



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

The Hunt Institute is committed to making its collections accessible for research. We are pleased to offer this digitized item.

Usage guidelines

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

Statement on harmful and offensive content

The Hunt Institute Archives contains hundreds of thousands of pages of historical content, writing and images, created by thousands of individuals connected to the botanical sciences. Due to the wide range of time and social context in which these materials were created, some of the collections contain material that reflect outdated, biased, offensive and possibly violent views, opinions and actions. The Hunt Institute for Botanical Documentation does not endorse the views expressed in these materials, which are inconsistent with our dedication to creating an inclusive, accessible and anti-discriminatory research environment. Archival records are historical documents, and the Hunt Institute keeps such records unaltered to maintain their integrity and to foster accountability for the actions and views of the collections' creators.

Many of the historical collections in the Hunt Institute Archives contain personal correspondence, notes, recollections and opinions, which may contain language, ideas or stereotypes that are offensive or harmful to others. These collections are maintained as records of the individuals involved and do not reflect the views or values of the Hunt Institute for Botanical Documentation or those of Carnegie Mellon University.

About the Institute

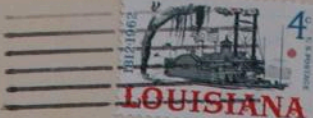
The Hunt Institute for Botanical Documentation, a research division of Carnegie Mellon University, specializes in the history of botany and all aspects of plant science and serves the international scientific community through research and documentation. To this end, the Institute acquires and maintains 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.



WESTERN MONKEY-FLOWER (*Mimulus pauciflorus* DC.)
In moist soil, often near springs and streams, of west-
ern North America, from Alaska and Saskatchewan to
California and northern Mexico.
From the Smithsonian Institution's collection of wild-
flower paintings by Mary Vaux Walcott, No. 3137.

July 16 (Square) 25 JUL 1962



PUBLISHED BY THE SMITHSONIAN INSTITUTION

ADDRESS

Dear Dr. Van Schaack Thank
you for the interesting
paper on *Fleming's* Prints of Missouri Botanical
5 Centuries. I am glad to
add it to our library. The City Art Museum
plates are beautifully printed.
Thanks again Sincerely
Agnes Chase

Dr. George B. Van Schaack
Missouri Botanical
Garden
St. Louis
Missouri



Thanks for enclosure on Rainbow Bridge

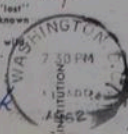
FRANKLINIA (Franklinia alatomaha Marshall). A "lost" species, collected in Georgia in 1765 but now known only in cultivation.

From the Smithsonian Institution's collection of wild flower paintings by Mary Youx Walcott, No. 244.

April 18, 1962

Dear Dr Van Schaack

Thank you for your kind greetings. I'm still working in the grass herbarium but do not seem to be getting much done - this species index has no end, naturally. Gratefully
Agnes Chase



ADDRESS

Dr George R VanSchaack
Missouri Botanical
Garden
2315 Tower Grove Ave
St. Louis 10
Missouri

5403 41st St, Friday night

[Sent 27 Aug 1958 - envelope discarded]

Dear Dr. Van Schaack,

Your letter of the 11th came the 13th and the 20th came a package with a copy of East of the Andes and West of Nowhere. Is this "for keeps?" I am reading it all over again till all hours. I bought it some years ago and then used it for a Christmas gift, as I often do, enjoying the gift myself and avoiding "going broke" at Christmas. I'll keep this unless it is a loan and thank you ever so much. I knew the author's father in Dept. Agriculture and happened to be studying at the Delessert Herbarium in Geneva when Dr. Fairchild was there too. He was a most interesting man--have you read his books? The one on the Gardens of the East Indies (that isn't the correct name)--it was on a Chinese junk/a group of naturalists sailed around the East Indies--ended by the world war.

I am very anxious about the way matters have been going for grasses! Work has been piling up since Sohns left and no help in sight that I can see. I do not recall the "arrangement we spoke of" except my anxious hope that you ~~you~~ would come. I wish that arrangement could be made. To add to our anxiety Dr. Swallen had a slight stroke the middle of June and did not come back to work for a month and now works 4 days a week. He is warned not to become fatigued. It is most fortunate his wife is the very capable person she is. *She is chief clerk, secretary, stenographer, etc.*

Dr. Black's death added greatly to our work. He was to have come back in the fall and stay to finish his revision of Axonopus. Dr. Swallen turned the mss over to me because I had worked on that genus. Black's arrangement was very different from mine, but I went over the mss with the specimens, checking as I would a mss of my own. I had gone over a carbon after he left and sent it to him with various suggestions and he agreed to all of them--that was a

comfort when I ~~effelt~~ felt I had to make some changes--all pubescence was "hairy" for example. I checked the bibliography, types, synonymy, and cited specimens. The subgenus Cabrera had not been worked up, so I suggested that Axon. proper be published as Black's work and the Cabrera subgen. be made a supplement. Then Swallen took the mss. and about Christmas, checked geographic names, the Latin, and read it all. I think he had not finished Cabrera when he suffered the stroke, and of course he had had no time since. He is only 55, so I hope he will recover completely. An assistant is badly needed. I suggested getting a youth to train as Dr. Hitchcock taught him. No college in the country, unless Univ. Illinois, pays much attention to taxonomy--they are all doing chromosomes (without having their species determined) or epidermal cells or the like. Some 2 or 3 years ago Swallen made known that he had set aside a case for those working on chromosomes to deposit specimens of the plant from which they obtained their chromosomes, so that others could consult it. I think that Stebbins^{is} the only one who has sent his material.

I feel sure there is no place where taxonomic work on grasses can ~~be~~ be done to such advantage as here. All the types segregated, in order and indexed; the index to all names of grasses, species, subsp., vars., subvar and forms they are a burden but can't be disregarded. There are many notes in the herbarium on all sorts of work done that save no end of time. The

work Dr. Hitchcock did in European Herbaria, and mine in Vienna, Pisa (Baddi) Delessert, Berlin, Munich, Brussels, Kew, Caen (now destroyed) a tragedy-- there is no place where one could work to greater advantage. And I am 89! Minful of all the work Dr. Hitchcock put into this herbarium, putting names on a type basis, and the library he built up, and all the indexing I've done (adding to the library, too) it is tragic that it seems to be headed for neglect. Please tell me what was the arrangement we spoke of. Sohns, bless his heart, is going to come to the herbarium tomorrow -- Saturday, to get down grasses from the third tier, where some needed duplicates are. We have been sending out some of our accumulation of Brazil grasses. // I have named hundreds of Paspalum, sent by IAN (Black's institution) and some others.

Aug. 26 - The foregoing was typed on the typewriter Dr. Swallen and I bought for copying the index cards. These were done here at home by a former librarian, Mrs. Van Eseltine, who had done similar work for her husband, Glen

3

Cornell

Van Eseltine, Geneva Expt. Station, of ~~Syracuse~~ University,
where (he had formerly taught, ^{at Syracuse}). The Vans adopted me for
an Aunt, and I am grandma to their children. Glen
died suddenly in 1938, and Florence became librarian of
public schools of Geneva. In 1954 she retired, bought half
this house and we have a home together. Her second
son Dr. William Van, his wife and two children 3 and 5
were here for a visit - left yesterday. He is teaching (and
doing research in) bacteriology in Univ. Georgia, Athens, Ga.
- That is why I did not finish this letter. The awful typing is
because this is not my old machine - and I am not fam-
iliar with this one. Florence has typed the endless cards
of the grass index, finished now except current publi-
cations, of which there will be no end. It is appalling
the careless way botanists (!) publish names, but how-
ever bad, they must be indexed or they may invalidate
names published by serious workers. It happens that
I had occasion to inform Mr. Hubbard of Kew and later
Dr. Bor of Kew Gardens that ^{their} proposed names ^(one each) were
pre-occupied. Index Kewensis, of course, does not index sub-
specific names, does not cite type specimens, as we do, and
seldom cites basis of transferred names. Our index is the only
one that includes subspecific names - and there are

thousands of them. I hope that serious taxonomists will
will use this index to check their work before publication.

This is an unforgivingly long letter to bore you
with, but you and Solms are the only ones who appreciate
the exceptional value of this herbarium, with its
indexed types, library, generic and specific-subspecific
index - even a biographical ~~index~~ set of cards on
botanists, by no means as complete as the one in N. Y.
Herbarium, but helpful.

Thank you again for the pleasure I had in
reading *East of the Andes*. Recently I have been
placing some of my books (and buying some) in the
(Grass part of) the herbarium, for reading for staff members.
(Darwin, Wallace, Humboldt and recent book on him by de Terra
- Gray, Life and Letters; Hooker, Wallace, Wm. Bartram Travels, and
others. Sears, Edwin Anderson and others. I am mindful
of my 89 years and terribly anxious to work on *Paspalum*
of South America, about half in typed ms. If you
can't come here can't you inspire an earnest student
with a love for grasses? It is a great comfort that
you yourself appreciate them. I forgot to tell you Smith-
sonian is to publish First Book with addition I recently prepared
on land building, etc, to come out this fall I think.
Thank you again. Sincerely Agnes Chase

August 11, 1958

Dr. Agnes Chase - Research Associate
Division of Grasses
Smithsonian Institution
United States National Museum
Washington 25, D. C.

Dear Mrs. Chase:

I am very glad to hear from you this morning about the two grasses which I recently sent you and to learn that we are in agreement about the *Microstegium*.

You must not apologise for delaying your replies for I know how very busy you are.

I have been wondering ever since we met last June, how matters have been going for the grasses since then. However, I wish that the arrangement we spoke of could be made.

I, too, regret that your nephew does not live nearer St. Louis for I am sure I should enjoy knowing him better.

With all good wishes,

Sincerely yours,

George B. Van Schaack
Acting Curator -
Herbarium

GBVS:MC

C
O
P
Y

SMITHSONIAN INSTITUTION
UNITED STATES NATIONAL MUSEUM
WASHINGTON 25, D. C.

August 1, 1958

Dr. George B. Van Schaack
Missouri Botanical Garden
2315 Tower Grove Avenue
St. Louis 10, Missouri

Dear Dr. Van Schaack:

Your letter of July 15 with enclosures was received the 17th. I was in the midst of making up sets of duplicates from Brazil, mostly Dr. Swallen's, and had the tops of herbarium cases covered with piles of specimens and couldn't stop till I had the piles tied up. Please excuse the delay.

I have gone over the little puzzle again and see you are right, it cannot be *Arthraxon*, must be *Microstegium*. See enclosed *M. nudum* (Trin.) A. Camus. Yours is a depanperate specimen but I think it must be that species. Don't call me an authority - there is no authority in science, - if one thinks he is he is lost. Look at Hooker, who referred our *Paspalum dissectum* L. to *P. scrobiculatum* L., and at the many inaccuracies on the authority of Bentham.

Reading your letter just now I see you refer your little puzzle to *M. nudum*, to which I referred it after going all over the puzzle again - so I hope we are both right.

Thank you for the copy of *Catapodium marimum* synonymy. I have placed it in the herbarium. Thank you, too, for the little *Paspalum orbiculatum* Poir. which is in the hands of the mounter.

I wish Virginius were nearer St. Louis, you and he would enjoy each other.

Please excuse my delay in answering your letter.

I am horribly ashamed to find this (buried) on top of my desk - I supposed I had sent it - forgive this 89-year old - please. I did mail Enclosure. a specimen

Sincerely,

Agnes Chase Aug 7.

Agnes Chase
Research Associate
Division of Grasses

July 15th, 1958

Dr. Agnes Chase
Smithsonian Institution
Washington, D. C.

Dear Dr. Chase:

I hope you don't mind my taking the opportunity to address you by your new title, although I know how little you put stock in titles. But your own is so well-deserved that I think it should be used. I was glad to get your letter from Washington a few days after I saw you and to receive the two packets of reprints which you sent, most or all of which I did not have. When I was last in Washington a couple of years ago you gave me a great many reprints so that I am wondering if perhaps I have not already been through the collection of which you write, but I should like to come to Washington anyway and will not keep that as an excuse for coming.

Thank you for the determination of the Paspalum. I had rejected the name orbiculatum because our sheets of this species which were determined by you (with one exception) have spikelets which are much rounder than those of the plant I gave you in Urbana. But I am certainly not going to argue this matter with the world's authority! I am glad to know that you are continuing your work on the Brazilian Paspalum for if you didn't do it I don't know who would.

I am, however, going to question the determination of the other specimen which I return herewith because I think you jumped to the same conclusion that I did myself when I first saw this plant, for superficially it certainly suggests Arthraxon hispidus, but in the plant in question the pedicelled spikelets are not wanting, in fact the point which first interested me, the spikelets are paired and both are pedicelled, although unequally. I believe you will find that part for part they are essentially indistinguishable as in Microstegium. My own examination and comparison with herbarium material indicates that the species is Nudum although the plant is aberrant in the pedicellate character of the "sessile" spikelet, which latter character I found only in herbarium material from Japan. I hope you will forgive me for asking you to look at the plant a second time for it is the very fact of its non-conformity which I think would interest you.

In his recent studies of Festuca here Charles A. Taylor had occasion to write to Mr. Hubbard to get a publication reference confirmed. I am enclosing a copy of Mr. Taylor's reply which may be of use to you in completing your file on this name. I am also enclosing a copy, regrettably poorly printed, of Taylor's treatment of the synonymy of Catopodium marinum which may be helpful to you. Finally, I am returning the Paspalum which you might like to put in the National Herbarium.

It was a great pleasure to see you in Urbana and to find you so well and enthusiastic. I enjoyed, too, meeting your nephew who obviously has had so much pleasure in plant collecting, and who clearly was so happy to see you. With all good wishes,

Sincerely yours,

GBVS:VM
Enc.

George B. Van Schaack
Acting Curator
of the Herbarium.

SMITHSONIAN INSTITUTION
UNITED STATES NATIONAL MUSEUM
WASHINGTON 25, D. C.

June 18, 1958

Dr. George B. Van Schaack
Curator of Herbarium
Missouri Botanical Garden
2315 Tower Grove Avenue
St. Louis 10, Missouri

Dear Dr. Van Schaack:

The two grasses I brought home to identify are being mailed to you. The tiny spikelets of Paspalum orbiculatum are golden at maturity--a pretty little annual that I collected in several places in Brazil.

The awned form of Arthraxon hispidus, your specimen, is rare in the United States, the dots on map (page 748) in the Manual refer to the awnless variety. This is the same as the grass sent with your letter of April 29, received May 2 and, I find, not answered. It is not Microstegium as you guessed, but Arthraxon. See Man. U. S., page 748 and pp. 24, 26, key to Andropogoneae. In Microstegium spikelets are all alike. In Arthraxon the (hypothetical) pedicelled spikelets are wanting--see p. 25, Key to Androp. la. "(See also Arthraxon - - - in which pedicellate spikelets are not developed)."

I am sorry I failed to write you. I was trying to finish the Brazilian Paspalums, several hundred, and still have some 50-60 to do.

I hope you will have occasion to come here to name some of your puzzles some time. When you do I think you may get some papers of interest by going through our reprints and some extras of others. You are on our mailing list, so you have our papers (at least the H & C papers and mine alone). For years I have been placing extras from Kew or elsewhere in the herbarium. For new or segregated genera, if we do not have a specimen, I make a cover for it (proper color) and put the reprint of the publication (if we have an extra) or copy the figure, if any, and the generic description. The name is entered in the Generic index and given a number in our sequence (mostly with A B C etc. after the genus number). The object is to keep track of all generic grass names (dozens not valid). In the mss. generic index in spring-back folder all genera are listed, first part systematic by tribes; these are the genera recognized as valid. Second part is an alphabetic list (including names not accepted as valid)

with number of the genus in the herbarium: zb. "Valota Adans. see Trichachne Nees V5."; "Uralepis Nutt. see Triplasis Beauv. 335 b."

