UNIVERSITY MUSEUMS UNIVERSITY OF MICHIGAN - -Ann Arbor, Michigan

MUSEUM OF ZOOLOGY

#### February 14, 1930

Dear Dr. Merrill:

I am very eager to have the place as botanist for the Roerich Museum. Tho my energies have been devoted principally to work on fishes and birds, I have been strongly interested in plants. I have been an experimenter for the Bureau of Foreign Plant Introduction for several years and have collected plants in north Greenland and New Mexico.

The work in Greenland was done for the National Geographic Society in the MacMillan Arctic Expedition of 1925, and I have since been invited by both the National Geographic Society and Captain MacMilan to accompany other expeditions as naturalist.

I have no knowledge of Asiatic languages other than Chinese, which I am studying with a tutor, but I can use freely five European languages, and it should not be difficult to acquire a sufficient understanding of other needed tongues. I believe 4 may also say that I have had success in dealing with foreign peoples, notably Eskimos and southwestern Indians, and I am perfectly capable of taking care of myself in the woods. I am strong and have, I believe, unusual capacity for work.

I want the place very much and I should be glad if you would let me send you recommendations of my ability as a collector. I understand from Professor Bartlett that he has already written you about my qualifications. He expressed himself as much pleased with my botanical work when it was only a secondary interest, and I believe that if I were devoting my chief attention to plants the results would be quite satisfactory to the Museum.

Very sincerely yours,

(SIGNED) Walter Koelz

COPY.

#### COPY

Dr. Walter Koelz, Himalayan Keserch Institute, Kulu Nagar, Punjab, India.

May 13, 1931

Dear doctor Koelz:

I enclose herewith another suuuplmentary list of your Lahul collection covering the <u>Scrophulariacea</u> and a few other small families. This will be followed as soon as possible my other lists. There is only one large group remaining the Composite, and I am temporarily held up on this because we have as yet not had time to assemble and arrange our Oriental material.

I received your note in response to my first criticisms of your collections and I think that it will be clear to you, just what I received, from the list I enclosed in my last letter. I realize that you have much to do and that you have to depend on native assistance in arranging your material.

I would repeat my recommendation, that as far as possible in your future field work, you attempt to secure comprehensive collections with rather abundant duplicates. This will enable you to make the "study collection" rather more complete so that in case of necessity I can divide my specimens and secure the services of specialists in critical genera. If you follow this general plan you will thereby also have much avaialble material for distribution to other institutions and for exchange.

The literature of India botany is very great. The fundamental work that you should secure, over and above all of these, is Hooker's Flora of British India, seven volumes. For the woody plants of your area you will find Parker's "A Forest Flora for the Punjfb with Hazara and Delhi" a very useful work. This is printed by the Superintendent, Government Printing Office, Lahore, Punjab, Second Edition, 1924 and the price is only Rs. 9-0-0.

There is an older book by Stewart, published by the same Press in 1869, entitled "Punjab Plants" which will also be useful, and still another one by Bamber "Plants of the Punjab" 1916, also published by the Government Printing office, Lahore. In case the last two are out of print, you could probably secure copies through Thacker Spink & Co., Calcutta, or Mr. R. N. Parker, at the Forest Research Institute, Dehra Dun, can advise you. The records of the Botanical Survey of India should be available although I do not know whether or not it includes this publication or papers appertaining to your particular region. Full information regarding this can be secured from the Director of the Koyal Botanic Garden, Subpur, Calcutta, India.

## Dr. W. Koelz

Some time when you have the opportunity, I would strongly recommend that you make a trip to Dehra Dun in order to confer with Mr. Parker who can be of very great assistance to you and in order to familarize yourself in general with the literature there available pertaining to the flora of northwestern india.

I judge that you will not attempt, at the present time, to secure many sets of periodicals but rather that you will attempt to secure some of the more important individual volumes pertaining to the flora of British India and more particularly the flora of the Himalayan region.

Out-of-print books can best be secured through dealers in botanical literature in England and in Europe and Mr. Parker can give you addresses of some of the more reliable firms, or I can supply them to you if you so desire. In making a request for an out-of print book it is of course best to secure a quotation in advance, because some of them are very expensive; on the other hand, other old books that are really essential are relatively inexpensive.

One publication that occurs to me that would be of definite value to you, if you can secure a copy, is Watt Dictionary of the Economic Products of India. This is unfortunately out of print and is, I believe, rather difficult to seucre but it contains a great mass of economic data pppertaining to the names and uses of Indian plants.

Now that I have actually made a start on the identification of plants from your region, I think I can handle future sendings with very little delay. It of course takes a considerable amount of time for one unfamiliar with the flora and its literature to gain the necessery working knowledge. In making the supplementary identifications of your plants, I have of course gone a long way in mastering the literature appertaining to your particular region.

