that George will be glad to cover details of the statistical model and the one by Rubin with anyone in the audience who cares to have them, after the symposium is over. But I definitely recommend that you stick to the biological implications (I'm sure you would want to anyhow) and leave any mathematical discussions out. Since the title of the paper was made up in your absence, you may want to change it. There's nothing hard and fast about it, and was given only because we had a deadline to meet before we could possibly have checked with you.

There will be an opportunity to show slides, and if you have any ideas by which you can present your paper with some graphic methods, please feel free to do so. One or two good slides, without too much detail included, will help. But please do not try to pack the whole, detailed, classification of Chrysobalanaceae on one slide! I think you understand my meaning.

Best regards to Ann and the two F1s.

Sincerely,

David J. Rogers
Professor of Botany

- Taximetrics Laboratory

May 12, 1967

Dr. John Cutbill
Department of Geology
Sedgwick Museum
Downing Street
Cambridge, England

Dear John:

I think that we are close enough to the official notification of our grant for the information retrieval project to begin to think about the actual work to be done. As I recall, you had hoped to have someone to work with us during the development of the project. I hope this is still part of your thinking.

Since we saw you we have decided to move our operations from this university to the University of Colorado at Boulder, Colorado where our address will be: Department of Biology, University of Colorado, Boulder, Colorado 80302. There will be no shifts in the operation and we think that we can get ahead faster there than here.

I trust that we can look forward to some sort of collaboration and hope that you will be able to send someone interested in developing the necessary ties between us. Let me hear from you soon.

Sincerely,

David J. Rogers
Professor of Botany

DJR/ch

P.S. Are you aware of the IR meeting in Mexico City December 18-20? We (Brill and I) expect to be there. The meeting is jointly sponsored by the National Museum of Mexico and the Smithsonian, and focuses on the IR problems of large museums (musea?).

- Taximetrics Laboratory

May 11, 1967

Dr. Arnold G. Kluge
Department of Zoology
The University of Michigan
Ann Arbor, Michigan 48104

Dear Dr. Kluge:

I will be attending the International Symposium on Systematic Biology in Ann Arbor on June 14-16. One of my assistants, Mr. George F. Estabrook, would like to attend this meeting also. Would you please provide us with a registration form?

Sincerely yours,

David J. Rogers
Professor of Botany

DJR/ch

- Taxidmetrics Laboratory

May 10, 1967

Dr. Homer N. Metcalf
Dept. of Plant & Soil Science
College of Agriculture
Montana State University
Bozeman, Montana 59715

Dear Homer:

I got your letter of the 5th. I just talked to Foskett and found that while you were not one of the front runners, neither were you yet excluded from the running. I said a few words to him which may or may not be useful, but can't tell.

You asked about the conference at Ann Arbor. This seems to be a gathering of "big guns" taxonomically from around the world, both botanical and zoological but with an emphasis on the latter. I am one of the discussants on a paper to be given by an unknown in the computer taxonomy field, a young man from Harvard (natch). This conference is sponsored by the National Research Council, but why the thing is coming off now, I am not sufficiently in the higher councils to know. All I know is that it is a free trip to Michigan in June which should be pleasant.

I think things are all set for our symposium at AIBS. Have you sent in your reservations for a room yet? Not all dormitories are air conditioned and I suspect that College Station would be miserable without air conditioning. I think we will try to drive down in a car from Boulder. Would you care to join us? Let me know so that we can make arrangements.

Sincerely,

David J. Rogers
Professor of Botany

DJR/ch

- Taximetrics Laboratory

May 10, 1967

Dr. Frederick L. Wellman
Department of Plant Pathology
School of Agriculture and Life Sciences
North Carolina State University
Raleigh, North Carolina 27607

Dear Fred:

Thanks for your letter of the 5th. I am glad to know that things are forging ahead, both for the book and also for the International Center of Tropical Phytopathology. The last is indeed good news.

It is too early to make any formal notices and so forth (because we haven't been given any formal notices), but I think we are going to get the money to make the information retrieval study. If we do, we certainly want to spend some time with you people discovering what precisely is wanted from a group like yours in the way of specific information retrieval problems. I mean by that what sorts of information do you wish to retrieve and what possible combinations of information would be wanted. We hope to ask a large number of people such questions as these and once we have discovered some of the kinds of desired information retrieval systems, we will attempt to build IR systems which match the needs of varying groups.

I hope you will show this letter to Dr. Lucas so that he can get an idea what we are anticipating. More details will, of course, be forthcoming after the grant has been made.

I saw Dr. Alexander yesterday and spoke to him about you. He wishes to be remembered back.