The object is to enable one to find anything readily. The numbering was originally after Dalla Torre & Harms, which was based on Hackel, but Hackel's genus was so broad it often included several genera, as in Andropogon and Panicum. So for Paniceae we took V for tribe 5 and renumbered all genera down to Olyra V 67 -- Spinifex V 75.

Andropogoneae and the others are renumbered, all under their tribes, and also alphabetically. Bamboos are as arranged and numbered by Dr. McClure. It may seem rather complex but this cross-index enables one to find genera readily. Since I keep watch of all taxonomic publications on grasses to keep up the Index, I make covers for new genera, giving them a number if we accept them as "valid," marking them "see . . . no . . ." if we do not agree. It is rather complex "bookkeeping" but we can readily find anything we have and at least a genus cover with a sheet representing any given genus, or a cross reference to where we leave it or put it.

This takes time to keep up but it saves several times the time in locating things. After the distressing amount of time it took to find things in Europe, especially in Paris, our system is a great time-saver. Visitors here have expressed their appreciation of our system.

Come some time and bring your puzzles. The herbarium is greatly enlarged--a new floor added under the lofty ceiling and hundreds of new cases.

I enjoyed seeing you again in Urbana.

Sincerely yours,

Agnes Chase

Agnes Chase
Research Associate
Division of Grasses

SMITHSONIAN INSTITUTION
UNITED STATES NATIONAL MUSEUM
WASHINGTON 25, D. C.

January 7, 1958

Dr. George B. Van Schaack
Missouri Botanical Garden
2315 Tower Grove Avenue
St. Louis 10, Missouri

Dear Dr. Van Schaack:

Your letter of December 27 with grass heads enclosed was received the 30th. This letter is delayed because like many people here I had to take a week off with "flu." I had tried my best to identify the material, but, beyond recognizing it as *Brachiaria*, I did not succeed. I left the material and your letter with Dr. Swallen. His note is on the enclosed packet*. The spikelets are abnormal, plenty with stamens (I found one spikelet with stamens in both florets), but no stigmas that I could find, and no beginning of a caryopsis. Some of this material looks as if the spikelets are not face (palea side) to the rachis, but if adjacent spikelets are removed it is seen that the spikelets are placed as in *Axonopus*, *Brachiaria*, etc. I am keeping part of the material and returning the rest. There are relatively few species of *Brachiaria* in China and many in Africa. I wish the Chinese student could send you some of the original seed. That must have normal spikelets if it bore these panicles--that is, the parent seed must have been viable.

"*Phalaris tenuiflora*" is not a published name. I have spent much time trying to find publication of names (on old European specimens mostly) that we find in the herbarium. Such are the bases of endless synonyms in Steudel and other old books, as "olim" or "herb so and so." On our sheets of this kind I write "not a published name." Your "*P. tenuiflora*" may be an error for *P. tenuifolia* Hort. ex Steud. Nom. Bot. 609. 1821, as syn. of "*Phleum asperum*" [Jacq.?]. I do not find "*Poa tenuifolia* var. *minor*" either. Varietal names may have been missed in our index because they are so often cited without bibliographic citation. These ined. names are a nuisance--they have cost me hours of work because some authors cite them as synonyms. You must have many herbarium specimens with ined. names. To this day some cite such names as synonyms. There are some Vasey names in this herbarium that we have marked "ined." Some such names have led to confusion. Dr. Hitchcock maintained they should not be published by later students. In my *Paspalum* (page 203) I refer to *P. intermedium* Munro. Please add "ex Morong." The South American *P. intermedium* Munro ex Morong, Ann.

* See L. v. P. B. *ottomiflorum* Hochst. f. *Sudan*
King (6) ...

N. Y. Acad. Sci. 7: 258. 1893, type 1019 Morong, Pilcomayo River, Paraguay, only specimen cited by Morong, hence the type. My revision was published before my second visit to Europe and I assumed Morong described Munro's species, though he did not cite any specimen so named by Munro. I found in 1929 the name "Paspalum intermedium" ^{in European Herbaria} Munro" (no description) on more than one species of Paspalum, one of them being the same as my Paspalum plenum--which does not invalidate my name, of course--none of them the great mulberry-colored P. intermedium Munro ex Morong, which is the valid name for that. As Dr. Hitchcock maintained, it is unsafe to publish an ined. name, unless one is sure it is the type. The old-timers did that to our confusion.

Abyssinia must be a wonderful grassland and Schimper, unlike most collectors, did not ignore grasses. He must have collected abundant duplicates because this herbarium, a relatively late-comer, has a large number of Schimper's grasses (mostly from Germany), including a good many type collections. Dr. Anderson must have had a wonderful time there. If you are going to identify the grasses you can do so here better than anywhere else. We have a large number of the Schimper collections, bases of species. Our new species index and type index would facilitate your work. ^{herbaria}

There are Gynyerium specimens here from Mexico to Paraguay. Some Gynyerium names belong in Cortaderia--our type cards indicate which.

"Stipa lachnantha" is not a published name, "s f a k," as that N. Y. zoologist (can't recall his name) used to use for "so far as known." Colombia has several species of Cortaderia--I suppose Dr. Anderson collected them, too. They are a very puzzling lot.

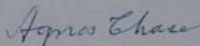
My next 1-2 year plan is to get Black's Axonopus published; to "proofread" and complete the cross-indexing of the species index; to prepare First Book enlarged for printing and to go over a great mass of Grass Herb. letters from 1906 or so (Hitchcock to Swallen) which Swallen succeeded in getting from Agriculture, to save all important botanical letters (I did that for the Scribner letters many years ago, when Dept. Agr. was clearing out old letter files. I wish I could finish South American Paspalum, which I have done up to Plicatula and Virgata, but there will not be time. I'm still bewailing Sohns' leaving (not out loud). I'd hoped he could finish Paspalum. He called on me Christmas week and brought reprints of his papers as I'd asked him to.

I have been working on Black's mss. most of the time since October or before. The specimens from the Instituto have been sent

here and it will take much time to put them in order by the mss. Black was really a devoted ecologist and forester and I doubt if he did much on *Axonopus* while in Brazil. He is a tragic loss, and Brazil, greatest grass country in the world (maybe only equal to Africa) is still without an agrostologist.

With best wishes for the new year,

Sincerely yours,

A handwritten signature in cursive script that reads "Agnes Chase".

Agnes Chase
Research Associate
Division of Grasses

Sept 28 1957

Dear Dr. Van Schaack,

Yesterday I sent out the last copy of First Book, except my own copy - and this morning received a request for it. Shortly after Dr. Carmichael came in with a letter from E. B. Wilson, enclosing your letter of May 13 to him. I had given a copy to Dr. Carmichael when, soon after he came here, he visited the herbarium. I showed him grasses, the beauties and striking ones and he showed so much interest I had the nerve to give him a copy of First Book. He came in later to tell me it had opened his eyes to grasses. Now he is in favor of reprinting First Book by Smithsonian. He suggested adding something about lawn grasses (which seems to be a problem to him as to everyone else in this region who tries to make a good lawn). I suggested hard-building from Dept. Agr. "Grasses" Yearbook 1948; he agreed and then looked at "Grasses as Basis of Civilization" by Hitchcock & Chase in Smithsonian Scientific Series "Old and New Plant Lore" vol 11: pt 4, 1931, and wanted some of that. I don't want to make the reprint expensive (I was so poor when I used to buy all Scribner grass bulletins as they came out that I feel strongly for the "poor" grass student). Apparently it is a go - I'll have to get it ready - and haven't a second copy to cut up for
(more over)

G.O.P. copy - have you a copy left from the pen
I sent you?

I should like to add a bit on cleistogamy
in grasses - now known from all over. Do you
happen to remember where Darwin writes of self
fertilization (in Cross Fertilization I think) and is so surprised
at the vigor of the *Sporus* he ^{called} "Victor." It
was progeny of self-pollination by Darwin - expect-
ing nothing. I wish he could have known of
the grasses self-pollinated. Did I tell you that
Uniola latifolia has 1 tiny black anther, held tight
between lemma and palea?

I appreciate your interest in First Book and I
know you will rejoice in Dr. Carmichael's decision to
have Smithsonian publish it (with additions) - it is all
a surprise to me.

I am working on Dr. Blake's mes of *Axonopus*.
Have you heard the tragic news of his death? Drowned
in the rapids of the Amazon below Santarem. I had read
the carbon of his ^{mes} and made various suggestions and checked
references etc. He checked in red his acceptances and I am
now editing his own copy to be typed here. As in any work
(on grasses at least) there is much to check in preparing
manuscript. I had rejoiced that at last there was an
agrostologist for Brazil and I am deeply grieved at
his loss. I collected a great many specimens of this
neglected genus ^(*Axonopus*) and had worked a good deal on it and
appreciate what a hard task he struggled with.

Thanks again for the nice things you said about my
little "First Book"

Sincerely,
Agnes Chase

July 17, 1957

Dr. Harry J. Fuller
Department of Botany
University of Illinois
Urbana, Illinois.

Dear Harry:

Dr. Woodson has asked me to answer your letter of June 4 regarding a statement about Mrs. Chase in connection with the possibility of awarding her an honorary degree. I am certainly very happy to know that there is such a good chance that she may receive such a degree, for it has been in my mind for a long time that this recognition should be accorded her. Several years ago Dr. Anderson and I discussed this matter and enlisted Henry Andrews' support in recommending her to our own board of trustees for this honor, but so far as I know the recommendation was never even acknowledged. At that time Dr. Anderson and I wrote a statement to support the recommendation. I have used this as a basis for the statement which I have included in the accompanying letter which Bob has read and thoroughly approved. I hope it will be helpful in convincing your Senate Committee. Please let us know if there is anything further we can do to lend support in your effort and if you are successful I should appreciate being able to attend the commencement exercises at which the degree would be granted.

Best regards.

Sincerely yours,

George B. Van Schaack
Acting Curator of the Herbarium

GWS:C
Enc

July 17, 1957

Dr. Harry J. Fuller
Department of Botany
University of Illinois
Urbana, Illinois.

Dear Dr. Fuller:

I write to answer your letter of June 4 to Dr. Robert E. Woodson, Jr., Senior Taxonomist of the Missouri Botanical Garden, regarding Mrs. Agnes Chase whom you are proposing to the Senate Committee on Honorary Degrees as a suitable candidate. Dr. Woodson has asked me to write the supporting letter which you requested of him because he feels that I know Mrs. Chase so much better than he does as a result of my association with her in Washington on my many trips to the United States National Herbarium. Both of us are very pleased to realize that Mrs. Chase's distinction in her field may receive recognition and are happy indeed to support the proposal which you are making. In the statement below I have tried to outline Mrs. Chase's most important contributions during her long creative period. These include not only such concrete items as monographs and explorations, but perhaps more important, the enthusiasm which she has engendered in the many people who have consulted her, for, as I am sure you have observed yourself, just to speak with her for a few moments is to catch some of her own zeal. Rightfully not unaware that her accomplishment has been substantial, she is modesty itself regarding its unusualness. It would be hard to find anyone in American science whose academic beginnings were more modest, whose achievement is so pronounced, and who has, at the same time, had so little recognition from the academic community.

In support of Mrs. Chase's candidacy for an honorary degree I should like to present the following summary of her career.

Mrs. Agnes Chase is the most distinguished authority on the grasses of the Western Hemisphere and at eighty-eight years of age is still in the front rank of the most able students of these highly specialized plants. Officially retired eighteen years ago, she has remained active, still in her office five full days each week, often taking work home with her evenings. During the early years of this 'retirement' she continued to direct the grass herbarium of the United States. Later she carried through the revision of A. S. Hitchcock's 'Manual of Grasses of the United States' and prepared the first draft of a monograph of a large group of South American grasses, the most recent in a series of monographs on various groups of American grasses published during the last forty years individually or in collaboration with Dr. Hitchcock, who was systematic agrostologist of the United States. The last three

years have been spent revising the 80,000 card catalogue of grass names, one of her many projects during fifty years with the grasses. Each name has been checked in the literature together with author, type, basis, etc. This catalogue alone would establish her reputation.

Mrs. Chase's achievement is perhaps the more remarkable in that her career began over fifty years ago in the Field Museum as a botanical illustrator with no formal training in botany. Since then she has been largely self-taught, having been continuously employed since 1903 in the United States Department of Agriculture, until 1935 as assistant to Dr. Hitchcock, rising in the ranks of the department from illustrator to senior botanist in 1925. Although never holding a formal academic appointment, she has been a guiding influence in the training of every student of American grasses, to all of whom she has given generously of her time by letter and on the occasions of their visits to Washington. Numerous scholars from the United States and abroad have gone to Washington to study under her guidance. Her book on the principles of grass taxonomy is a masterpiece, so simple that it has been referred to as "the scorn of graduate students, but the delight of scholars".

She has travelled extensively throughout the United States, the West Indies and Brazil, studying and collecting grasses, and throughout Europe visiting numerous herbaria for the study of type specimens. It is largely through the efforts of Mrs. Chase and the late Dr. Hitchcock that the United States possesses the largest and most complete grass herbarium in the New World, second only to that at Kew.

Mrs. Chase is internationally known as an authority and is widely recognized as the person who has contributed most to the world's knowledge of the grass flora of the western hemisphere.

Nothing in what I have written above suggests that with all her devotion to scientific activity she has still had time to carry on a rich personal life. Widowed after a brief year of marriage and without children, she still numbers by dozens intimate younger friends who stand in a sort of family relationship to her, having received over the years both spiritual and material support from her. Her many friendships abroad, always faithfully renewed with interchange of scientific material and knowledge, have been the occasion for unusual generosity in the difficult days which her friends have faced since the last war.

In granting Mrs. Chase an honorary degree the University of Illinois would honor itself in recognizing a distinguished native daughter of Illinois whose

life has been devoted to the study of that family of plants probably most important in the economy of the state, a family whose study is also a cornerstone of the University's curriculum.

Sincerely yours,

George B. Van Schnack
Acting Curator of the Herbarium

GBVS:C

SMITHSONIAN INSTITUTION
UNITED STATES NATIONAL MUSEUM
WASHINGTON 25, D. C.

June 23, 1957

Dear Dr. VanSchaack,

Your letter of the 18 came last week. ~~We do not have~~
~~Fig. & de Notari's Agrostographia Aegyptiaca. We shall be~~
most glad to have your duplicate print and photostat
of the 18 pages of Part I. Please let me know the cost
of the photostats, I want to pay for them. We appreciate
your interest in the library.

SEE 174

We have photostat of "Agrostographia Aegyptiaca"
Fragmenta curantibus A. Figari et J. de Notari's, Exhib.
6 Aprilis 1851. Pars I. Species in regione sinaica ab Equite
Figari, aestate 1849, collectae "pages 245-262, no figures.
In this is cited as a syn. sub is "Panicularia typhoidea Fig. & de Not.
Agrost. Aegypt. Frag. 55, 1853." as cited in Man. U.S. ed 2. p 933
as syn. of *Panicum glaucum* (L.) R. Br. [I don't know now
why date is 1853. "Exhibens" means "presented" [to some Acad]
instead of published.] Stapf 72 Trop Afr. 9: 1039, 1930) cites Mem. Acad. Sci.
Turin Ser. 2, XVI, 371, 1854 for *P. typhoidea* Fig. & de Not.