Yours very truly

E.D. Merrill Director-in-Chief

EDM.HS

Naggar, Kulu, Punjab May 30, 1931.

Dear Doctor Merrill:

Your note was transmitted thru Dr. Roerich. I am sorry you have had such trouble with the plants, but there isn't anything I can do to remedy it now. The sets were not made up by me, and most of the duplicate material has been disposed of. I did not examine the sets, knowing that most species were represented by two numbers and you would therefore get at least 2 specimens of a species. I gather, however, from your memorandum that you do not want a species twice, even from a different locality, but rather fuller specimens from one. - As for sterile specimens, only in 3 or 4 cases were such collected. Is it possible that the flowers or fruits were broken off in transit? I never heard how they were received. And one thing more about collecting here: grazing is so heavy that an indefinite quantity of material is not to be found. In many cases the only good material is found in some tiny ravine that the goats can't climb into. Again, after a species is confined to a few square rods of such a ravine on top of a mountain 25 miles from camp, and if not fully in flower, I should have to spend a few days at some later period in order to collect it in proper bloom. That accounts for the imperfectly developed fruits and flowers you got in a few cases. Such matters can be remedied later on, of course.

I am very much obligated to you for the help and interest you have shown. As time goes on, I shall not be such a burden, I hope, but just now, my only literature is Hooker and Prof. Parker will not do anything. A Dehra Dun investigator was here a few days ago and in explanation of the disregard for my letter said that Professor Parker as a matter of practise never answers letters. I had expected that for a set of plants they would undertake determinations that for them would be easy, but perhaps they don't want a general herbariun. - I leave in a day or two for Ladakh, to return in fall.

Very Sincerely,

(Signed). W. Koelz.

# The New York Botanical Garden

Bronx Park

New York, N. Y.

Telephone Sedgwick 3-3200

August 13, 1931

Dr. Walter Koelz Urusvati Himalayan Research Institute of the Roerich Museum Naggar, Kulu, Punjab India

Dear Dr. Koelz:

I enclose herewith some rough notes on essential publications appertaining to the flora of India. You should, by all means, secure a copy of Blatter's Bibliography which will give you all, or most, of the really essential titles; this was published in 1911.

Most of the works that I have listed on the enclosed sheets are standard but out of print and can be secured only through dealers in secondhand books. You may be able to secure some of these from Thacker, Spink & Company, Calcutta, but, for the most of them, I think that you will have to depend on European dealers. I should advise you to send a list of those you desire to two or three dealers in secondhand books and ask them to give you quotations rather than order direct; it is never safe to order a secondhand book without first getting a quotation on the price.

I suggest Dulau & Company Soho Square, London, Heffer & Sons, Cambridge, England, as reliable firms that would be glad to give you estimates. Probably most of the titles I have indicated are carried in stock by some dealer in botanical literature and when any one firm receives an order for a book that they do not have, they at once communicate with other dealers in the same type of literature.

Very truly yo irector

EDM/GMS (Enclosure) COPY

September 21, 1931

Dr. Walter Koelz <sup>U</sup>rusvati Himalayan Institute of the Roerich Museum Naggar, Kulu, Punjfb, India.

Dear Dr. Koelz:

This personal letter is written in connection with the official one I have forwarded today, appertaining to the identifications of your botanical material. I found when I came to sort the specimens that the study set showed little improvement over the material sent in the first shipment. In general, the specimens are well prepared, although some were very small and some were distinctly "scrappy". The chief criticism I have to make is in reference to the inadequacy of the material as in practically no case was it possible for me to divide the specimens in order to secure the cooperation of specialists. Wherever the services of specialists can be secured, this is most desirable as their identifications would be much more authentic than those that I make in groups with which 1 have little familiarity. 1 would therefore urge you in future sendings to make a serious effort to supply a particular ample study set. In many families there are no specialists, and in these cases 1 will have to do the best I can with the material. There are, however, specialists in many groups who would be perfectly willing to identify material for a set of specimens; thus 1 could secure Hitchcock's identifications in the grasses; Kukenthal's in Cyperaceae, including Carex; Johnston's in the Boraginaceae; Pennell's in Scrophulariaceae; Dunn's or Epling's in Labiatae; Alston's in Selaginella; Copeland's and Christensen's, ferns; Markgraf's, Compositae; Burkill's, Dioscorea; probably Ames', Orchidacese and so on for numerous other families.

On the whole, I did much better with this list of identifications than I had anticipated when I commenced studying the material; this was due in part to my better familiarity with the literature appertaining to the region, and further because now all of our oriental material is segregated and is readily available for purposes of consultation. However, the herbarium of The New York Botanical Garden is particularly weak in collections from British India. It is, of course, exceedingly difficult to make identifications in critical groups on the basis of descriptions alone. I am endeavoring to build up our reference collections from India, but material comes in rather slowly. In many cases it would be highly desirable to send special specimens to Kew and to other institutions, for direct comparisons with types.