Sincerely,

David J. Rogers
Professor of Botany

DJR/ch

- Taximetrics Laboratory

May 9, 1967

Mr. Jake Page
Natural History Press
American Museum of Natural History
Central Park West
New York, N.Y.

Dear Jake:

Some months back I sent in a manuscript on economic botany entitled "For the Life of Man." As I understand it, this passed over Dick Klein's desk and that he, having satisfied himself, forwarded it to NHP.

I have had no word on this manuscript and am wondering if it has been lost or if not lost what is the status with it. At least some notification one way or the other should be made.

I have just about got all the illustrations done for the manuscript but do not expect to turn those in until I have heard what the preliminary response is to the manuscript itself. I will appreciate some sort of reply fairly soon.

Sincerely yours,

David J. Rogers
Professor of Botany

DJR/ch

cc: Dr. Richard Klein

- Taximetrics Laboratory

May 9, 1967

Dr. M. L. Magoon, Director
Central Tuber Crops Research Institute
'Iran Villa'
Kowdiyar, TRIVANDRUM - 3
Kerala, INDIA

Dear Dr. Magoon:

Your letter of May 5th and mine of May 8th probably passed each other in air planes somewhere over the Atlantic Ocean. In my letter yesterday, I acknowledged receipt of Mr. Appan's application, that it is in the process of being evaluated by various administrative offices at the University of Colorado, and that we are certain that we have some sort of research appointment for him.

I have just noted in our files that I have sent to Dr. S. K. Sinha, Plant Physiologist at your research institute all of the publications that I have made on Manihot. I also included to Dr. Sinha a short bibliography listing a number of important references on Manihot. I would appreciate it if you could have copies made of the bibliography for other interested workers there because this is only a typewritten listing and is not published in any form. I am sending to you under separate cover copies of my other reprints for your personal file. Would you please let me know when these arrive because of the uncertainty of the mail service. If they do not arrive in some satisfactory time, I will send other copies. I would also be pleased to know whether or not Dr. Sinha received his materials (these were mailed March 24, 1967).

Best personal regards,

sincerely yours,

David J. Rogers
Professor of Botany

DJR/ch

- Taxinmetrics Laboratory

May 8, 1967

Dr. M. R. De Carlo
Division of Biology and Agriculture
National Research Council
National Academy of Sciences
2101 Constitution Avenue
Washington, D.C. 20418

Dear Dr. Carlo:

I will be pleased to have you send additional copies of our information retrieval proposal to the individuals whom you mentioned in your letter of May 3. I am encouraged that you have seen fit to do this and appreciate your efforts.

Sincerely yours,

David J. Rogers
Professor of Botany

DJR/ch

- Taximetrics Laboratory

May 8, 1967

Dr. Daljit Singh
Asst. Agricultural Commissioner
Indian Council of Agricultural Research
Krishi Bhavan
New Delhi, India

Dear Dr. Singh:

I am very pleased to have your recommendation for Mr. Appan. I trust that we will have an opportunity to have this fine young man here. I will let you know as soon as we have definite arrangements made.

Very sincerely yours,

David J. Rogers
Professor of Botany

DJR/ch

- Taxidmetrics Laboratory

May 8, 1967

Dr. M. L. Magoon
Director, Central Tuber Crops Research Institute
Trivandrum - 10
Kerala, India

Dear Dr. Magoon:

We have received the application from Mr. L. G. Appan. I am pleased to have your recommendation of him and I think that it will be possible to find a suitable arrangement for him. I do not wish, however, at this early stage to be too positive about it.

It was a great pleasure to become acquainted with you and to learn about the fine work you are doing. I trust that we will soon meet again.

Very sincerely yours,

David J. Rogers
Professor of Botany

DJR/ch

- Taximetrics Laboratory

May 8, 1967

Mr. S. G. Appan
Radha Nivas, Kumarapuram
(Near Medical College)
Trivandrum, India

Dear Mr. Appan:

Your application for graduate study with me has been received. I am very pleased to have it. As soon as possible I will notify you of the disposition of this application.

Sincerely yours,

David J. Rogers
Professor of Botany

DJR/ch

- Taximetrics Laboratory

May 8, 1967

Dr. William Bossert
The Biological Laboratories
Harvard University
Cambridge, Massachusetts 02138

Dear Dr. Bossert:

Thank you for sending the abstract. I am sending a copy of
a paper you might be interested in reading.