I am puzzled because I do not find Fig. &
de Not. Agrost. Aegyptiaca, not this Fragmenta in Britzel nor
in Bradley. Tackholm cites "Fig. et de Not 1852" only without
title of work. — That's a long story — many such took no
end of time in editing and verifying those cards
That endless index is finished and all 79 boxes of
cards down here in Sohn's room and in order on the tables
— back breaking job. I am going to de Vriesnelan grass
sent by Zaraida before I go at "proofreading" the whole.

Later. Part 1 was what I planned and pt 2 has been pushed back -
I know I had seen it but decided to must have been Messum copy. ^{Probably} so much
plate I - XXXI.

The cards were typed by a retired librarian and bibliographer, and like Miss Miles with the same training they are perfect. I read proof each night on the days work. What I shall do now is check back on names based on other names, and the like - checking my editing rather than Mrs. Vais's typing. It is really a cross index, bases are cited for derived names and on the original I added "basis of - -", sometimes basis of more than one name. I hope you will have occasion to use this index some time. The number of superfluous names is appalling. Cultivators especially with sep. var. subvar. form, etc. are inaddenning.

The Sohns have a beautiful home with a good deal of ground. Ernest came over and got a bushel of Vinca, by edging our walks, front and back. He got a lot of ivy, too - it is trying to take possession of our small place. He will get Viola and Hepatica next and Dentzia and some other things that are increasing too fast for our lot. When I acquired 100x30 feet in 1910 it looked like a vast estate to me - from Chicago. I put in enough for an acre or more. I had never gardened in anything bigger than a flower-pot.

I hope you will be coming this way this summer - I hope you will have occasion to use the new index.

Your little First Book - there are now 4 copies, but no orders have come for some time.

With best wishes

Mrs Anderson is on vacation, hope you can read my writing
Sincerely
Agnes Chase

SMITHSONIAN INSTITUTION
UNITED STATES NATIONAL MUSEUM
WASHINGTON 25, D. C.

April 2, 1957

Dr. George B. Van Schaack
Missouri Botanical Garden
2315 Tower Grove Avenue
St. Louis 10, Missouri

Dear Dr. Van Schaack:

The precious copy of Husnot, Graminées has just come. Thank you as Chairman of the Library Committee, as Acting Curator of the Herbarium, and as highly valued friend of the Hitchcock Library and of grasses themselves. If I knew how to say it better I would. (I could say it in German and Portuguese and French, but it couldn't be more heartfelt.) Until I finish the Index this will go with the books that are waiting for rebinding.

I am in the last of the 36 drawers, past Triticum (which was awful with all manner of subspecific names and alleged hybrids), and I hope to finish by the end of this month. Then I am going to compare all of both sets from the beginning, for, being a cross-index, there are probably notes on previous cards that may need to be added and notes on later cards to add to earlier ones. I want it to be as helpful as possible. The carelessness of name-makers is appalling.

I have not seen Dr. Sohns for a long time. He is moving or has moved into his fine new house, on a hill in Maryland overlooking the Potomac. He took me to see it while it was nearing completion. It will make a lovely home for them.

With best wishes and many thanks from Dr. Swallen as well as myself.

Sincerely yours,

Agnes Chase

Agnes Chase
Research Associate
Division of Grasses

SMITHSONIAN INSTITUTION
UNITED STATES NATIONAL MUSEUM
WASHINGTON 25, D. C.

March 18, 1957

Dr. George B. Van Schaack
Missouri Botanical Garden
2315 Tower Grove Avenue
St. Louis 10, Missouri

Dear Dr. Van Schaack:

Your letter of the 15th has just been received. When you mentioned Husnot's Graminées 1896-99, I looked in the catalogue and found the title (I should have answered your kind offer) but I find we have only an excerpt from the copy in U.S.D.A. Library. So we shall be most grateful for the extra copy you offer.

You must be about as overworked as I am. I am in Triticum now, next to last drawer of the Index. When cultivators take to naming plants they seem to think that every individual, nearly, should have a distinct name, ssp., var., subvar., form, and often a. b. c. after that! But we hope to reach the end this spring. Then (knowing that everything must be proofread), I am going to have the new cards brought down (the 80 boxes are crowding my room badly) and check the old and new. Since this is almost a cross-index, I cite basis of name and then add to the original "basis of so and so" -- Agropyron and Triticum, for example. This requires going back to earlier cards and I may have missed some. By summer, anyway, I hope to be done with the only agrostological work I don't like. I hope it will come to be known and widely used, for the proportion of useless and incorrect names is appalling.

I hope you can get back to grasses again soon. With best wishes,

Sincerely,

Agnes Chase

Agnes Chase
Research Associate
Division of Grasses

I can well understand that it would be hard for you to leave Mo. Bot. Gard. My letters were not to urge you but to keep you informed. One must love grasses to do good work on them - they can be very trying (and their multitude of names published for them is a heavy burden) You do, I know, but you

have a pretty large collection there, and you are
always more than welcome here ^{to look up things} (Smithsonian
salaries, I believe, are not high - I have never been on
that payroll - I was in Dept. Agr.) but Dr. Roberts, archaeo-
logist, says salary is better than Harvard, that Harvard
counts the prestige of being professor in Harvard as
part of the recompense (this was in reference to Dr.
Kidder of Harvard and himself).

I hope you enjoy your work where you
are. Grasses were an awful mess when I was there
(about 1900-1901 I think). You must have done or
have to do, a vast amount of study and classi-
fication, which, after all, is the most enjoy-
able part of grass study.

That poor little First Book! I am down
now to 3 copies and 2 of ed. 1. I hope I don't get
any more orders. A Japanese (Walker's correspondent)
plans to translate it. I begged Walker to tell him to use
common Japanese species, follow plan of First Book
but not the common species explained.

I hope, since it does seem to help those
who are interested in grasses, to understand them,
that you can republish it

With best wishes,
Sincerely,
Agnes Chase

Feb 14 Grass Herbarium

Dear Dr. Van Schaack

The poor little First Book seems to be having a hard time. The enclosed letters seem to indicate the Silvers estate is about ready to let go of it. I hope so. I have but 6 copies left and 3 of the first edition.

Some time ago I wrote you about the yawning opening there is here for a man who loves grasses. Swallen has not told me anything as I think he would if he had any idea that you would consider the place. I know he is anxious to find someone, the right one. I can't but wish he knew you would consider the position.

I am still working on the index
- have ^{just} reached Triticum, 2 drawers
now to the end, about 3000. I want
you to see it - it is much more than
name with reference. The type, if
cited, or specimens cited, locality etc
is recorded, and if the type or frag-
ment of type is here a T is added,
referring to the genus and species it
is now referred to here, (A. S. H. Swallen,
A.C.) or "fide Stapf S. aff." "fide C. E. Hubb."
etc etc. It will save endless
time in agrastological work and
help to avoid making synonyms.

The herbarium has been ex-
panded and working conditions
much better than they used to
be. The Division of Plants was
a step-child under Dr. Maxon. It
is up and coming under Swallen.
Here is hoping.

Sincerely,
Agnes Chase

SMITHSONIAN INSTITUTION
UNITED STATES NATIONAL MUSEUM
WASHINGTON 25, D. C.

Dec 14, 1956

Dear Dr. Van Schaack,

The rather small supply of First Book I bought from the Silveus family (or from "Bill" since it was more than a year ago) have been selling distressingly fast. There are just 10 copies left. Of course I'm not urging you to print the off-set edition - I'm only letting you know. There are 2 copies of first edition.

I was painfully distressed when Dr. Lohus left for higher pay, for he was doing excellent work, was a painstaking curator and likable besides, but recently Dr. McClure told me of a man whose love for grasses is great enough to withstand offers of higher pay. I am waiting anxiously to learn when he is likely to come. He will find the indexes, the types (and fragments of types) the species index and generic

index will save endless time, and a greater collection of grasses than he has ever seen before.

Those Attn collections new for American continent are waiting to be published - the true Agrostis mertensii, that so delighted me, and an Asiatic species I don't recall, and all sorts of lovely tropical grasses, and opportunity to do field work. All these and a most hearty welcome await the man who loves grasses. I'm hoping he will come before too long.

Did you ever find out what that bulb-based grass is? I hope you could get living plants or bulbs.

With very best wishes,

Sincerely

Agnes Chase

Best wishes for Christmas

index will save endless time, and a greater collection of grasses than he has ever seen before.

Those *Atta* collections new for American continent are waiting to be published - the true *Agrostis mertensii*, that so delighted me, and an Asiatic species I don't recall, and all sorts of lovely tropical grass and opportunity to do field work. All these and a most hearty welcome await the man who loves grasses. I'm hoping he will come before too long.

Did you ever find out what that bulb-based grass is? I hope you could get living

SMITHSONIAN INSTITUTION
UNITED STATES NATIONAL MUSEUM
WASHINGTON 25, D. C.

April 20, 1956

Dr. George B. Van Schaack
Missouri Botanical Garden
2315 Tower Grove Avenue
St. Louis 10, Missouri

Dear Dr. Van Schaack:

Your letter of the 17th was received yesterday. Thank you for your good wishes. My table is covered with flowers and packages today.

I am in the 27th drawer of the 36 and hoping to finish by the end of this year--but I have a stack of cards 4 inches high, largely Maire & Weiller, to be verified when I have reached the end. I shall sort by publications required. Some of Maire I have done are inaccurate--combinations ascribed to Trabut that are not made in publications cited. Why are papers published without editing? Henrard's *Digitaria* is a disgrace to that old University of Leiden that Linnaeus visited.

We have botanical papers by Walter Brown. Have you seen his "Grass with Liquid Endosperm"? *Limmodea arkansana* (I verified it) is about like thin sauce for pudding thickened with cornstarch. Another interesting paper is "Cytological Study of Cleistogamous *Stipa leucotricha*" in *Madroño* 10: 97, 1949. I surmise this device of grasses is probably not so rare as supposed.

I moaned at the mention of a third volume of Maire's work. Today I saw notice of it in a Department of Agriculture list, so I must go on moaning and need not borrow your copy. We (Dr. Swallen or I) buy grass papers for the Hitchcock library so that they will never be "out" when we want them.

I had to stop this letter to attend a surprise birthday party with a handsome cake, tea and all the trimmings.

I still have some 20 or more copies of the First Book, but I shall be glad to see it printed again. I suppose you will omit Silveus' list of pronunciations at the back.

With best wishes,

Sincerely,

Agnes Chase

Agnes Chase
Research Associate
Division of Grasses

April 17, 1956

Mrs. Agnes Chase
United States National Museum
Washington, D. C.

Dear Mrs. Chase:

I believe this will reach you very close to your birthday and I should like it to bring my warm greetings for the occasion and my best wishes for the coming year. I suspect it will be another blue ribbon year in your life because it will probably see your completion of the re-editing of your grass catalogue. I hope it will give you as much pleasure to realize that you have been able to do this as it agrostologists everywhere to know that it has been done. It will be a very valuable tool for all of them for as long as grass is studied.

We have never heard from Mr. Silveus about the plates, but that doesn't really make very much difference because I do not think we could find anyone to print directly from the plates any cheaper than Edwards in Ann Arbor has quoted us for an offset printing. I hope that we shall be able to see your book reprinted during the next year. In this connection I was interested the other day to have a book salesman, whose interests are largely in the Humanities, say that his firm was considering publishing a book by Walter Brown, I think it is, of Texas, on the biology of grass. When I spoke to this man about your book he said, "Oh, yes, I have heard of Mrs. Chase's book. It is still selling and I think you would do well to have it reprinted."

Yes, I can imagine how difficult it is to reorganize all the names in Bené Maire's work as it must have been when you were doing Ascherson & Graebner. What splitters these people are! I wonder if you have seen the last part of Dr. Maire's work on the Gramineae, the third volume of the Flora. Our copy is at the bindery now but if you have not seen it and cannot come by it easily, let me know and I will have it sent to you.

Again with all good wishes.

Sincerely yours,

George B. Van Schaack
Acting Curator of the Herbarium

SMITHSONIAN INSTITUTION
UNITED STATES NATIONAL MUSEUM
WASHINGTON 25, D. C.

March 12, 1956

Dr. George B. Van Schaack
Missouri Botanical Garden
2315 Tower Grove Avenue
St. Louis 10, Missouri

Dear Dr. Van Schaack:

Your letter of the 6th came Friday. Young Silveus has never paid any attention to the First Book, except to send me a bill for the first lot I ordered after his father's death. For the next lot (those of which I still have a number of copies) I sent a check for \$50. Probably he sent me all that were left.

Copyright is only for 7 years, isn't it? It can be renewed for another 7, and unless revised the copyright lapses. It is 19 years since Silveus's copyright was secured. There is now no copyright. But to feel secure, if you wish you can omit pages 115-120. If you want it I can rewrite Grasses in relation to man, with a different title. A brief bibliography should be added.

I never had a copyright on this work. Macmillan had the copyright for 14 years. I have no claims whatsoever on any edition issued in the future in any form.

I have been having a most horrible time cataloguing a "Flore de l'Afrique du Nord," 1955, by Dr. René Maire, in which every species has several names--*Festuca ovina* ssp. *eu-ovina* var. *typica forma genuina* and the like. Gramineae--pp. 229-357--and I have a stack of cards 6 inches high, most of them useless. Many of his references are obscure (to herbarium specimens I surmise) and I have a pile of cards for which I must search for the references. It is time-consuming and useless. No two living things are exactly alike; these subspecific, subvarietal names must refer to a specimen, not to a species, which is a population of interbreeding individuals. So many Europeans are given to this sort of thing--even Hackel was, in *Festuca*.

I should think Silveus Jr. might be dropped if the offset process is satisfactory--as it was in Pilger's Panicoidae.

An excellent revision of *Danthonia* of Australia by Joyce Vickery came last week. I am eager to get at our Australian material, which I know is a mess. I suppose you received the paper *Contr. N. S. Wales National Herbarium* 2: no. 3. 248-325, pl. 3-8. 1956.

With best wishes,

Sincerely yours,

Agnes Chase

Agnes Chase
Research Associate
Division of Grasses

SMITHSONIAN INSTITUTION
UNITED STATES NATIONAL MUSEUM
WASHINGTON 25, D. C.

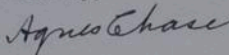
December 16, 1955

Dr. George B. Van Schaack
Missouri Botanical Garden
2315 Tower Grove Avenue
St. Louis 10, Missouri

Dear Dr. Van Schaack:

Your letter of the 9th with leaf enclosed came some days ago. I have tried again but can not find anything with "bulbs" and striped blades to fully agree. The white stripe is a "sport" and may appear on other grasses. Vavilov somewhere states that certain variations appear in allied species --but I can't guess its allies. Maybe the bulbs are variations too. Disregarding "bulbs" and striped blades, there is nothing to go by--it is like the hosts the mycologists send with rusts on them. Please ask the man for a better piece with some of the bulbs, if not to be had now, send it in the spring. It may be some recently introduced grass that has not reached us. I hope you can get a plant.

Sincerely,



Agnes Chase
Research Associate
Division of Grasses

MISSOURI BOTANICAL GARDEN
2315 TOWER GROVE AVENUE
SAINT LOUIS 10, MO.

Archeutheron elatius
shaded leaves
L.H.'s garden.



has of "bulbs" (thickened internodes),
at base, 6-9 mm. across

Arrhenatherum elatius var *bulbosum* (Willd.) Scribn.
Ornamental-Fresno State college Bot Gard. Fresno, Cal.
Jack Springer 529 Aug. 10, 1933

f. *strictum* (Hult.)
L.P. Smith

Arrhen. elatius var *bulbosum* (Willd.)
Tampier, Va. ^{Spencer}
W.W. Cooper

Arrhenatherum elatius var
bulbosum, Clay Co
Alabama
R.H. Harper June 1911

December 9, 1955

Mrs. Agnes Chase
Research Associate, Division of Grasses
United States National Herbarium
Smithsonian Institution
Washington 25, D. C.