## Dr. Walter Koelz

I am quite willing to continue this work of identifications of your current collections but my work would be much more satisfactory to you and to myself if I could have, as far as it is possible for you to supply material, a rather more ample study set.

I find difficulty in reading the carbon copies of a considerable number of your field labers. I suspect that the difficulty is due to the fact that you have used a gummed label so that the carbon impressions are distinctly faint. I would suggest that you abandon the use of these gummed lables. Further suggestions for improvement occur to me in that frequently local names would be of distinct value to me in checking identifications and in furnishing clues to identifications in groups where my knowledge is comparatively limited. It would be desirable also to add economic notes, and especially when specimens are taken from cultivated plants this fact should be noted.

Very truly yours

E. D. Merrill

Director

RDM/GMS

# The New York Botanical Garden

Bronx Park

New York, N. Y.

Telephone Sedgwick 3 - 3200

January 8, 1932

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Himalayan Research Institute of the Roerich Museum Naggar, Kulu, Punjab India

Attention of Dr. Koelz

Dear Dr. Koelz:

I enclose herewith a list of identifications of the cellular cryptogams included in your last sending, as far as the specimens can be identified. You will note that Mr. Williams has indicated one moss as new, and in connection with this material has recently prepared descriptions of two other new species from the first collection sent; one dedicated to Dr. Roerich, and one dedicated to you.

Very truly yours

Meriel E. D.

Merrill Director

EDM/GMS

(Enclosure)

### Naggar, Kulu, Punjab January 30, 1932

Dear Doctor Merrill:

Things here have suddenly taken a disagreeable turn. The organization has, a few days after approving my plans for rounding out the field work next summer so that a presentable report could be made, suddenly dedided to send me to New York on March 10 from Bombay. I am to leave a representative of all collections here and go to New York to write a report on what may be left. I have virtually no duplicates of the first seasons's plants and to split a bird collection before it has been worked, is unthinkable. Furthermorem what can I do in New York? As you have said repeatedly and as I understand perfectly, most of the plants can only be identified by the expert, nor can anything be done with the birds outside of London where the Indian collections mostly are. By the time the determinations come back, a year will have passed.

And to be suddenly stopped at the end of two seasons when my contract called for three leaves me with virtually nothing to report. The British have published bird lists of every place I have even visited and only by comparing the material can anything be done. There is also a plant list of Lahul. I have'nt seen it so I don't know how much I can add but my Lahul collections haven't been intensive enough to warrant revision of a list that is fairly good. This summer's collections in Rupsu, Ladak and Zankskar may be worth a paper. I don't know the literature. The other areas, Kulu, Rampus, et al, have been explored in a desultory fashion.

I intended next summer to complete the Lahul collections and to finish a study of the folk uses of plants. (The people use a large percentage of the plants). Then I would have made a visit to the areas adjoining the field of last summer's explorations. One of these Sections Rupsu was visited in early spring, Ladak in mid-summer and Zankskos in fall so I don't know much about the flava. The whole purpose of my work has been to build up as large an Herbarium in as short as possible a time in order that there might be a named collection available for other uses.

My contract calls for field work in the Himalayas but I am willing to do anything if I can see where scientific results can be obtained. If I come to New York I shall only be marking time for a year and that is not to be considered. They havent even consulted me on the time required to sort the material but sent a peremptory order to sail March 10, assuring me my work wont take long. I have 4000 birds to identify (the bird collection has'nt been touched since I have been here) and some 1700 plants to label and 1500 to mount, to say nothing of my private affairs. I had bot lumber for building a house and have negotiations with the Government for land that cant be completed by March.

I hope you have not advised them in this course. They don't understand that scientific work cant be done by dictation, more especially in absence of knowledge of material available. Surely no one can force me to publish something that I don't consider worth publication.

I don't want trouble and have tried to prevent it. I even told them if they would give me an extra month I would go to N. Y., for the purpose of seeing if you could show me the possibility of doing anything with my material. But they have refused that.

I am sorry to add that the people here are not honest and I fear are capable of doing what suits best their interests. I can see no other object in their treatment of me than to get rid of my line of work. They said they were willing to terminate the contract.

I have written to Professor Bartlett giving him a copy of all correspondence to date of writing, leaving it to his judgment as to whether you should see it. I think now that, since you recommended the organization, you should have an opportunity to judge in how for your recommendation was justified. It will not be easy for me to lose employment at this season and unexpectedly, but to stay in N. Y. doing nothing is hardly more preferable.

I don't know whether I shall be able to sail on March 10, but I shall be grateful if you will cable your advice. I should have to start for Bombay around the 5th.

I must add that no personalities have been involved in any way. After the first discussion on Dec. 26. I saw that it would be safer to say little and since then we have met daily at lunch without a mention of business matters.