Sincerely yours,

David J. Rogers
Professor of Botany

DJR/ch

- Taximetrics Laboratory

May 8, 1967

Dr. M. L. Gay, Jr.
Dept. 72-14, Zone 401
Lockheed-Georgia Company
Marietta, Georgia 30061

Dear Dr. Gay:

I am sorry not to be able to provide you with very much information about XPOP other than what appears in the published literature. I am sure, however, that you can gain a considerable amount of information from the developer of XPOP, Mr. Mark Halpern, whose address is: Dept. 52-40, Bldg. 201, Lockheed Missiles and Space Co., Palo Alto, California 94304.

We intend to use XPOP as a general system on which we will build a generalized IR system. This has not yet been done. The TAXIR system will be but one output from the general system as an example of an application of the methodology for IR which we hope to make, given funds from NSF. Frankly, we are a little puzzled and would be pleased to know where you read about our methodology. The reason for quandary is that other than in a proposal to NSF we have not written down any discussions about the system. Since yours is the second inquiry, this is a little embarrassing, and I will appreciate hearing from you as to where the information was printed.

Sincerely yours,

David J. Rogers
Professor of Botany

DJR/ch

May 8, 1967

Mr. L. A. Montoya
IIICA, Oficena en Mexico
Londres 40
Mexico 6, D.F.
Mexico

Dear Mr. Montoya:

Thank you for your letter of May 4 which came this morning. We are sending you under separate cover several pieces of information on Manihot. Shall we call it yuca?

I am not at the moment able to send you a copy of the full bibliography. I have exhausted my supply and have sent off two copies, one to Mantaldo at Maracay. As soon as other copies are made, I will forward one to you.

I look forward to seeing you in Texas and hope that you will be able to visit us here in Colorado. I will let you know now that I am expecting to be in Mexico City during the week of December 18-20 for a symposium on "Information Problems in the Natural Sciences" sponsored by the Universidad Nacional Autonoma de Mexico. This seems to me to be an opportune time to make a few collections of Manihot esculenta.

I am writing at this early date to inform you of my anticipations because I hope that you can make some plans to allow me to make collections of materials of mature or nearly mature plants from the experiment station at Cotaxtla near Vera Cruz. Since I recall that your harvesting usually falls sometime in December or January, I would hope that I could plan to have a few plants of each of your cultivars in the collection available for sampling.

Please let me know if it is convenient to make these arrangements so that I may plan ahead for the trip and for the time necessary. I hope that we can get together in December.

Vgry sincerely yours,

David J. Rogers
Professor of Botany

DJR:ch

- Taximetrics Laboratory

May 8, 1967

Dr. D. J. Farber
Bell Telephone Laboratories, Inc.
Holmdel, New Jersey

Dear Dr. Farber:

If reprints of the following papers are available, I would greatly appreciate receiving a copy:

SNOBOL, A String Manipulation Language. Journal of the ACM, 11(2): 21-30, January, 1964.

The SNOBOL3 Programming Language. The Bell System Technical Journal, July-August, 1966, Page 895.

Thank you.

Sincerely yours,

David J. Rogers
Professor of Botany

DJR/ch

- Taximetrics Laboratory

May 8, 1967

Dr. Donald F. Squires
Deputy Director
Museum of Natural History
Smithsonian Institution
United States National Museum
Washington, D.C. 20560

Dear Don:

I am glad to hear of the proceedings for the symposium in Mexico. I would like to have Bob Brill participate in the technical sessions with Nick Saszynski. Any particular suggestions about Brill's participation? Will that be something of a round table or a workshop session? It might be that they could get ahead with some work if we allow them to sit down and iron out some procedures.

Sincerely yours,

David J. Rogers
Professor of Botany

DJR:ch

- Taximetrics Laboratory

May 4, 1967

Dr. George Hepting
Southeastern Station
United States Forestry Service
Asheville, North Carolina

Dear Dr. Hepting:

We have heard of your information retrieval system for forestry and wondered if there is any descriptive materials concerning your methodologies and the direction of your work. I would be pleased to receive any descriptive materials which you have available.

We hope to embark into a rather ambitious program and development of a computerized information retrieval system shortly and will be very pleased to have any ideas which you may have developed along these lines.

Sincerely yours,

David J. Rogers
Professor of Botany

DJR/ch

OFFICE MEMO

TO: CSU Post Office

Date June 27, 1967

FROM: Dr. David J. Rogers

SUBJECT: Mail to be sent to the DEPARTMENT OF BOTANY & PLANT PATHOLOGY

REMARKS: Please forward after July 1, 1967 any mail for the following individuals to the DEPARTMENT OF BOTANY & PLANT PATHOLOGY:

Dr. David J. Rogers
Mr. Henry S. Fleming
Mr. George F. Estabrook
Mr. Robert C. Brill

Thank you!!!!!!