Dear Mrs. Chase:

Many thanks for your letter of the 5th and the enclosure of fragments of Arrhenatherum. I assume you wish me to keep these and shall put them in the herbarium since we have no specimen of form striata at all, but I am a tough customer and I still don't believe that the plant I sent you is Arrhenatherum. I am returning a leaf from the plant under discussion which is typical of the plant so far as the ligule is concerned, in size, texture and lack of decurrence. I have compared it carefully with the specimen which you sent and feel sure that there is an essential difference in the way the ligule grows from the sheath.

I really ought to return to you also the stamps which you sent me - I sent those to you for postage - but they are so pretty and ones I haven't seen that I am going to keep them.

Sincerely yours,

George B. Van Schaack
Acting Curator of the
Herbarium

GBVS:G

Grass Herbarium

Dec 5 1955

Dear Dr. Van Schaack,

Your letter of Dec 1, with check for $\$4$ has just been received. $3 \times 1.25 = \$3.75$, so I enclose 25¢ in stamps. Thank you.

I hope Dr. Thorp will find young Silvers at home, and I hope he will give the plates, since they cost his father nothing, but let me know, please.

Enclosed are fragments of our only specimen of *Arrhen. elatus* var. *bulbosum* f. *striatum* (Hubb) L. B. Smith, and of "normal" *A. elatus* var. *bulbosum*. The spikelets of var. *bulbosum* are slightly larger than in *elatus* itself and in f. *striatum* (1 specimen) are larger still. Examine enclosed fragments. The striped form is a ^{one} cultivated form, and such things

seem to be capable of doing any
thing - like double roses and
double Narcissus. The single
is usually a "good" character, but
in Poas, where we need constant
characters, it is often variable.
I was relying on the "bulbs"
mostly.

Sincerely,

Agnes Chase

December 1, 1955

Mrs. Agnes Chase
Research Associate, Division of Grasses
U. S. National Museum
Smithsonian Institution
Washington 25, D. C.

Dear Mrs. Chase:

Thank you very much for your letter of the 25th with the determination of the grass which I had sent you. Having asked you for the determination I ought to be scarcely in a position to doubt it, but I really wonder if it is Arrhenatherum elatius var. bulbosum. I haven't been able to find that any of our specimens of var. bulbosum have a ligule so very short. In general, their ligules are quite long and decurrent. On the plant we are discussing there seems to be no evidence of this latter characteristic. But up to the moment I have nothing to suggest, so perhaps I should keep still.

The three copies of your book which you recently sent have reached me and I am enclosing a check for \$4.00, which I hope covers their cost. Dr. Tharp has written me that he is going to be in San Antonio in about ten days and that he will try to persuade young Silveus to give us or sell us the plates. I wrote Dr. Schns some time ago asking what he would suggest composing for an addition should we make a reprinting. I hope he is thinking about this.

With warm greetings.

Sincerely yours,

George B. Van Schaack
Chairman, Library Committee

GBVS:C
Enc

SMITHSONIAN INSTITUTION
UNITED STATES NATIONAL MUSEUM
WASHINGTON 25, D. C.

November 25, 1955

Dr. George B. Van Schaack
Missouri Botanical Garden
2315 Tower Grove Avenue
St. Louis 10, Missouri

Dear Dr. Van Schaack:

Your letter of the 22nd with enclosure was received this morning. I finally guessed it because of the statement "roots more like a bulb." It is Arrhenatherum elatius var. bulbosum (Willd.) Spenner. See Man. U. S. page 305. "Jack Springer no. 529. Ornamental - Fresno State College Botanical Garden, Fresno, Cal. Aug. 10, 1933." has white-striped blades like this. I have added "blades sometimes white-striped." ^{in Man.} And looking in Bailey, Standard Cycl. Hort. 397. 1914, I find ". . . a variegated form of this [A. elatius var. bulbosum Presl] has been offered under the name A. bulbosum variegatum. - A. S. Hitchcock." There is no specimen as early as that in U. S. Nat. Herb. Dr. Hitchcock was in the Department of Agriculture--he did the grasses for Bailey's Cycl. See Man. ed. 2: 824, 1951, for this name and for A. elatius var. bulbosum forma striatum (Hubb.) L. B. Smith 1947, based on it.

I am returning the specimen.

I hope you can locate Silvens files and get the plates --hope he will give them to you, but if he does not I'll pay the cost.

Sincerely,

Agnes Chase

Agnes Chase
Research Associate
Division of Grasses

SMITHSONIAN INSTITUTION
UNITED STATES NATIONAL MUSEUM
WASHINGTON 25, D. C.

September 24, 1954

Dr. George B. Van Schaack
Missouri Botanical Garden
2315 Tower Grove Avenue
St. Louis 10, Missouri

Dear Dr. Van Schaack:

Your letter of the 12st came yesterday. Enclosed is a carbon of the letter sent to Mr. Buller. I hope this is about what you had in mind. I wanted to stress the necessity of his collecting grasses, with notes on their habit and forage value made in the field, both numbered, for accuracy, and sending them to you. The underground parts (showing rhizomes or perennial bunch habit or annuals) should be collected. If they have not done this kind of work, instruct them. I've asked Dr. Sampson to have California Grasslands sent to Mr. Buller.

*but I thought
this would
come better
from you.*

I supposed from your letter that they would write me from Mexico. I hope my letter is about what you wished. My letter of last week reached you eventually, I trust.

I think *Bothriochloa* and *Schizachyrium* make good sections or groups in *Andropogon*, but not distinct enough for genera. The one character of *Schizachyrium*, solitary racemes, does not hold, a *W. I.* species has 2 in terminal inflorescence and 1 on branches. Thick rachis joints look distinct, but in *A. condensatus* and its allies the rachis joints are as slender as in section *typica*. *Dichanthium* also I think is better as a section.

I hope you are quite well by this time. When you get to work on Mexican forage grasses I hope you can come here.

With best wishes,

Sincerely yours,

Agnes Chase

Agnes Chase
Research Associate
Department of Botany

September 24, 1954

AIR FORM

Mr. Roderic E. Buller
Assistant Agronomist
Rockefeller Foundation
Calle Londres 45, Mexico 6
D. F., Mexico

Dear Mr. Buller:

Dr. van Schaack has written me of the project to prepare a publication on the important grasses of Mexico, especially forage grasses I assume. I believe such a work would be of the greatest value to Mexican agriculture, especially to the cattle industry. Dr. van Schaack is willing to undertake the work, and I know of no one in this country better fitted to prepare such a manual. He has been studying grasses intensively for some years and has himself collected grasses in Mexico. At the Missouri Botanical Garden he has a very large collection of grasses to work with, and I hope he can visit the U. S. National Herbarium, where we have specialized on grasses for many years, and have all the necessary literature. We could lend him drawings showing the structure of the grasses, especially the "heads" and spikelets, to help make the publication readily usable to agricultural students.

We are in communication with agrostologists throughout America, in Canada, Venezuela, Brazil, Uruguay and Argentina particularly. Except for the late Dr. Conzatti, no student of grasses has developed in Mexico (and Dr. Conzatti did not specialize on grasses). The work would therefore necessarily have to be done elsewhere.

As I understand it you would prepare the agricultural part and Dr. van Schaack the necessary botanical part to insure accuracy. "Popular" bulletins that are wanting in accuracy are a disservice to agriculture. Since the Rockefeller Foundation Agricultural Program is now carrying on scientific work in Mexico, I should think such a publication as planned would be accepted as part of that work.

I am asking the University of California to send you a copy of California Grasslands and Range Forage Grasses, by Dr. A. W. Sampson and others, that I think will be of interest to you.

Sincerely yours,

Agnes Chase
Research Associate
Department of Botany

AChase:efa

September 22, 1954

Dear Mrs. Chase,

Since writing you a couple of weeks ago relative to a possible grass manual program of the Rockefeller Foundation I have heard from my friends there that it is very possible the foundation will embark upon such a program. The probable form will be a series of four or five regional manuals, only one to be started at this time. This would probably be for the northern grassland areas of the country and would comprise about 100 species. I gather that if work on this should proceed satisfactorily than other areas would be taken up.

My friends in Mexico were to have written to you for a letter about me, etc., but they seem to have understood that I would do that myself and they have accordingly not yet written you. Consequently, to save time, I should like to ask you to write them directly. You will recall that the items they are chiefly interested in are: 1) my capability to undertake anything of this nature, 2) the desirability, if not even necessity, that the taxonomic study and attendant library research be done here in the U. S. rather than in Mexico, simply because Mexico does not have either the herbarium or library resources adequate to such a job.

If you would not find it too much of a burden to write a letter regarding these matters I should very much appreciate having you do so. The letter should be addressed to: Mr. Rodolfo M. Buller, Assistant Agronomist, Rockefeller Foundation, Calle Londres 45, Mexico 6, D. F., Mexico.

I returned to St. Louis last week from Wisconsin, making a long trip of it by way of Stillwater, Oklahoma, to visit Mr. R. P. Calarier who is growing and studying some of the *Andropogoneae*, chiefly *Dichanthium* and *Pecticochloa*. He has a large number of plantings of each of these genera. When one sees a lot of this stuff together it is remarkable how close the genera seem to be. In particular, I do not believe the often used key character that separates them on the basis of the basal spikelets of the racemes holds,--in the field we seemed to find *Dichanthium* in which all of the spikelets of the racemes were alike. Mr. Calarier is going to check this carefully, for it seems that this may be a regional character.

I hope everything is going well with you. With all good wishes,

Sincerely,

George B. Van Schnack

Washington University
The Department of Mathematics
January 4, 1952

From: Committee on Teaching and Examinations,

To: All instructors.

Subject: Preparation of final examinations for Fall Semester, 1951-52, in 100-200 courses.

1. All regular staff members are entitled to prepare such final examinations for their 100-200 courses as they may see fit to use. It is hoped, however, that joint examinations will be used wherever possible in order that the labor of duplication may be minimized. In all cases these examinations should be delivered to this committee for duplication and deposit until the time of the examination. Copies of all such examinations should be in the hands of this committee not later than Monday, January 14.
2. Each instructor in Mathematics 100 is entitled to prepare his own final examination, although it is hoped joint examinations will be used wherever possible. The examinations prepared by non-regular staff members should be submitted to this committee for approval not later than Friday, January 11. At the time of submitting the examination the instructor will submit also an outline of the course as he has given it, including sections covered (in chronological order) and approximate time devoted to each group of sections.
3. Your assignment for preparing final examinations other than those referred to in paragraph 1 and 2 is:

A copy of this examination should be submitted to this committee for approval not later than Monday, January 14. This copy should be in final form, complete in statement and punctuation, and should be accompanied by a set of solutions so that the committee can quickly estimate the difficulty of each problem.

SMITHSONIAN INSTITUTION
UNITED STATES NATIONAL MUSEUM
WASHINGTON 25, D. C.

September 20, 1954

Dr. George B. Van Schaack
Missouri Botanical Garden
2315 Tower Grove Avenue
St. Louis, Missouri

Dear Dr. Van Schaack:

Your letter of the 8th came the 12th. I think the idea of a manual on forage grasses of Mexico for agricultural students and literate farmers is excellent. If you would like to use them I could lend such of the drawings I made for the first little "Range Grasses" and the 1951 California Grasslands as would apply to Mexico. I am thinking especially of those showing structure of spikelet, etc. I hope you will take up this project—you are certainly capable of preparing such a work. You would probably have to accept the decisions of the students of agriculture as to the species to be included, as I did with the papers by Sampson and Chase.

Dr. Sohns has spoken of the unpopularity of Yankees in Mexico, and he told me he speaks German whenever possible, and with his German name he is received very kindly. Mexicans probably do not know that the early Dutch settlers were the original "Yankees" and might accept you as German. Dr. Sohns has no idea of preparing such a work as you describe, I am sure, and would be sympathetic to your task. He is in Mexico now, to return in about a month—we are both hoping with specimens of *Calamochloa*, collected in San Luis Potosi, during the French occupation and known only from the type in Paris. I took a photo and was given a few spikelets. If the Mexicans accept the work of the Rockefeller Foundation I should think such a project would fit into that. I hope the plan will be accepted and I would be glad to see the manuscript.

Are Buller and Freytag likely to write to me? If so, I shall write them that I feel sure you could prepare an accurate and most useful work.

I thought Wisconsin was very healthful. Did you eat stale fish? Did you have to have tetanus shots? That is severe I've heard. I hope back in St. Louis you are quite well again.

With best wishes,

Sincerely yours,

Agnes Chase

Agnes Chase
Research Associate
Department of Botany

2315 Tower Grove Avenue
St. Louis Missouri
September 8, 1954

Dear Mrs. Chase,

When I was in Mexico City this summer I spent considerable time with some of the staff members of the Rockefeller Foundation Agricultural Program in Mexico, which has offices in Mexico City and a field station in nearby Chipingo. One of the younger members is a fellow named Rodney Buller, who is in charge of the program to improve local pastures, etc. He and a friend of mine, George Freytag, who is working on the bean program, proposed to me that I consider undertaking a project with them to develop some sort of manual or manuals of the more important grasses of Mexico,--important, that is, from the standpoint of pasturage and other economic uses. Such a manual should be suitable for use by trained agricultural students and well educated farmers, as by botanists, but it would not be a flora,--perhaps something not too different from your Range Grasses of California. I indicated that I was not uninterested, and accordingly Buller and Freytag are currently preparing a project outline to present to the Higher-ups. To help support this outline they wish to have some statement about the following ~~three things~~: 1) my capability to do such a manual, 2) the desirability of a major part of the study of specimens and writing of text being done outside of Mexico. Number 2) relates to the fact that currently the Mexicans are very jealous of having botanical work relating to Mexico done outside of the country. I have taken the liberty of telling Buller and Freytag that they may write to you with regard to these two matters. I hope that this will not be a burden to you.

In this connection I must remark, of course, that I know Dr. Sohns is currently working on the grass flora of Mexico. But I do not see how this project would conflict with his, for his is certainly a very much more ambitious one which will require many years to finish. In fact, I should think this one might assist him, for as part of the project there would be extensive and well directed collecting all over the agricultural areas of Mexico, and at least one set of the plants collected would be deposited at MBG easily available to him.

I have been vacationing in northern Wisconsin, where I have twice nearly killed myself with ptomaine poisoning, and have also put a rusty nail through my foot. It is accordingly with some feeling of relief that I turn southward tomorrow. I am driving first to Stillwater, Oklahoma, to visit the grass garden there, which is currently featuring the Andropogoneae. On the way back from there I hope to be able to get a glimpse of Hugh Iltis in Fayetteville,--he is one of my favorite friends.

With all good wishes and many thanks,

July 27, 1954

Mrs. Agnes Chase
United States National Herbarium
Smithsonian Institute
Washington, D. C.

Dear Mrs. Chase:

Thank you very much for the list of bibliographic corrections that you sent to Dr. Eva Potzal's paper. I have tapped these pages into our bound copies of the Journal in which the paper appears. Dr. Potzal's errors point out so well the value of your Index. I am so glad that you are finding it possible to have it retyped and I congratulate you and Mrs. Van Eseltine on the rapid progress you seem to be making. I hope that before too long, some inexpensive method of duplicating such an Index may be found so that Agrostologists here and abroad may have a copy of your Index and you may be spared having to answer all their queries.