If you can finance in any part my plant collecting this summer it will help me greatly, provided I stay.

I am sending copies of letters that Bartlett has'nt. I am sorry to bring so disagreeable a matter before you.

Very sincerely,

Walter Koelz

Naggar, March

THE NEW YORK BOTANICAL GARDEN BRONX PARK (FORDHAM BRANCH P. O.) NEW YORK, N. Y.

PRESIDENT HENRY W. DE FOREST VICE-PRESIDENTS HENRY DE F. BALDWIN JOHN L. MERRILL DIRECTOR-IN-CHIEF DR. ELMER D. MERRILL ASSISTANT DIRECTOR DR. MARSHALL A. HOWE

TREASURER JOHN L. MERRILL ASSISTANT TREASURER HENRY DE LA MONTAGNE, JR.

February 16, 1932.

Dr. W. Koelz, Himalayan Research Institute, Punjab, India.

Dear Doctor Koelz: -

I received your note a short time ago, regarding collections made in Thibet, and naturally am very much interested in what decision will be reached in reference to making the identifications of this material. As you know, I am not a specialist on the flora of the region in which you are working but have tried to do the best I could with the material. It is, as you readily understand, im-possible for any one individual to be a specialist on all groups of plants. What is really needed here is a more ample study set without regard to what individual or what institution makes the identifications. The specimens should be sufficiently ample in each case so that before mounting they may be arranged in natural groups and the individual specimens divided wherever necessary, in order that material can be supplied to individuals thoroughly qualified to make determinations in critical groups. As I have explained to you in previous letters, I need the services of a specialist in such crit-ical families as the Gramineae, the Cyperaceae, the Scrophulariaceae, certain genera of the Leguminosae, and in other families. The ser-vices of such specialists are available but to secure their assistance one needs to be in a position to supply each individual with a set of specimens that he can retain for his own collection. Naturally, we desire to retain a complete set at The New York Botanical Garden for future reference purposes. The problem could very easily be solved if the study set could be made particularly ample so that in the majority of cases the specimens sent for identification could be divided, thus allowing us to retain one at New York and supply a reasonably ample specimen to the specialist involved. This is the policy that I followed in all the years of my Philippine service, that is, wherever the services of a specialist could be enlisted he was supplied with complete duplicate sets in return for his identifications, and he was given full discretion as to what, when and where he should publish. If I continue this cooperative work with the Himalayan Research Institute I would like very much to develop the sympathetic cooperation of such specialists as are available in Europe and in America.

If Dr. Roerich decides to send study collections to other institutions, I sincerely hope that it will still be possible for you to supply at least partial sets of duplicates to the herbarium of The New York Botanical Garden. I find that the Roerich Museum in New York is much interested in the progress of this botanical work

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and I have cooperated with the Museum in reference to preparing exhibits at the Museum and also in reference to preparing data for publicity purposes. Personally, I should be very glad indeed to continue the work.

Very truly yours,

EDM-HS

E. D. Merrill Director.

En Merrill

### COPY

July 27, 1932.

Dr. Walter Koelz Urusvati Himalayan Research Institute of the Roerich Museum Naggar, Kulu, Punjab India.

Dear Dr. Koelz:

Responding to your letter of May 30, the general criticisms that I made of your first collection were, of course, intended for your own guidance in reference to possible future work. I have followed this general policy with my collaborators in the past, because after all one learns largely from experience, and my idea in writing to you as I did was merely to indicate possible improvements in future sendings. I realize, of course, that not infrequently, owing to reasons that you indicate and others, that it is impossible to secure ample material and that under such circumstances one has to do the best that he can.

In reference to sterile specimens, it may very well happen that flowers or fruits were lost in the process of poisoning and mounting; on the other hand, it is more probable that whoever made up the set of duplicates failed to select proper specimens; the percentage of sterile specimens in the first sending was negligible. The material was well packed and came through in good condition. In some cases, as I think I indicated in previous correspondence, there were labels with no specimens, and, on the other hand, specimens with no lables, but, again, the percentage of such cases was very small.

Please do not misinterpret me in reference to sending the same species twice or more; it is highly desirable, from my standpoint, that we receive as complete a series as possible for it is a very simple matter to eliminate material from permanent collections after a species has reached what might be considered too great a representation. Different collections of the same species made at different times in various habitats are distinctly important as such material gives us an idea in range in variation, and range in habitat and altitude that can not be gained from single collection. Therefore in sending material for identification I wish that you would attempt to include as complete a representation of all numbers collected as possible.

I shall in the very near future be able to commence the actual identifications of your last sending and think it highly probable that I will send you lists of identifications by families as I complete my work on individual groups rather than wait until I shall have had time and opportunity of examining the entire collection.

Very truly yours

E. D. Merrill Director-in-Chief

EDM/ GNS