June 29, 1967

Mr. Alvaro Montaldo
Facultad de Agronomia
Universidad Central de Venezuela
Maracay, Venezuela

Dear Mr. Montaldo:

I have just about completed a very rapid perusal of the very fine job you have done on the Manihot bibliography. I am sending along a list of corrections as I found them. I feel certain there are other corrections that need to be made. You would have to spend much time, I am sure, to be certain the references are all correct. A list of my suggested corrections is appended hereto.

It has just occurred to me that we might be able to improve this bibliography tremendously if we were able to have it done with a computer. I know that it is possible to make a very thorough cross reference index to the bibliography using the computer facilities at the BioScience Information Service of Biological Abstracts in Philadelphia, Pa. We could get indexes of authors, of subjects, of the journals where published, and any other type of index which we might deem useful.

If you think that you would be interested in having the services of BioScience Information Service to do this job, I will personally take the matter up with the director, Dr. Phyllis Parkins, who is a personal friend of mine. I feel certain that we could get very good service at a very low cost to us. Please let me know if you are interested in this possibility.

I am also enclosing a list of new references which you might like to include in the bibliography.

Please address your reply to me at the following address:
Taxometrics Laboratory, Department of Biology, Armory 101, University of Colorado, Boulder, Colorado 80302.

Once again, let me thank you for the very fine job you have done in assembling this bibliography. It is a very fine piece of work.

Very sincerely yours,

David J. Rogers
Professor of Botany

- Taximetrics Laboratory

June 22, 1967

Mr. Mark Halpern
Dept. 52-40, Bldg. 201
Lockheed Missiles and Space Co.
Palo Alto, California 94304

Dear Mark:

We have left Fort Collins, but we are sitting in Boulder with bare walls and a solitary telephone that only gets incoming calls and no secretary to answer it. For what it is worth, the number is: Area code 303, 443-2211, extension 6712. If you still have access to a Lockheed telephone, would you call us some morning soon?

We are trying to get organized now and make plans for the summer, including a trip to see you. It would be nice to know where you will be.

Keep trying to call us. Sooner or later one of us will hear the telephone ringing in the office of the non-existing secretary. If you care to write instead, the address is:

Taximetrics Laboratory
Department of Biology
Armory 101
University of Colorado
Boulder, Colorado 80302

Best regards,

Bob Brill

BB/ch

- Taxometrics Laboratory

June 26, 1967

Miss Hazel Niehaus
Administrative Assistant
University of California Press
2223 Fulton Street
Berkeley, California 94720

Dear Miss Niehaus:

I will be glad to review A NUMERICAL TAXONOMIC STUDY OF THE
GENUS SALIX, SECTION SITCHENSES. Please send it to the following
address: Taxometrics Laboratory, Department of Biology, Armory 101,
University of Colorado, Boulder, Colorado 80302.

Sincerely yours,

David J. Rogers
Professor of Botany

DJR/ch

- Taximetrics Laboratory

June 26, 1967

Mrs. Judith Prewitt
Department of Radiology
University of Pennsylvania
3400 Spruce Street
Philadelphia, Pa. 19104

Dear Mrs. Prewitt:

Enclosed are the listing, the write-up, and instructions for reading the printout for the similarity-clustering program you requested. If you have any questions in the use of these materials, please feel free to write us.

Sincerely yours,

R. C. Brill
Programmer

RCB:ch

P.S. Please note our new address given on the first page of the write-up.

- Taximetrics Laboratory

June 27, 1967

Mr. Warren Brown
Inventory Clerk
Central Receiving
Colorado State University
Ft. Collins, Colorado 80521

Dear Mr. Brown:

By July 1, 1967 my staff (Henry Fleming, George Estabrook, Robert Brill) and I will have completed moving our research project to the University of Colorado, Boulder, Colorado. Included in this transfer will be the following equipment listed on your property inventory:

<u>Description</u>	<u>Decal No.</u>	<u>Class Code</u>
Microscope Binoc B & L Stand MTD	059616	6880
Microscope Binoc B & L Stand MTD	059617	6880
Illuminator Microscope B & L	059618	6881
Illuminator Microscope B & L	059619	6881
Illuminator Mounted w/Microscope	059620	6881
Microscope Binoc CMPD B & L MTD	059621	6880
Typewriter Royal STD	031640	1920
Calculator UWD Olivetti	059615	1215
Termatrex	031651	6001

Sincerely yours,

David J. Rogers
Professor of Botany

DJR/ch

- Taximetrics Laboratory

June 23, 1967

Dr. Derek Burch
Missouri Botanical Garden
2315 Tower Grove Avenue
St. Louis, Missouri 63110

Dear Dr. Burch:

I will be glad to correspond with Dr. Theodore D. Sterling concerning the possibilities of biological examples for courses tailored for biologists. I would like, however, to correspond directly with Dr. Sterling in as much as the data we have punched on the cards is relatively meaningless unless one knows the structure of the raw data, its intended purpose, etc. I would not think it would make a meaningful type of example for him. I have several suggested alternatives.