I have just returned from a six weeks trip to Mexico. I had the good fortune to be asked to help a geologist colleague drive his car to Mexico City. We left on the 12th of June and reached Mexico City on the 1st of July having passed through Monterey, Torreon, El Parral, and then south through Durango, Guanajuato, Morelia, and Toluca. Not until we reached Durango did we find any grasses in bloom, for north of there the rainy season was so little advanced that there was scarcely any green thing to be seen; but south of Durango, the country became greener. Along the road from Morelia to Toluca there were grasses in abundance, many of them in full flower. It was a beautiful but frustrating sight, for my companion collects cilies rather than plants and I was unable to stop even to look at the grasses. However, I stopped some ten days in Mexico City and was entertained by several members of the staff of the Estudios Especiales of the Department of Agriculture which, as you may know, is under Dr. Wellhausen of the Rockefeller Foundation. I was taken collecting on points beyond Mexico and Cuernavaca, about 10,000 feet, once up into the high country of Tlaxcala, and once up into

July 27, 1954

the crater of Nevado Toluca. In the last locality, about 12,500 feet in elevation, I was surprised to find only five species of grass, and not one of these a Poa; I do not remember ever before being in such a territory without finding at least one species of Poa.

The whole trip was most interesting and now that it is over, I find that life can never be quite the same again. Not only is the vegetation fascinating, but the life of the people is so very different from what you see in this country. The extremes of poverty and wealth are probably greater than in the United States, as the number of people definitely depressed below a decent standing is so vastly greater.

I flew back by way of New Orleans where I stayed for several days with Joseph Ewan and his charming family. He is very busy finishing the manuscript for his "Vegetation of the Rocky Mountains" which he hopes to submit about one month from now just before he leaves to take up his Guggenheim Fellowship in London. Nesta has received a grant from the American Philosophical Society which will enable her to join him for the second half year in London where she will be of great assistance to him in his study.

I hope that Washington has not been unbearably hot for you this summer and that you are keeping well. I regret that I have not been able to see you this year and I shall not be able to get East now that I have had this long holiday in Mexico. With all good wishes,

Sincerely yours,

George B. Van Schaack
Honorary Curator of Grasses

GBV:mz

April 23, 1954

Dear Mrs. Chase,

Your reference is to Gueldenstaedt, J. A., *Reisen durch Russland und in Caucasischen Gebirge*, St. Petersburg, 1787. In the chapter 'Von Terekfluss' he says: 'An den Flussufern des Terek und in denen zu beyden Seiten naechstgelegenen Gegenden habe ich nach und nach folgende Pflanze bemerkt.' There follow 7 pages of lists of plant names (no authors). On page 189 is listed 'Alepecurus maniculatus'.

I am very glad to look up this reference for you. It was a little item, but I should have been equally glad to undertake a larger one. So if there is anything else of this or other nature with which I can help you please let me know.

Mrs. Van Saelstine is performing a great service for agronomy, --it is a shame she cannot be more adequately rewarded in the material things of this world; although she must have her reward in satisfaction. I think the time is not distant when it will be possible to have such cards as yours copied much more cheaply than at present. When I was in Boston this summer I talked to an ingenious inventor there who had designed a machine for copying a whole book in a matter of an hour or so for a cost of only a few dollars. That is, if only the machine could be built. He estimated it would cost about \$75,000. The Library of Congress should own such a machine! This stupid Hearthy investigation will cost many times that, and then he probably won't get what's coming to him.

Thank you for sending the enclosed carbons. I have taken notes from them.

With all best wishes,

Sincerely yours,

George B. Van Selandt

SMITHSONIAN INSTITUTION
UNITED STATES NATIONAL MUSEUM

WASHINGTON 25, D. C.

April 21, 1954

Dear Dr. VanSchaack,

Will you kindly take time to look up the enclosed for us?

It takes a great deal of time hunting up some of the references that were taken from Ind. Kew and a few others. I am trying to get every card verified, with explanations when necessary. This grass catalogue was started by copying all Ind. Kew grasses, and later, ^{and now} by indexing from the originals, but we go over every new Supplement ~~for~~ checking by our catalogue. Miss Niles, as she found time, was verifying all the old cards, and this is what I am doing, checking every card. Fortunately most things needed are in "Washington" and the librarians of the Dept. Agr. and the Smithsonian Library (the main one, the one for the herbarium in this building is but a small part) are able to locate nearly everything somewhere in this city. They are borrowing books from elsewhere for me now. This is such a little item--apparently-- that I'm asking you to look it up--and shall be grateful.

I recall that you asked me about the possibility of getting a copy of the grass catalogue and that I never answered it. I WISH copies could be made of the new cards. I think I told you that Mrs. VanEseltine, retired librarian, is copying the cards. She is paid 85 cents an hour--poor pay for such careful work--but she has no busfare, nor wastes time coming and going. Copying from the new cards would go more quickly than from the old ones, but we estimate that there are at least 80,000 cards--and Shinnars and his kind are busy adding to their number. The estimated cost of \$4000 may not cover it and we may have to go begging. Dr. Walker insisted that the cards should be photographed, and we got a man over here once to consider the cost--I forget the amount but it would be more than \$4000. The old cards, many of them are not in good shape to be photographed, ^{worn,} ~~not~~ corrected and the like. I wish some billionaire would put up the money to have the cards copied or better to have them photographed and reproduced, ^{on cards} and sold at a price her-

SMITHSONIAN INSTITUTION

UNITED STATES NATIONAL MUSEUM

WASHINGTON 25, D. C.

April 14, 1954

Dear Dr. VanSchaack,

Your letter of April 1 found here on my return last Monday--

It was not forwarded because we were leaving Honolulu March 20. We landed the 25th but stopped over to visit Yosemite and Grand Canyon, so we did not reach till April--and I had a spell of arthritis in one foot which prevented me from coming to work till last Monday.

I.--I heartily agree with you in your estimate of George Black, as man and as botanist. He is leaving tonight for New York and Boston, then by air back to Belem. It rejoices my heart to know such a fine botanist is working on *Axonopus*, a very difficult genus.

II.--I didn't do the the usual things, loll on the beach, learn the hula dance, nor ride surf-boards. The islands (I was only on Oahu and Hawaii) are terribly weedy with all the common grasses from everywhere (except Alaska and Siberia). I collected grasses but got only 2 endemics. The islands are enchanting--palms, lovely trees from Brasil, Africa, Australia, Pacific Islands--everywhere. Traveling was so costly we only went to Hawaii for 4 days, and not to any of the other islands. We stayed in Honolulu with Mrs. VanEselstine's sons and family, 4 of the brightest, liveliest children, 9 to 3, you ever saw. The 3-year old went botanizing with me, carrying my big digging knife.

III.--Thank you for your kind invitation to stop at St. Louis, but we did not come by way of St. Louis. Mrs. Van had never been west of Cleveland, so on the way out we stopped between trains at New Orleans, and at El Paso to visit Carlsbad Caverns--
Returning marvelous. We landed at San Francisco and Dr. Sampson (my "nephew" and Dr. Burchem (grandson), with wives, met the boat and took our baggage to the Sta. Fe, then took us to a luncheon at the Faculty Club, where I met some old friends and some I had known by correspondence, then around to see trees, (*Torreya*, for one) and other thing then to the herbarium, for most of the rest of the day. At 8 next morning the four called for us and drove 200 miles to Yosemite. I had been there in 1910 and was thrilled to see El Capitan, Bridal Veil Falls, Yosemite Falls, and other lovely places again--just as I had been seeing them all these years in mental pictures. The Valley was under snow, but roads had been cleared most of the way. We had to turn back before reaching Vernal and Nevada Falls, the road being more than a foot deep in snow. We stayed at Merced over night and left next morning for Grand Canyon. I had been there, too, in 1910, and went down to the river on mule-back. Coconino forest was under snow, but the rocks along the rim were clear. The driver of the coach (trained Nat. Park. Service) drove some 25 miles west, stopping at lookouts, and in the afternoon 50 miles to the east, so that I saw far more of the Cañon (from above) than I had seen before. Again I enjoyed seeing again what I had been seeing in memory for so many years. From there that night we started for home. I got a bad spell of arthritis in one foot (never had it before) and Mrs. Van turned into a nurse, ordering wheel chairs, etc. Last Sunday I put my shoes on for the first time and came to work Monday morning. There is a mass of things to catch up on. I labeled my collections at home while laid up. / / / / I had a letter from you about the Grass Catalogue I am re-checking, the which is being typed by Mrs. VanEselstine, retired librarian.

A small fund has been given for this purpose and Mrs. Van (my long-time "niece" who sold her house in Geneva last summer and has doubled up with me here) is doing the work at home, keeping track of her time. With no carfare and no time lost getting to work she was willing to do the work, and is doing beautiful accurate work. I am editing and verifying everything--takes far more time than I expected, but it is a great satisfaction. I read proof on all the copied cards. We have just begun the work again this week. I WISH it were possible to have this catalogue reproduced in some way. There are at least 80,000 cards. Some years ago I talked to a man from a copying service (by photography) and the cost was far beyond our reach. If only some "foundation" would put up the money the new cards, all typed and proof-read, could be reproduced, to the vast betterment of agrostological literature.

The cost of a single set by photography would be beyond any institution's means. We are more than willing to look up references for anybody and do received requests. The old set of cards will be used until the new are complete, probably 3 years or more, then the old will be stored in a safe place and thereafter 2 cards will be made of every reference, so that a set will be in reserve, just "in case" (I am not afraid of Communist bombs, but with U.S. "defences" all over the world, even to north Greenland, some crazy military man in our "defence" force, may start an atom-bomb war.)

You must find Dr. Anderson most interesting--his book "Plants, Man and Life" is delightful. (Naturally I am flattered by his reference to the little "First Book.") His comments on biologists and bureaucrats (PP/ 80, 81) is a joy. Have you seen Lyсенko's statement giving "credit" for the "Michener" theory (and the consequent death of Pavlov) to Stalin? He is credited with many crimes, if this is true it is one of his greatest.

Thank you again for the kind invitation to visit your herbarium.

Very best wishes,

Sincerely

Agnes Chase

Dear Dr. Van Schaack,

If you have a copy of Dr. Eva Potzal's latest paper in which she re-distributes *Arrhenatherum*, ~~*Arrhata*~~ *Avenastrum* (subgenus of *Avena*) and *Helictotrichon*, according to their epidermal cells (of blades) you may care to correct her bibliographic errors by the enclosed. The typist made 2 carbons.

I fear that great library of Berlin Bot. Garden may be lost. I had to look up these things for our index and decided she might like to have the corrections. Hope she does not take it amiss. I sent some such to Dr. Jansen, Amsterdam (he is doing the grasses for Malayasian Flora) and he not only said thanks but asked for more (before printing, I hope.)

Best wishes,

Sincerely,

Agnus Chau

*We now have 1/6 of the
Grass Index typed*

Your reference is to

Gueldenstadt, J.A.,

Reisen durch Russland
und im Caucasischen

Gebirge, St. Petersburg

1787. In the last

'Von Terekfluss' he says:

"An den Flussufern des

Terek und in denen zu

beiden Seiten nachbet-

gelegenen Gegenden habe

sich nach und nach folgende

Pflanze bemerkt. These

follow 7 pages of ^{list of} plant

names (no authors). On

Alopecurus paniculatus Guldénst ex Ledeb. Fl. Ross.
H: 465 1853, cites Ledebour cites

"Guldénst. It. I. p. 189." Not in Washington but
listed as being in Mo Bot Gard

Is there any description? Please copy what there
is for us. Miss Niles note reads "Mo. Bot. Gard.
Sent for Dec 11, 1937" apparently not received.

The Terek is a river, north of the Caucasus.

page 189 included *Alopecurus paniculatus*.

October 19, 1953

Dear Mrs. Chase,

When I first told Dr. Edgar Anderson of your marvelous catalog of grass names, already several years ago, he was very much interested in it and expressed the thought that it was far too valuable to be allowed to exist in only one copy. He did not, however, at that time have access to any money which might assist in its copying. To what extent that situation may have changed by now I do not know. But when I told him this fall that you were laying plans to have a second copy made for USMA he indicated that it might be possible to find some assistance for this were it feasible to arrange to have two copies made, the second for the Missouri Botanical Garden. Beyond this vague indication he would not go, but he has asked me to write you to inquire regarding the possibility of having a second copy made and an estimate of what you would consider an equitable share of the expenses to be paid by us.

It was a great pleasure to see you in Washington this past summer and to find you in such good health. And I feel very happy about your new living arrangements. How much you will enjoy having Mrs. Van Eseltine with you.

I wish that when you visit Peoria this fall you might find it possible to spend a day or two with us. We should all be very happy to have you. You would not find the grasses in the state they were on your previous visit, but there is now little here that you might wish to see!

I am enjoying a new office. For years my working space has been a desk and a few shelves beside the third floor elevator door, which has no been the easiest place to work in. I have finally been given a full sized office with plenty of working space, and still no farther from the grasses than is your office from yours.

With all best wishes,

Sincerely,

George B. Van Schoeck

5403 Forty-first St.,
Washington 15, D.C.

Jan. 21, 1952³

Dear Dr. VanSchaack,

I have not answered your kind letter of Dec. 27, nor thanked you for the Sand County Almanac, I am sorry and ashamed of myself. I enjoyed the book immensely, the vivid pictures of beauty it brought me, and his discussion of gadgets and trifling things in general that leave no place for time to think. I often make an index of my own on the fly leaves at the end of a book of ideas or phrases that impress me especially. This book now has several.

Since you turned the Heister over to Mo. Bot. Gard. it was no "favor" to you, but it isn't a thing one would care to keep in a private library. I had a nice letter from Dr. Pinto da Silva whose inquiry as to Heister as author of *Digitaria*, *induced me to get these copies made.* It was he who called attention to the different authorities I gave for the type of *Helictotrichon*. That thing haunts me.

I have not forgotten that I have a sheet at the herbarium from you that I have not been able to name. I'll try to get at it again soon. Just now I am trying to make a sort of manual of the grasses of Okinawa for those poor botanists out there whose herbarium and entire university buildings were destroyed in the war. You know of Walker's visit to the islands in 1951. To my joy he did not neglect grasses and got them all interested in that family--I think it is better represented than any other in the collections. I have made up a skeleton enumeration and am now making keys to genera and species. In a bulletin by A.W. Sampson and A.C. nearly 20 years ago, *that* ^a Sampson wanted for his summer students that had not had college, I made keys with little figures of the spikelets in the left margins of the keys, where there is always space. And I made figures, somewhat diagrammatic for the *tribes* families and genera. I am going to do the same for this Okinawa work. English is hard for them anyway, but

the figures will help. Recently I came across a statement said to be a Chinese proverb "One picture tells more than ten thousand words." There is much truth in it. The grasses of the Okinawa flora are so much farther advanced--the work on them, I mean--that Walker thinks that can be published separately. The "occupation" is trying to encourage the Okinawan's own efforts to re establish cattle raising, and meadows. I am stressing the economic grasses.

This is a "holiday"--I don't rejoice in it. A poor president and bad or indifferent lot are going out but I doubt if the incoming will better conditions. I am horribly afraid that the general will want to work at his trade of war. The Koreans were never enemies of U.S. and we are devastating their country and killing them off far worse than the Japanese did. Have you seen I. F. Stone's "Hidden History of the Korean War?" It impressed me because ~~it~~ so much of it is just what I had figured out for myself. From my school days I've been a convinced pacifist, and I am more and more convinced with every war we get into. Woodrow Wilson's "war to end war" has resulted in war somewhere ever since, largely the result of that vicious treaty of Versailles and the partitioning of countries. It makes me heartsick to see U.S. acting like old Rome, conquering and occupying one country after another, and the "occupation" behaving as badly as occupations always do. It is a great relief to get back to grasses.

With very best wishes and thanks again for Leopold's beautiful book.

Sincerely,

Agnès Chase

SMITHSONIAN INSTITUTION
UNITED STATES NATIONAL MUSEUM
WASHINGTON 25, D. C.

Dec. 18, 1952

Dear Dr. Van Schaëck,

Thank you very much for all the time you took in looking up "*Saccharum monandrum* Roland." I shall copy your findings and mail it to the Indian after Christmas. It is a relief to have this card in our ~~file~~ catalogue fixed. As I have time I am going over the card index of grass names and trying to find all the unknowns or partly knowns. Dr. Mukherji's request and your kindness have cleared this one. / / / / Dr. Pinto da Silva, Portugal, has frequently written to me for all sorts of puzzles he hasn't the facilities to look up himself. He has just caught a serious error I made in Manual ed. 2. I am sending you the result of many hours' work to explain the type of *Helictotrichon* Bess. and to ask you to correct the misstatement on page 302. Dr. da Silva also asked why "*Heister*" is given as authority of *Digitaria*. Enclosed is my reply to that. After Christmas I shall send you a set of the photoprints of *Heister's Systema*. There is but one copy in U.S., in library of Harvard, wouldn't lend it but would make a microfilm. I ordered that and had 4 photo prints made in Dept. Agr. When I came to look up *Digitaria* in it I felt as if I was "stung." But however inadequate it is I am glad to have the ultimate basis of *Digitaria* in this library. I gave one to the Nat. Mus. Library. You may keep the photo prints I shall send you or place them in Mo. Bot. Gard. Library, as you wish. *Heister's* proposed "rules of nomenclature" are interesting, and his proposed changes in generic names also, but I am glad the rest of them were not taken up.

I know you must have enjoyed your visit to the Grand Canyon and other places in the southwest. I went horseback down to the river at Bright Angel. I started back on foot while the party ate lunch, collecting grasses--at the top I had to be pulled off the saddle, couldn't lift myself- it was my first trip on horseback. Next day I walked down to the plateau and back, collecting grasses. This was in 1910. The Coopers from New Zealand must have enjoyed the trip immensely, for all they have such magnificent scenery in their own country. We expected Mr. Cooper here--hope he can come next summer. We shall be glad to see you here next summer. Dr. E. P. Sohns, now curator of grasses, Mr. Swallen being head curator of the Nat. Herb. He has just come back from his first trip to Mexico. He is devoted to grasses and very well trained under Dr. Weatherwax, he is a joy, the latest in the long line of agrostologists here, without a break from Vasey to Swallen, with Sohns most promising.

With best wishes for a happy Christmas and praying for peace in the coming year,

Sincerely,

Agnes Chase

SMITHSONIAN INSTITUTION
UNITED STATES NATIONAL MUSEUM
WASHINGTON 25, D. C.

Dec. 9, 1952

Dear Dr. Van Schaack,

Acta Lit. Univ. Hafn. 235. 1777, listed in Ind. Kew. is recorded here as being in Mo. Bot. Gard. No volume number is given. Will you be so kind as to take the time to look this up for us, please? The reference is Saccharum monandrum Roland. Hackel does not list this name in his monograph on Andropogoneae. I'd guess it to be an Imperata, from the name "monandrum." I'll be ever so much obliged.

With best wishes,

Sincerely,

I hope you will be coming this way again soon.

Agnes Chase

December 11, 1852

Dear Mrs. Chase,

The reference you request is found in Acta Literaria Universitatis Hafniensis, Hafniae, 1776, in an article entitled 'Fragmentum botanico medicum et oeconomicum surinamense (pp. 285-304), which, itself, is an abridgement of the following article by Rottboell: Descriptiones Plantarum quarundam Surinamensis cum Fragmento Botanico medico & oeconomico Surinamensis (pp. 267-322). I have copied on the attached yellow slip Fritschel's reference, 7615 which seems to indicate that this work was published three times in one form or another: 1st as a separate in 1776, then 2nd, in Acta Lit, pl 287-304, and 3rd, as a second edition separate in 1790. The only copy we have is that in Acta Lit.

Why Kew Index attributes Saccharum nonandri to Rolander I don't know, for the article is by Rottboell and merely refers to plants found in Rolander's Herbarium: 'Duae Particulae continet haec Dissectio. Prior basilicum tradit Plantarum Surinamensis, quae Cl. Rolandri Herbarium sicum, in Suriname collectus, supeditavit. Altera Paree oeconomicum atque medicum plantarum quarundam Surinamensium unum describit.'

The reference reads as follows:

Sacchari nonandri planta, si sufficienti copia ad saccharum conficiendum parabilis esset, eodem cum S. Officinarum passuaret, cum Culi suavia sit dulcissimum. Decoctum Radicum habuit valida febre laborantes Judaei, quod dulcissimum est, & vi emolliente atque aperiente gaudere dicitur.

On the same page three Paspalums, two Panicums and a Cynocorus receive brief notices. On pages 268-271 occur descriptions of what are presumably n. spp., namely Panicum lanatum and Milium capillare. I should not say n. spp., but rather new names for the synonymy of the first is Andropogon insulare L., Gramen avenaceum, Sloan. Hist. Jan. P. I. 43, Nardus Dactyloides Rolandri; and of the second: Panicum capillare Rol., Panicum miliaceum viride &c. Sloan. Jan. 35. Hist. I. pag 115. t. 72. ff 3. Of the first Panicum lanatum) there is a plate which presumably represents Trichachne insularis, although the naked branches shown are rather ~~268~~ ramified, (no pun!)

I wonder why Palle in Flora of Surinam (or rather Amshoff and Henard) lists none of these names of Rottboell in synonymy.

SMITHSONIAN INSTITUTION
UNITED STATES NATIONAL MUSEUM
WASHINGTON 25, D. C.

April 24, 1951

Dear Dr. Van Schaack,

Thank you ever so much for your kind letter and for the beautiful book which arrived in the last mail yesterday, Wilfred Blunt's Art of Botanical Illustrating. It is ever so kind of you to give me this lovely book. I had seen a copy and read some of it, it is a joy to own it. I had read Fitch's chapter with the greatest interest.

I had your name on the list to send copies of the ^mannual when it came out, and then was told by the editor copies from my allotment could be ~~sent~~ sent from the Printing Office. When I saw the number of errors I wished I had kept them to correct and then to wrap up myself. Everything was sacrificed to "keep down expense" and I was not sent revised proofs of the pages. I typed out some lists, and corrected all the copies I later sent out from here (all the foreign ones). Then Dr. McClure offered to have the list multigraphed. When I receive the copies I shall send you one to correct your copy. It was the editor who decided on the 2-column, to "keep down expense." Now I am arranging the herbarium to agree with the ^mannual. The addition of even one species in a genus requires renumbering the index to the genus, which you may remember is placed at the beginning of the genera, the species being in systematic order. There is more or less change of names (Tridens, zum Beispiel) and I can't resist cleaning up the genus covers--each species has a genus cover, "genus" refers to the heavy paper only. It has been a long task but I am nearing the end. Then all the type cards and synonyms must be checked. I was often so pressed for time that I annotated them in pencil only. When I am done with this I shall get back to Paspalum of South America. The herbarium is undergoing cleaning and painting and we have all been displaced persons in turn. Thank you again ever so much,

Sincerely,
Agnes Chase

SMITHSONIAN INSTITUTION
UNITED STATES NATIONAL MUSEUM
WASHINGTON 25, D. C.

Dec. 8, 1950

Dear Dr. VanSchaack,

The box with 47 mounted sheets of Paspalum (and Axonopus) came some days ago. I finished them and repacked the box yesterday, but no packages are sent out now until after the holidays. We have duplicates of many of them, all but one of the Hassler collections. From one of yours I got data for ours which had "Paraguay" only on the label. You will find notes on some of the sheets for your information. I was in the Virgata group when I had to lay aside Paspalum for the Manjal, and had not reached Plicatula, which is a very puzzling group, so the names of some in that group are tentative. The specimen of P. notatum var. sauræ is not typical. That is the "Paraguay strain" of P. notatum now being experimented with in Florida and Georgia. It is also called "Pensacola strain." The specimen I refer to was named P. pumila by Parodi, but that was long before he described var. sauræ. The glume and sterile lemma are not so hard and shining as usual in all the Notata group. But it is not pumila.

You have certainly done a great deal of work on that herbarium, these specimens were in beautiful condition. I remember the condition it was in in the late 1900s when I was there.

Has your library secured Henrard's Monograph of Digitaria? It is an awful piece of work, even making allowance for his poor eyesight and probably shattered nerves, I don't see how he could have put out such an unusable thing. I spent about 2 weeks annotating and cross indexing our copy, and copied all my annotations in the copy I sent to Ohwi, Tokyo. I made a digest of the groups (which are mostly not at all natural) listing the species under each to help in using the keys. If you care to bring your copy next time you come here you may copy mine--it will save you a great deal of time. There are some absolute errors, too. I hope you are coming this way on your way home this winter. With very best wishes,

Sincerely yours,

Agnes Chase

Recd. 2/11/51
Thanking for manuscript

and receive

The Manual is actually on the way. ^{late} December or early January I was told, when I went out to Beltsville to compare my list of those who I want to send copies to with the lists in the editor's office. The editor was debating whether to make to title page date 1950 or 1951. He said if he made it 1950 and it was held up till ^{the} January the date would be wrong, so I suppose it will be January when the copies are distributed. It will not be out of print as soon as ed. 1 was, (inside of 2 months) for 4000 are printed for distribution to Dept. Agr. and agric. colleges, (and to names sent in by senators, I suppose), and 10,000 for sale only. That is what delights me. The price is \$3, which, at present cost of paper and printing is very reasonable. So many have helped me in sending specimens that extended the range and in other ways that I have a long list to send copies to, and I was delighted to learn that I was to be given 200 copies, instead of the usual 100. I shall buy some copies besides. Of the first edition I bought 100 copies and gave away many and sold them when the work was out of print. My copies were gone in the early '40's. There are many abroad who send us publications that I want to send copies to.

November 28, 1950

Dear Mrs. Chase,

Thank you for your letter of the 24th, and for the confirmation of my naming of *Macedo* 3194.

Dr. Woodson is indebted to you for the information regarding your Composite. We must report, however, that your specimens have not been named here. In fact, it is because they are unnamed that I wrote you of them.

I am glad that you will look at the South American *Paspalum*. I am sending you the 40 sheets you indicated (there seem to be only 2 from Argentina instead of 3) and 7 additional sheets which have since turned up. These latter include 4 phototypes, 3 of Hochst. and 1 of Steud. These 47 sheets will be shipped to you within a few days. They will be sent to you since we asked if you would look at them.

With all best wishes,

Sincerely,

George B. Van Schaack

SMITHSONIAN INSTITUTION
UNITED STATES NATIONAL MUSEUM
WASHINGTON 25, D. C.

November 24, 1950

Dear Dr. VanScheack,

Your letter of the 14th came the 17th and the Panicum the 22nd. Macedo 2194 is Panicum exiguum Mez, as you named it in your letter. It seems to be fairly common in Minas, I got it several times. That long glume I is unusual in the Capillaria group. Thank you for the specimen. Thanks also for the photo of the type of Sporobolus hians Van Scheack, your first.

I collected Compositae for Dr. Greenman in my first trip to Brasil, 1924-5. The plants must be in the Mo. Bot. Gard. Dr. Greenman never reported any to me. Are they named? For Dr. Robinson I collected Eupatoriaceae (and what I guessed might belong in that tribe), I never heard from him, except that he wrote that my notes were exceptionally good. You know how composite heads flatten out into half moons. I made a drawing of the shape of ^{heads of} all I collected and copied the drawing on the label. I don't think I did for other than Eupatoriaceae. Mo. Bot. Gard. and Gray contributed toward expenses and got full set of grasses and these things they asked for. Gray got Boraginaceae, also. I collected (both trips) Eriocaulaceae, because they are so interesting. During the last few years I have received the names from time to time from Dr. Moldenke. I also collected the open campo ferns, ~~Anemia~~ Anemia, because I surmised that fern collectors would not hunt the campos. Dr. Maxon from time to time mentioned some interesting one, but so far as I know the collection was never named. The 1929-30 trip I financed myself, so did not have to dry things other than grasses unless I wanted to, like Eriocaulon.

we have I should be glad to see the specimens checked in red in your list. Of the types listed, Swallen's and mine, and photograph, notes and spikelets of Pasp. haenkeanum Presl. in the Botanical Museum in Prag, taken by Dr. Hitchcock. I examined the type of P. plicatulum var. multinode Mack. in the Vienna Herb. with notes and fragment. Thanks ever so much. for the offer.

With best wishes,

Sincerely,

Agnes Chase

I was glad to show the herbarium and our system to Dr. U Tin. But he did not have time to see all he wanted, said he was coming back.

Research Associate.

Country	Collector	Number	Det. by
Brazil	Rambo	1 ✓	
	Orth	16	Hitchcock, Chase, or Parodi
	Macedo	10 ✓	Parodi
Paraguay	Hassler	14 ✓	
Surinam	Misc	8 ✓	Henrard or ?
Venezuela		3 ✓	
Argentina		③ <i>Strobil.</i>	
British Guiana		2	Swallen
Columbia		1 ✓	
Uruguay		1 ✓	

Isotypes of
P. lucidulum Swallen
P. plicatum var. *multinode* Hack.
P. boliviense Chase
P. inconstans Chase
P. Haenkeanus Presl

Sent in addition to these marked ones

2 Uruguay
1 Bolivia

Types. P. humile
trichopetalum
serotinum
longistylum

47 sheets sent about 12/1/65.

November 14, 1950

Dear Mrs. Chase,

In cleaning up several piles of Ignotae and Inserendae this fall I have rounded up between sixty and seventy sheets of South American Paspalum not among those loaned you a couple of years ago. I enclose a rough classification of these so that if there be any it would interest you to see you may mark such on the list and return it to me.

I am sending you a duplicate sheet of a South American Panicum, Macedo # 2194 from Minas. I am unable to match it with anything here. It comes closest to Panicum exiguum Mez among the sheets we have. Of this species I have only two sheets which differ rather markedly in the pubescence of the panicle,--your own sheet of March 20-22, 1930 from Goyas, and # 5522 of Maria from Minas. If you can name this sheet for us Dr. Woodson would appreciate it for he would like to send a determination to Macedo.

I am enclosing with the above sheet a photograph of the type of Strobilus hiemalis Van Schaack, Ann. Mo. Bot. Gard. 37:397, 1950. I sent the only isotype to Mr. Swallen last winter. Since the latter specimen does not show the habit so well as the type perhaps you would like to add the photograph to the sheet.

I hope that you found U Tin interesting. He is good stuff but so tense here in America that he does not always show his best side. He apparently suffered a lot during the war,--personal and family discomfort and danger as well as the pain of seeing his life's work on the herbarium at Rangoon destroyed together with the library. He talks almost buoyantly of rebuilding a herbarium and library. I am afraid I would not have the same courage.

I hope that you are well. I know that you are still enjoying grasses, as an I, for which I daily thank you.