1. That we supply a flow chart and documentation of our clustering program which is well documented.
2. That we send also a deck of data which can be run through this program.
3. That we send a completed run so that Dr. Sterling can select from this much more meaningful problems and their solutions for mathematics.
4. That we send the mimeographed notes of the course which we offer dealing with the mathematical aspects of classification.

If this is satisfactory, please ask Dr. Sterling to communicate with me at my new address after July 1, 1967:

Taximetrics Laboratory
Department of Biology
Armory 101
University of Colorado
Boulder, Colorado 80302

Sincerely yours,

David J. Rogers
Professor of Botany

DJR/ch

- Taxidmetrics Laboratory

June 23, 1967

Dr. Franklin W. Martin
United States Department of Agriculture
Agricultural Research Service
Crops Research Division
Federal Experiment Station
Mayaguez, Puerto Rico 00703

Dear Frank:

In response to your letter of June 19, perhaps it has not been clear in my correspondence to you what my role could be or should be in a potentially collaborative effort on Ipomoea. If it is your choice to proceed as you suggested in your last letter, then certainly that is the most appropriate procedure. Clearly, that which grabs you as a specialist should be the area in which we work, and ideally you should not take dictation from a computernik type as to what direction is most significant in the studies. My role should be to aid in establishing the most useful way to do computer studies on the data of interest to you. In this respect, I will be glad to follow any direction of interest to you.

I think perhaps we should consider at first only a smaller sector of the total job in order that we get our feet on the ground before a large effort is made. I think we can get some ideas about how the work will progress from a preliminary study. I have Dr. Jones' papers and would suggest that there are some data already accumulated which (with a little more added) might provide a satisfactory "test case" of the computer methods. If you are satisfied with these runs, then perhaps we can proceed to a full-blown operation. I don't believe that it is clear on what I can do and cannot do and we should proceed with caution in expending large quantities of yours and Dr. Jones' time until we have seen what we might accomplish.

If my suggestions are meaningful, then I recommend that we have a three-way face to face talk about these problems some time in the near future. I think we could probably arrange to meet at some central point convenient to all to go ahead with planning. In the meantime, I am sending both to you and Dr. Jones copies of our methodologies with the computer to give some idea of how our programs work.

I am very pleased that you have decided that we can make some reasonable collaboration.

Sincerely yours,

David J. Rogers
Professor of Botany

Dr. Franklin W. Martin

- 2 -

June 23, 1967

Enclosures: J. Theoret. Biol. (1966) 12, 297-310
Systematic Zoology, Vol. 15(1): 59-69
Use of computers in studies of taxonomy and evolution. In
EVOLUTIONARY BIOLOGY
Taxon, Vol. 16: 86-97 (1967)
BioScience 16(11): 789-793.

P.S. Please note my new address after July 1, 1967 will be:

Taxometrics Laboratory
Department of Biology
Armory 101
University of Colorado
Boulder, Colorado 80302

- Taximetrics Laboratory

June 23, 1967

Dr. Robert M. Johnson
National Science Foundation
Science Development
Division of Institutional Programs
Washington, D.C.

Dear Bob:

Thank you for sending the cutout on the Biomedical Communication Center. I will contact the people listed in that announcement.

We are indeed moving to Colorado University. Plans did not work out here in the Department of Botany as I had hoped they would, so we accepted an offer that had been standing for some time from Boulder. I will drop in to see you sometime.

Sincerely,

David J. Rogers
Professor of Botany

DJR/ch

- Taximetrics Laboratory

June 23, 1967

Program Information Department
International Business Machines Corporation
40 Saw Mill River Road
Hawthorne, New York 10532

Gentlemen:

I would like to question the final fate of a program submitted to the SHARE Library for the IBM 7044 computer through the Graduate School Computing Center, University of Colorado, Boulder. The program first submitted in March was returned for corrections. These corrections were made and the program re-submitted. I will be pleased to receive information concerning disposition of this program. For your information:

Submitter's Name: Dr. David J. Rogers
Author: R. C. Brill
Title: Similarity-Clustering Program of Taximetrics
Laboratory
Field of Application: Classification
Primary Subject Code: H5