Sincerely,

George B. Van Schaack

Country	Collector	Number	Det. by
Brazil	Bambo	1	
	Orth	16	Hitchcock, Chase, or Parodi
	Macedo	10	Parodi
Paraguay	Hassler	14	
Surinam	Misc.	8	Henrard or ?
Venezuela		3	
Argentina		3	
British Guiana		2	Swallen
Colombia		1	
Uruguay		1	

Isotypes of *E. lucidulum* Swallen
P. plicatulum var. *multinode* Mack.
P. bolivianae Chase
P. inconstans Chase
P. haenkeanus Presl

SMITHSONIAN INSTITUTION
UNITED STATES NATIONAL MUSEUM July 24, 1950
WASHINGTON 25, D. C.

Dear Dr. VanSchaack,

Hugo Iltis was in a little while ago and he says that you are going to get more of *Ectosperma*, Wallen's new genus. A letter from Miss Kellogg comes just in time. She writes: Miss Carter went to Eureka Valley recently to collect more specimens of the grass. She and a friend went in from Hawthorne, Nevada, and only had a day in the valley. She went to different parts of the sand dunes and yet not far from where Miss Anderson collected it she found it quite abundant. A sandstorm hampered their explorations and she could not reach any of the deep roots.

Maybe this will enable you to get to the place more easily than going up through Death alley.

Very best wishes,

Sincerely,

Agnes Chase

11
Oct. 6/49.

Dear Mrs. Chase,

I am very sorry you were distressed over the count of South America Papilion. Her Mr. Wooden as I would suspect for a moment that either you or Mr. Lovell would fail to take the best care of any loan from here. We are convinced that either we miscounted at the seed, for which we would be sorry, or that a few sheets have temporarily been misplaced in your herbarium & will turn up in time. Such a large loan is a nuisance to count accurately, as I now know, having tried to count this one myself tonight. I ^{very} carefully checked the numbers in each of the folders you returned and then added these numbers. My total is 1796, different from any previous count!

I am glad that the loan contained some things of interest and I am most grateful to you for having gone over the lot - at least one little part of our herbarium is now in order. Since the loan went to you there have turned up in recent mailings about a dozen fascicle sheets from Payeray and a few others. If you would care to see these I would be

pleased to send them to you.

There is one sheet I would like to ask about. It is Bong 308 which I found in the corner labelled P. paniculatum. Your only annotation is a sheet with you in Kats and date, 1949, above the label, which bears the "Cyprip" 308. Paspalum Tuergerii Hook. f. Hitchc. G. & E. P. Bot. 4 x 6. "The plant seems to be the former, with wide blades and ~~racemes~~ ~~in~~ ~~the~~ ~~axils~~ of sheaths. **

I am happy to hear that the manuscript is nearly at the press. I wish I could have been around to hand copy for you. It would have been a pleasure to keep you ^{think} ~~to~~ what I would have done.

The trip to the Rockies was indeed a delight even though we had to bear along so slowly. We saw so many beautiful spots I would have stayed in a couple of weeks instead of only a couple of hours or at most a day. I got about 300 numbers of presses, mostly from the higher altitudes, for we seldom had time to stop in the lower valleys. I am looking forward to going over them as soon as I can get at it. We got about a ~~hundred~~ 75 good Kalochneumon plants, most of which the K. K. Lay took - I would like to show them to you sometime.

Mr. Beach's notes, J.

11/11/49

SMITHSONIAN INSTITUTION
UNITED STATES NATIONAL MUSEUM
WASHINGTON 25, D. C.

Sept. 29, 1949

Dear Dr. VanSchaack,

Thank you for the card you kindly sent me. You must have enjoyed your vacation with the Ewans.

The south American *Paspalum*s sent after you had left for your vacation have been returned to the herbarium. After the Manual went to press and I cleared up the many things awaiting time to attend to them, and after naming Pacific grasses sent by Dr. Merrill, with permission to divide with the U. S., I went at the *Paspalum* to work them out before I could hope for proofs of the Manual. I sorted the sheets into groups and species--forgetting that they were to be checked by the list sent Mr. Swallen. Having sorted all into species I put them in alphabetic order for your convenience (we have ours in systematic order, but I hadn't time to make an index to them in that order), and then learned that they should be arranged by the penciled numbers in the corner of the sheets. Three I wanted photographed, and they were not done for about a month. By that time Manual proofs began to come in. I begged off about arranging them by the penciled numbers, and Mr. Swallen kindly checked the numbers with me on a list of numbers. The numbers were not in exact order, there being some with a letter added and some with the same number on two sheets. If I had checked them all, as I should have done before sorting them, I would have discovered and noted this. To my distress there are some 6 numbers (I think) not checked when we got through. I kept the sheets all together all the time and cannot see how any can be missing, unless I could have committed the crime of accidentally putting a sheet into our covers when I was comparing specimens. If I did that I shall discover them when I get at *Paspalum* in the winter, as I expect to do. I do hope this will not make grasses more unpopular in the Garden. I was surprised to see how many of my collections the Field Museum sent to Mo. Bot. Gard. I think Dr. Greenman was at the Field when I first went to Brasil 1924-25, and contributed to the fund (paid more than half myself, but Dr. Hitchcock wrote a few of the large herbaria asking if they wished a share of the harvest). I collected Composite for some, I think Mo. Bot Gard. was one. Field only asked for grasses, as I recall. A good many from Field are the only representatives of the species in your herbarium except the same species from me direct. Apparently Mr. Standly took out many grasses after he went there. I am glad they are in safe keeping,--a good many species are represented only by collections by Dr. Hitchcock and A.C.

In the Bernhardt Herbarium I found a few type collections, these I placed in a separate cover. I was delighted to find that *Pasp. hyalinum* type is the form with smaller spikelets, not the near ally that has slightly ~~larger~~ spikelets and a few ~~large~~ racemes. My "hyalinum" is *abstrusum*, which I had down as a synonym. I had a photo made of *Pasp. scalere* Trin., of which we have a tiny fragment from Trinius herbarium. There was one of Dusén of which I made a full description and had photographed and made a drawing of the spikelet. So far as I can tell at present it is undescribed. Several of mine are in mss. here. I put the name down at first, then stopped, lest someone use the name in print before publication. These are marked "H. sp. ined or in mss." When the revision comes out you can easily put the names on. I hope the arrangement in covers will help you in your study. I am very grateful for the loan.

The proofs of the Manual have been pouring in. I had no one to hold copy so it went slowly, then Dr. Walker gave me a day, and a "good daughter" gave me another. The editor then sent a copy-holder for 3 days, and I am now in the "Synonymy." I read all a second (really a third) time, for I first go over for

spelling of names, accents, indention of keys and the like, then read by copy, then the whole again and add the extensions of range, etc. that have come in since the ms went to the editor. The proofs of the illustrations have not yet come. It seems to be going through much faster than usual. Title page is "1934" and I hope it will be out in January--hope it does not take too much time in the bindery. I am putting aside everything else now, reading proofs.

I hope you found some interesting grasses on your western trip--of course all grasses are interesting, but some more so than others. Dr. (he is now) Llano was up on Cornwallis island in the archipelago north of Canada in the summer and said vegetation, except lichens, was very scarce, but he got some grasses. He was also on Attu, a short time, I think.

Very best wishes,

Sincerely yours,

Agnas Chase

I am finding that aluminum handy to wrap little things for the refrigerator, thank you.

Washington DC May 7, 1949

Dear Dr. Van Schaack,

Thank you very much for your kind greeting and good wishes on my birthday. I hope you are enjoying your work on grasses in spite of the difficulties you must encounter in straightening out such confusion as you must have found. I hope you can come here this summer with your puzzles. My best "birthday

"gift" is the approaching publication
of the revision of Hitchcock's Manual of
Grasses, after waiting some three years.
I had re-revised the ms. several times,
and when called for in March I worked
early and late renumbering the figures
and maps, which I had purposely left
until there was hope of its being printed,
one additional figure near the beginning
requiring renumbering throughout. I
hope it may go to press by July 1. Very best
wishes, Sincerely Agnes Chase

SMITHSONIAN INSTITUTION
UNITED STATES NATIONAL MUSEUM
WASHINGTON 25, D. C.

Feb. 15, 1949

Dear Dr. Van Schnack,

Your letter of the 9th has been received. I am very glad you have Hackel's True Grasses. It is away out of date, and his Andropogon and Panicum each almost include half a tribe, but it is the only thing giving all genera of grasses up to that time. If you can come here for a week or so, you can prepare a list of genera from our herbarium list. The tribes as we have them are not final by any means, but at least they bring the greater number together according to their affinities. Pilger's 1940 work, which you are using, is a great help (though I do not wholly agree with him).

I did not mean to ask for Paspalum at once, my limited desk and table room ~~is~~ is overloaded just now. I hope in about six weeks at least I can ask you to send Paspalum. Several species have been added to Paspalum of North America since my revision was published. I hope you can come for a while next summer. I think it would help you a great deal.

Just now I am struggling with some very poor specimens collected by Hotogawa in different groups of Micronesia. These were sent down by Dr. Merrill with permission, as usual, to take part of each specimen needed. The best thing is a collection of

[†] true *Garnotia stricta* Brongn. That name has been misapplied to many species, but only one, from Guam, has ever reached us that agreed with the description and excellent plate. We have a fragment of that, but now have a fairly good specimen.

With best wishes,

Sincerely yours,

Agnes Chase

British Guiana	23	19 = USDA Dist. Coll. Retake.
Ecuador	7	
Uruguay	12	
Peru	3	
Colombia	33	mostly Santa Marta H. St. Smith 1896-1901 + NY Bot Gard Expt. Col. 1917
Venezuela	27	17 of Fendler
Bolivia	32	mostly Bary, Buehler + Steudner
Dutch Guiana	8	
Paraguay	35	mostly Morong, Jorgensen, Hassler
Brazil	190	Chase det
	34	Chase undet
	14	Solymann
	76	mostly Dillen, Galetti + Riedel
Argentina	43	Jorgensen etc.

2/9/29

Dear Mrs. Chan,

Many thanks for the reports which you sent recently and for those which you asked the Museum to send me. I now have a complete set of all the parts of *Laubert* which relate to grasses.

~~No, I do~~

I spend little time on plants other than grasses - there is plenty ~~of the latter~~ to do with these alone. Yes, we have Hackel's True Grasses & I have used it. Mostly of late however I have been working out the *Panicum* and have been using Petzner, wherever I can, which, I am happy to report, is sometimes.

I assume from your letter that you want me to send along some *P. C. Paspalum*. I shall do so unless I hear within ten days that you do not want them sent yet. I shall have them chopped to you. I have been working over the Mexican & West Indian

Acropelium, having fairly gone over
thanks to your manuscript. There remain
a few puzzles which I'll perhaps ask
you in the Swallen to keep on with sometime.
With all best wishes,

A. —

SMITHSONIAN INSTITUTION
UNITED STATES NATIONAL MUSEUM
WASHINGTON 25, D. C.

Jan. 27, 1949

Dear Dr. Van Schnack,

*and
Sachse*
Your letter of the 17th came the 26th. With this I am mailing you the publications on your list that we still have, and I am asking Mr. Commerford, who has charge of the Nat. Museum publications, to send you Types of N. Amer. Grasses, North American Sp. Pennisetum, I hope they are still in stock.

Are you working on plants other than grasses? It must be a terrific task if all are as out of order as the grasses were when I was there--but I just realize that was 50 years ago! Is Hackel's True Grasses (translation by Scribner & Southworth of Hackel's Gramineae in Engler & Prantl) in the library? It has been out of print for at least 40 years, but is still the only thing that covers all the genera up to that time. It was published by Holt in 1890. I wish you could come here with your puzzles. I still want all your Paspalums of South America whenever you can send them. I have been sidetracked on Paspalum but expect to get back to it by spring.

With best wishes,

Sincerely,

Agnes Chase

Jan. 17, 1949

Dear Mr. Chase,

When Hugh Eltis returned from Washington a couple of weeks ago he came bearing me gifts from you. Many thanks for seedlings such a generous set of separates. I am trying to build up something of a ^{herbarium for the} grass herbarium ~~herbarium~~ and these ^{separates} will constitute a big addition to it.

To date I have been able to secure nearly all of the works on grass which have appeared since 1850. However I still lack the following:

See attached

Should you still have any of these to distribute I would greatly appreciate a copy of such as you could send.

I am still seeking books - at times it seems an endless job. However, it is now possible in some cases to go to the cons. find such books as we wanted in perhaps

across 18 months that will be largely true
of the first autumn. I hope so for there
is much other work to be done which will
be affectionately undertaken until this parting
is over.

I have not forgotten that of a year ago
you asked me to reproduce the S.G. Pospolom
for you. I trust you will still want them.

I hope you work a fair amount, that
you are taking care of yourself & that
the year holds out in store for you.

With all best wishes

1[✓] 2[✓] 3[✓] 4[✓] 5[✓] 6[✓] 7[✓] 8[✓] 9[✓] 10[✓] 11[✓] 12[✓] 13[✓] 14[✓] 15[✓] 16[✓]
17[✓] 18[✓] 19[✓] 20[✓] 21[✓] 22[✓] 23[✓] 24[✓] 25[✓] 26[✓] 27[✓]

out to them

Dmit have Hitchh. Camb. Vol. N^o 4 as follows:

- Vol. 12 #3 Types of grasses.
- ✓ 17-6 Trop. N. Am. sp. of Pan.
- 22-3 N. Am. sp. of Leachue, etc.
- 22-4 N. Am. sp. of Pennisetum.

In addition Dmit have

- ✓ 1-8 ^{grass} Pan. C. grass
has a reduncus J. W. L.
" " Fr. Mex.
- ✓ 3-1 Monog. Gr. W. + Br. Am. I (was there a II?)
- ✓ 14-3 grasses grasses Fr. Br. Am.

SMITHSONIAN INSTITUTION
UNITED STATES NATIONAL MUSEUM
WASHINGTON 25, D. C.

Oct. 19, 1948

Dear Dr. VanSchaack,

I am sorry I have neglected your letter of the 3d. The Reeder's home address is 107 Sheldon Terrace, New Haven 11, Conn., John's Yale is Osborn Botanical laboratory, Yale University, New Haven, Conn.

They were here for the September meetings but had very little time in the herbarium. They are getting the Yale herbarium in order (Charlotte mostly I surmise--Yale is lucky to get the pair for salary of one) and find valuable material that apparently no one has looked at since Eaton's day.

I spent a good part of the spring and summer on a bulletin by Dr. A. W. Sampson and A.C. to replace the Range Grasses (439) Bull., published in 1927. It was one of those bulletins intended for those who have no botanical training, the summer school boys, and young cattle men. This one is much larger and not quite so restricted, and includes an enumeration of California grasses, and more illustrations. If you look up the Dept. Agr. Yearbook for 1948 "Grass" you will see another of the elementary explanations of what a grass is. Alluding to the abuse grasses stand and how they cover the earth, nevertheless I used the phrase "these are the meek that inherit the earth," and the editor took that for the title of the short paper. He had asked me to write such a paper because he said he had everything about grass but what it is.

Now I have got back the revision of the Manual--it had lain in the editor's office--and am adding extensions of range and what has been done on grasses and published the past year.