Sincerely yours,

David J. Rogers
Professor of Botany

DJR/ch

- Taximetrics Laboratory

June 23, 1967

Mr. D. G. Coursey
Tropical Products Institute
56/62, Cray's Inn Road
London, W.C. 1, England

Dear Mr. Coursey:

With response to the communication concerning ITRIC:

1. I favor both proposals.
2. Comments:
 - (a) I suggest that a permanent information center for Tropical Products Institute be established and that further formal approaches should be made to the director thereof.
 - (b) I further recommend that connections be established between this center and UNESCO and FAO to broaden the base.
 - (c) The acronym ITRIC should be adopted for its members to facilitate ease in communication.
 - (d) I request that the committee consider the best methods of using the literature that I have accumulated on Manihot esculenta. This literature, while far from complete, represents a considerable spectrum of work done on this particular root crop. Some of the papers are no longer generally available. I would be pleased to place this literature at the disposition of ITRIC provided some permanent arrangement can be made for its care.

I look forward to further work in ITRIC.

Sincerely yours,

David J. Rogers
Professor of Botany

DJR/ch

Enc. My new Boulder address.

- Taximetrics Laboratory

June 22, 1967

Mr. Joseph C. Watkins
The University of Michigan Press
Ann Arbor, Michigan 48106

Dear Mr. Watkins:

In May, 1967 I ordered the book "Mahogany of Tropical America"
by F. Bruce Lamb. I have not received this book as yet and wonder
if you can give me some idea when I might expect it.

Sincerely yours,

David J. Rogers
Professor of Botany

DJR/ch

- Taximetrics Laboratory

June 21, 1967

Dr. Donald F. Squires
Deputy Director
Museum of Natural History
Smithsonian Institution
United States National Museum
Washington, D.C. 20560

Dear Don:

A title for Bob Brill's paper for the forthcoming conference in Mexico is: "A generalized approach to information retrieval: the BIRD and TAXIR systems."

I hope this is all you need at the moment.

You will be hearing from us shortly concerning our desired collaboration on the development of the IR project.

Sincerely,

David J. Rogers
Professor of Botany

DJR/ch

- Taximetrics Laboratory

June 20, 1967

Dr. Rafael Girard
11 Avenida "A"
8-03, Zona 2
Guatemala

Dear Rafael:

I am very pleased to have received your magnificent work "Los Mayas Su Civilizacion Su Historia Sus Vinculaciones Continentales." This is indeed a most magnificent and comprehensive work. Thank you very much for sending it.

Sincerely yours,

David J. Rogers
Professor of Botany

DJR/ch

- Taximetrics Laboratory

June 20, 1967

Refer to: Proposal N-2898

Dr. M. L. Magoon
Director, C.T.C.R.I.
Iran Villa
Kowdiyar
Trivandrum - 3, India

Dear Dr. Magoon:

From your letter of June 14, I assume that Mr. Appan has not yet received the forms that are necessary to be filled out from the University of Colorado at Boulder, Colorado. I checked yesterday and found that these forms had been sent but it is quite likely that the mailing service sent them by surface mail. If so, this would certainly explain their failure to appear by now. I think, however, that everything will be all right. As soon as I hear, I will send off notification.

Best regards,

David J. Rogers
Professor of Botany

DJR/ch

- Taximetrics Laboratory

June 20, 1967

Dr. Russell B. Stevens
Division of Biology and Agriculture
National Academy of Sciences
2101 Constitution Avenue
Washington, D.C. 20418

Dear Dr. Stevens:

Enclosed please find a copy of my discussions at the International Conference on Systematic Biology just passed. This paper is to follow Dr. William Bossert's presentation entitled "Computer Techniques in Systematics."

Sincerely yours,

David J. Rogers
Professor of Botany

DJR/ch

Enc.

- Taxidmetrics Laboratory

June 20, 1967

Dr. Jerry S. Kidd
Program Director
Special Projects Program
Office of Science Information Service
National Science Foundation
Washington, D.C. 20550

Dear Jerry:

I am sorry to have delayed so long in making comments concerning "A Proposal for the Development of a Center for Information Services Phase II: Detailed System Design and Programming." My comments are put onto a separate paper for your benefit.

The procedures listed in this proposal will be complementary to our own activities and we will certainly want to work closely with people who seem to have a good grasp of the situation.

Sincerely,

David J. Rogers
Professor of Botany

DJR/ch

Enc.

"A Proposal for the Development of a Center for Information Services
Phase II: Detailed System Design and Programming"

In general we find the proposal well balanced, conceptually sound and useful. The generalized software philosophy seems good. We approve of generality rather than standardization in the approach such as this one. Clearly the principal investigators are on their toes.

It is unfortunate that there are few or no details for hardware or software. Had there been some given in the proposal, we would have had a clearer picture of the modus operandi. Perhaps the investigators have not found it possible to give a clearer picture than they have. I would like to see beforehand a little more precise description of their procedures.

The most distressing feature to me is the setup for their budget. I should think for the amount requested considerably more detail could have been given as to how the money will be spent. It would be more of a revelation about their operation than I now have. Also it seems to me the investigators have been somewhat chary in letting us in on the personnel who will make the system fly. Such detail would help us in the evaluation of such a proposal.

My overall evaluation of this proposal is good. The usual scale of research proposals of 1 to 5, where the lower numbers are the higher ranks, I would put this one between 1.5 and 2—excellent to good.

- Taximetrics Laboratory

June 20, 1967

Dr. Harlan P. Banks, Treasurer
Botanical Society of America, Inc.
214 Plant Science Building
Cornell University
Ithaca, New York 14850

Dear Dr. Banks:

Please note our change of address on July 1, 1967 from
Department of Botany and Plant Pathology, Colorado State University,
Fort Collins, Colorado 80521 to the Department of Biology, Univers-
ity of Colorado, Boulder, Colorado 80302.

I am sorry that I neglected so long in paying my dues. It
was strictly an oversight.

Sincerely,

David J. Rogers
Professor of Botany

DJR/ch

- Taximetrics Laboratory

June 19, 1967

Dr. Clery G. Salazar
Departamento de Horticultura
Facultad de Agricultura
Universidad de Puerto Rico
Mayaguez, Puerto Rico 00708

Dear Dr. Salazar:

I am sorry I cannot send you the paper you requested "A
computer-aided morphological classification of Manihot esculenta
Crants" as this is a mimeographed paper and has not been published
yet.

Sincerely yours,

David J. Rogers
Professor of Botany

DJR/ch

-- Taximetrics Laboratory

June 19, 1967

Miss Alo Ghosh
c/o Mr. Byomkesh Ghosh
5, Townshend Road
Calcutta-25, India

Dear Miss Ghosh:

I have just written to Dr. Biswa Ghosh with the unfortunate news that I do not now have sufficient funds for your travel and expenses to do graduate work with me. However, I suggest that you make application now to the following address requesting forms for application for graduate studies:

Chairman, Department of Biology
University of Colorado
Boulder, Colorado 80302

This will take some time to accomplish and you will probably need at least a years time to make satisfactory arrangements for admission to the graduate program.

I suggest the above in order that you may have the opportunity (although there is no certainty of this) to do graduate work one year or two years from this date. I strongly recommend that you make application to the Rockefeller Foundation. The address is as follows:

The Rockefeller Foundation
Agricultural Program
111 West 50th Street
New York, N.Y. 10020

In that letter I recommend that you set forward your desires to do advance studies on Manihot esculenta. And in that letter you may use my name as a reference indicating to the Rockefeller Foundation that I suggested that you approach them for funds to carry your research and studies forward under my direction at the University of Colorado.

Miss Alo Ghosh

- 2 -

June 19, 1967

I am sorry that we cannot immediately offer you funds but under the best circumstances it would take at least one year to make the arrangements. I trust that you will carry forward the above recommendations.

Sincerely yours,

David J. Rogers
Professor of Botany

DJR/ch

- Taxometrics Laboratory

June 19, 1967

Dr. Biswa Nath Ghosh
c/o H. D. Ghosh
E-33, B.E.L. Estate
Bangalore-13, India

Dear Dr. Ghosh:

Between the time of your visit here and your letter written from India on the 3rd of June, I had expended my last funds for students. Therefore, I am very sorry to report that there is no opportunity through my efforts to assist Miss Alo Ghosh to come to this country this year. I will write to Miss Ghosh explaining to her that this year there are no funds and ask if she will be kind enough to consider either next year or the year following.

In the meantime, I am recommending that she make application to the Department of Biology, University of Colorado for admission as a graduate student. This will take some time and I do not believe that from this date it would be possible to finish up the necessary applications before the beginning of the next school year.

I am very sorry not to be able to support her application financially now and only hope that we may work out some useful arrangements either next year or the following one. Please be assured of my interest, and I must apologize for not having sufficient funds to carry this student along.

Sincerely yours,

David J. Rogers
Professor of Botany

DJR;ch

- Taximetrics Laboratory

June 8, 1967

Dr. Hugh Cutler
Missouri Botanical Garden
2315 Tower Grove Ave.
St. Louis, Missouri 63110

Dear Hugh:

I'll take the 10 or 15 minutes. Sorry I wasn't in on
the planning of this.

Sincerely,

David J. Rogers
Professor of Botany

DJR/ch

- Taximetrics Laboratory

June 6, 1967

Mr. H. R. Webb
Conference Secretary
CSIRO
372 Albert Street
East Melbourne, Australia

Dear Mr. Webb:

Thank you for your telegram. I am sorry I cannot accept the invitation to present a paper at the Vith International Biometric Conference. Other arrangements have already been made.

Sincerely yours,

David J. Rogers
Professor of Botany

DJR/ch

- Taximetrics Laboratory

June 2, 1967

Dr. Howard Irwin
New York Botanical Garden
Bronx Park
Bronx, New York 10458

Dear Howard:

The reprints of our paper came and it looks great. The only thing that I suggest that we do next time is that we include the $S(1,1)$ values for the different levels on the fold out. As you know, we have a pretty large number of reprints of it and I would like to coordinate my sending them out with you. Do you have some sort of standard list of people to whom you expect to send copies? I doubt that we will overlap very much but we might as well coordinate it if we can.

Nothing new or different has developed. Things are still on track for our symposium in Texas in August, and our move to Boulder is all arranged. Henry, George and Bob have moved down already and I will join them July 1.

Somebody, I think Bob Breach, sent me a Xerox of a page from the annual report where Bill said that we had wiped out NYBG's interest in computing. That was an interesting comment.

Sincerely,

David J. Rogers
Professor of Botany

DJR/ch

- Taximetrics Laboratory

June 2, 1967

Dr. Marshall C. Johnston
University of Texas Herbarium
Biological Laboratories Building
The University of Texas
Austin, Texas 78712

Dear Dr. Johnston:

The specimens have arrived and the green sheet is signed and enclosed herewith. I am pleased to have these specimens. I will proceed with the write-up and it should not be too long before you have the rough draft copy.

I would indeed be very pleased to have cytological materials of Manihot mexicana ssp. Walkerana. We can certainly improve our knowledge of the group with this.

I hope that I will be able to stop by Austin on the way to the AIBS meetings and get a first hand look at the specimens you have growing there.

Sincerely,

David J. Rogers
Professor of Botany

DJR/ch

Enc.

- Taximetrics Laboratory

June 1, 1967

Data Processing Magazine
134 N. 13th St.
Phila. Pa. 19107

Dear Sirs:

Please insert the following classified ad in your Employment Opportunities section of the Data Processing Magazine.

EXPERIENCED PROGRAMMER to assist university research team in building large scale biological information retrieval system. Work in Boulder, Colorado, nestled against the foothills of the Rocky Mts. Near Denver, skiing, hunting, fishing and camping. Salary starts at \$9,000. Write Dr. David J. Rogers, Taximetrics Laboratory, Dept. of Biology, University of Colorado, Boulder, Colo. 80302.

Please send the bill to us at the address given in the ad. Thank you.

Sincerely yours,

David J. Rogers
Professor of Botany

DJR/ch

- Taximetrics Laboratory

June 1, 1967

Dr. Adrian R. Chamberlain
Vice President for Administration
Colorado State University
Fort Collins, Colorado 80521

Dear Dr. Chamberlain:

We have decided to accept the offer from the University of Colorado commencing there July 1, 1967. Our decision to move is dictated by the opportunity to enhance our ability to produce. We will be members of the Department of Biology.

We would like to have your approval to transfer the following equipment purchased on GM 13974, National Institute of Health grant:

- 2 Bausch & Lomb No. 31-26-94 power pod with zoom head from 7X to 3X
- 2 No. 31-26-19 2X adapter
- 2 No. 31-26-96 stand heavy duty with upright and cross arm
- 2 No. 31-26-59 arm with prot for Nicholas illuminator
- 2 No. 31-33-53 lamp 6V with transformer
- 2 No. 31-05-63-02 20X wide field lenses

- 1 Royal Standard Manual typewriter with mathematical keys
MCS 138036371
- 1 Olivetti Ivrea-Tetractys Calculator D94750

Thank you.

Sincerely yours,

David J. Rogers
Professor of Botany

DJR/ch

- Taxometrics Laboratory

June 1, 1967

Dr. Askeff Löve, Chairman
Department of Biology
University of Colorado
Boulder, Colorado 80302

Dear Askeff:

This is a letter of recommendation for Henry Fleming. Henry has worked for me for six years as a taxonomist and computer specialist. The fact that he is with me now is a recommendation in his behalf.

Sincerely,

David J. Rogers
Professor of Botany

DJR/ch