Dr. Pohl, Iowa State College, Ames, Iowa, to whom I made a brief explanation as to the delay in printing the Manual, wrote me, enclosing carbon of a letter from Dr. McNew, head of Botany there, to his Senator, and said he had written a similar one to his representative. Dr. Dwight M. Moore, head of Botany, Univ. Arkansas, had written that he had seen Senator Fulbright and had later written him about the Manual. Dr. Moore was here in September and I had explained the situation. These gave me an idea. I wrote out a statement concerning the Manual, and this week have sent it to 4 who have asked when the Manual would be out. You did not ask, but I am sending you one of the carbons I made. It seems possible if colleges, especially agricultural colleges, would write their congressmen, explaining their need of the Manual and stressing the fact that it would pay for itself in a reasonable time, that the funds might be appropriated for its printing. Dr. Pohl wrote that if the Department would not print it the Iowa State College Press would do so. That is encouraging, but of course I would much rather it was printed by Dept. Agriculture, in the same form as the first edition. Despoiling the engravings is just an example of the madness of war. And we have not regained our sanity yet. I read a report lately that \$9,000,000 had been spent by the government to buy up eggs to keep up the price (when most people can't afford an egg a day for their children) and more millions still were spent for potatoe

The Manual of Grasses of the U. S. by A. S. Hitchcock, U. S. Department of Agriculture Misc. Publ. 200. 1935 (issued in May, the title-page date, "February," being erroneous). Price \$1.75.

The first printing was exhausted within 2 months. It was reprinted in August or September, 1935, and by 1938 it had been reprinted 8 times. The 8th printing was exhausted in 1938 or 1939. A revised edition was decided on and J. R. Swallen prepared a revision in 1939-40. (Agnes Chase was retired from the Dept. Agriculture April 30, 1939.) This revision was set aside because of the war. There was continual demand for the Manual and at the annual meeting of the Botanical Society of America, 1946-47, a resolution was offered by Prof. H. D. Harrington, Colorado A. and M. College, and passed, requesting the Secretary of Agriculture to have the revision published. Mr. Swallen was then in Brasil and Agnes Chase was asked to bring the revision up to date. (On retirement Mrs. Chase remained custodian of grasses in the National Herbarium, where A. S. Hitchcock and his small staff had worked since 1913, when the grass collection of the Department of Agriculture was incorporated in the National Herbarium, still supported by the Department of Agriculture because so large a part of the work was for that Department. May 1, 1939, Mr. Swallen, an assistant, and Miss Niles, the bibliographer, were moved to Mr. Morrison's office in the South Building and later to Beltsville. Mrs. Chase carried on the work of the Grass Herbarium (without pay) until Mr. Swallen's appointment as Curator of Grasses in the National Herbarium, under the Smithsonian Institution, in October 1947.)

The revision by Agnes Chase, including additional illustrations and distribution maps, was transmitted to the Department of Agriculture and went to the Division of Publications in October 1947. Some months later it was learned that the engravings for the 1696 illustrations and maps used in the first edition and stored at the Government Printing Office had been taken for war metal. The drawings and maps were preserved in the Grass Herbarium and are available for engraving. These and the additional drawings were transmitted with the manuscript to the Department of Agriculture in October 1947.

The editor put the date "1948" on the title page, and it was expected that the work would be issued in the fiscal year ending June 30, 1948. Later it was learned that the appropriation for publications had been severely cut and that there were no funds for the printing.

The fact that the Manual was reprinted 8 times shows that it far more than paid for itself. The price set for a publication, it is understood, is estimated to cover the cost of printing if the edition is sold. A report kindly furnished by the Government Printing Office gives the following figures: Total printed 11,680; distributed free 1900; sold 9980. (At \$1.75 gives a total of \$17,465.) The profit, however, does not go to the Department nor to the Government Printing Office, but to the Treasury. If an appropriation of the amount required for printing the revision were made by Congress or the amount added to the appropriation for the Department of Agriculture and designated for this purpose, there is reason to believe that the amount would be returned to the Treasury within a reasonable time. There is a continuing demand for the Manual. (Before the Manual was printed in 1935 Agnes Chase ordered and paid for 150 copies. These were sold at \$1.75 during the various times the first edition was out of print, but were exhausted in 1942.) Many letters are being received asking when the Manual would be ready. Second-hand book dealers have been asking \$7, and recently it was listed at \$10.

Statement by Agnes Chase, Research Associate,
Smithsonian Institution, Washington, D.C. October 19, 1948

The manuscript is now in my hands and I am adding extensions of range and including the published work on grasses of the past year.

Agnes Chase

SMITHSONIAN INSTITUTION
UNITED STATES NATIONAL MUSEUM
WASHINGTON 25, D. C.

June 10, 1948.

Dr. George B. Van Schaack,
Missouri Botanical Garden,
2315 Tower Grove Avenue,
St. Louis 10, Missouri

Dear Dr. Van Schaack:

Your letter of June 5 with grass enclosed came yesterday. It is *Leptochloa fascicularis* (Lam.) Gray, very immature, and one of those species that sit on the dividing line between tribes. You probably put it in *Festuceae*. At Kew they put this in *Diplachne* because of the awns, but other *Leptochloas* have tiny awns.

Nobody is ever able to do all he hoped, unless he hoped for little, but you must have learned a great deal. I hope you can come here with your *Andropogoneae* puzzles this summer and we will help you solve them.

With best wishes,

Sincerely yours,

Agnes Chase

Agnes Chase
Research Associate

SMITHSONIAN INSTITUTION
UNITED STATES NATIONAL MUSEUM
WASHINGTON, D. C.

February 19, 1948.

Dr. George B. Van Schaack,
Missouri Botanical Garden,
2315 Tower Grove Avenue,
St. Louis, Missouri

Dear Dr. Van Schaack:

Your letter of January 12th came during a "vacation" spent with flu, etc. I returned February 10 and am trying to catch up. Your inquiries in regard to exchanges and the like I am referring to Mr. Swallen, Curator of the Division of Grasses.

Copied on sheet. "Ehrharta vaginata Pilger," Schlechter 10852 (coll. 1897), is in this herbarium also. The name has never been published. It is so annotated in 1911 and again 1948. I have just run over all our cards again to see if that number is cited under some other name. The best treatment of Ehrharta is Stapf's in *Thiselt.-Dyer, Fl. Cap. 7: 660-682. 1900.* Some of Schlechter's are cited in this, but none with numbers so high as this. Our 10852 is in *Indet.*, with notes. I hesitate to ask Dr. Pilger since so large a part of the Berlin Herbarium was destroyed.

In *Old World* covers there are "indet" covers at the end of many genera. When something new is described that is where I look first, hoping to find a cited specimen.

With best wishes,

Sincerely yours,

Agnes Chase

Agnes Chase
Research Associate

SMITHSONIAN INSTITUTION
UNITED STATES NATIONAL MUSEUM
WASHINGTON, D. C.

February 12, 1949.

Dear Dr. Van Schaack,

Your letter of Jan. 20 was sent to me at home some time ago. Please excuse delay. I was one of the thousands of victims of a flu epidemic here and only returned to work this week.

Thank you very much for sorting your Paspalums geographically and listing the collections for me. It looks as if you have little that we do not have. When I have about finished the South American species I should be glad to go over your Paspalums naming them or revising the names. Could they be kept segregated until I ask for them? I had intended to include Brazilian Paspalum only, but Brasil includes nearly 90 percent of the species so I have gone back and added the rest of South America. I should like to examine all of yours -- you know the habit grasses have of changing the names on their labels.

After I sent you the list of Hordeae I reworked the "Lepturus" group of Hordeae and the Chlorideae taken out of it. Enclosed are notes I hope you can read.

With best wishes,

Sincerely yours,

Agnes Chase

Agnes Chase
Research Associate

*Feb 14. Briefly answered, returning sheet I was
requested to be returned.*

MBG.

January 20, 1978

Dear Mrs. Chase

You asked me when I was in Washington if we would loan you some Paspalum. I am sorry that I have forgotten whether you said you wanted to see all the South American sheets or only ~~just~~ those from Brazil.

Within the week I have sorted ~~the~~ our Paspalums geographically and find that your own collections constitute a very large part of all we have. Since ~~you~~ ^{we} have many sheets which you have seen & do not wish to handle with again I ^{attach a} list of ~~of~~ approximately what we have. I shall be ^{glad} ~~happy~~ to have any or all of these sheets sent to you as you may request. ~~Even should~~.

With best wishes

Sincerely yours,

Brazil	190	Chere (det.)
	34	Chere (Undet.)
	14	Salzmann
	76+10	mostly Duran, Galdi, Riedel
Argentina	43	Järgensen, etc.
Bolivia	32	mostly Morong, Järgensen, Hassler
Paraguay	35+1	mostly Morong, Järgensen, Hassler
Bolivia	32	mostly Bong, Buchten, Steinbach
Uruguay	12	Mitt.
Peru	3	"
Ecuador	7	"
Colombia	33+1	mostly Santa Marta, H. H. Smith, 1898-1901 & N.Y. Bot. Gard. Col. Expl. 1917
Venezuela	27	17 of Judd
Dutch Dutch Guiana	8+2	Mitt.
British Guiana	23	19 of USDA Distr. Coll. Hitchc.
Chile	2	

SMITHSONIAN INSTITUTION
UNITED STATES NATIONAL MUSEUM

WASHINGTON 25, D. C.

Jan. 12, 1948

Dear Dr. VanSchaack,

With all sorts of apologies I am sending you the enclosed a week after I promised it. I never seem able to estimate how long anything is going to take. I thought I was about finished with the Range Grass paper, and then found I had overlooked the list of species to be added. I worked the whole week on it and only got it off Saturday afternoon. Today I went over all this group of *Hordeae* and send you carbon of what I typed for US. At least I'll send it airmail.

If you need help in your efforts to bring order to the grass collection I shall be glad to look up things for you--and hope I shall not delay so long.

With best wishes,

Sincerely

Agnes Chase

Jun 10, 1948

Chas,

Upon my return to St. Louis I learned
~~to you~~ ^{but}
It has been announced that Dr. Greenman retired
as curator on January first and that Dr
Woodson had succeeded him. Dr. Woodson says that
~~he~~ ^{he} does not know how ^{the} exchange gets
to the herbarium standards, and he asked
me to write you to ask if you can make
a fairly definite statement regarding the debt,
in particular regarding ^{the} grasses and whether
it was the expectation of the Rosemary
Herbarium that the debt in grasses should
be paid in grasses alone.

More generally he would be interested in
your opinion regarding the disposition of
the duplicates in the M. D. G. herbarium. There
has ~~been~~ been filling up here a fairly large
number of duplicates which have not been
segregated. These include both general
duplicates of nineteenth century collections,
and a not unimportant number of duplicates
of great historical interest, such as collections
of Lindheimer, Wright and the like. Is it
a usual practice that duplicates be exchanged
on a one-to-one basis regardless of historical
value? To what extent is the Rosemary
Herbarium interested in receiving ^{any of the} ~~such~~ duplicates
in question? ~~and~~ And do you have any
suggestion as to what herbaria in this
country - abroad would be most benefited

Dear

1-10-48

by receiving duplicates from here.

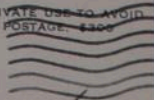
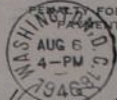
In attempting to order up the genus *Echidnium* recently I found a sheet (Herbarium #10552) marked *E. vaginatum* Pilger n. sp. I have been unable to find this name in either the Ken Index or the Gray Herbarium Catalog. I would appreciate your sending me ~~the~~ any reference to this name which you may have.

It was a just pleasure to see you ^{on my recent visit.}
~~down at the hotel~~ ~~last week.~~ With
all best wishes



SMITHSONIAN INSTITUTION
UNITED STATES NATIONAL MUSEUM
WASHINGTON, D. C.
OFFICIAL BUSINESS

PERMIT FOR PRIVATE USE TO AVOID
PAYMENT OF POSTAGE \$300



Dr. George B. Van Schaack
Nert Coxsackie
N Y

Smithsonian Aug 6, 1946

Dear Dr Van Schaack

Thank you for the labels just received. I am still putting every thing else aside to work on the Manual but I am nearly done. There is a whole herbarium case full of grasses to name and report on besides a great pile of letters. My reputation for promptness must be gone.

Sincerely Agnes Chase

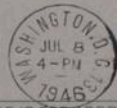
August 3, 1966.

Dear Mrs. Chase,

I have finally completed writing all the labels for my *Atten* grasses. I am herewith sending you those for the set which is to be deposited in the USNH. You will find this set of grasses marked 'Van Schaek, grasses for USNH, Parts I + II' in the cabinet containing my collection, the right hand column, second shelf from the bottom. This set includes three sheets of Capt. Sauer's collection, for which labels are included. I have sorted the labels numerically by genus, since the specimens are sorted by genus.

I appreciate very much your loving care & the determinations of the two grasses I mailed you some time ago. I have only just now had a chance to see my specimens again and seem to have lost track of how I could have gone so far wrong as to call a ~~Glyceria~~ *Trichusa* a *Glyceria*! My collecting of grasses continues and gives me a great deal of fun - and now that the Parisians etc are coming along, some problems that I may eventually bring down to you.

I trust that the work of reading the Manual is going along well enough so that you are able at least from time to time to get out in the field, as well as get some specimens or to find grasses. With warm regards, sincerely yours,



THIS SIDE OF CARD IS FOR ADDRESS

George B. Van Schaack
In care of
Miss Helen O. Rider
135 Deerhill Avenue
Danbury, Conn.

1348. *Festuca obtusa* very immature

1351. *Deschampsia flexuosa* stamling
with abortive spikelets - unusual

No cause for discouragement. In a herbarium
you would have found these

Working top speed on
the Manual

Best wishes

A.C.

7/8/46

have found. Not that I have been without some success, but still I have been baffled - great deal of the time, often I feel to the point that had you been near I would have appealed to you. As now I am appealing as you have guessed from the enclosures. I collected these two things today in a damp maple woods near Albany in a calcareous region. I have struggled with them until I am sure I cannot determine them at my present stage.

The second specimen was loosely tufted, apparently perennial, basal leaves many, half the height of the culm, reticulate in the channel. Culm blades were profligately horizontally, reflecting the odd looking spikelets. I key this repeatedly to *Deschampsia*. The florets are apparently perfect, some of them showing awnless, ~~and~~ the awn is dorsal, attached low, the rachis ~~part~~ is prolonged (minutely). But there is no D. in the manual it comes anywhere near. And what are the sterile or undeveloped spikelets?

^{Abundant in this woods}
The other specimen was, loosely tufted, blades flat, soft & lax, long. I cannot key it to anything but *Glyptis*. The lemma nerves are not very distinct - I see only 5, though there may be 7. It fits *G. canadensis*

most closely, but is only 2-flowered, and the
second plant is uniformly next to uninteresting.

I can hear you chuckling as it occurs
to you where I have gone astray. Sometimes
when you're not too busy, ^{please} scribble the
names on the ~~attached~~ ^{enclosed} card - don't trouble
to write, let me find out how I went
astray.

I am enclosing the vouchers you ~~sent~~ ^{sent} ^{kindly}
me.

I trust you have found some one to take
at least part of the load of routine work
off your shoulders.

With many thanks and warm regards,

Sincerely

SMITHSONIAN INSTITUTION
UNITED STATES NATIONAL MUSEUM

WASHINGTON, D. C.

June 10, 1946.

Dr. George B. Van Schaack
West Coxsackie
New York

Dear Dr. Van Schaack:

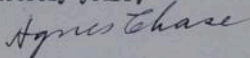
Your letter of the 6th just received. I am sending carbon of what I wrote to Dr. Woodson. I had hoped you could go to St. Louis this fall. Since there is no one else (I feel confident) who could take such a curatorship as that proposed I should think it would be held open. When I remember how I started at the Field Museum on grasses, with no training but what I had gained by myself--I had never seen a student of grasses and the terminology used at that time was so vague I had to work out structure myself--I feel you are, relatively, "well prepared". I had only Bentham & Hooker for genera other than those in Britton & Brown, and Mexican Boundary, Yucatan, and West Indian grasses were given me to name. With structure well in mind and the books available today you can "learn by doing," and you can get help here when you need it. The grass collection at Missouri Botanical Garden was a mess when I saw it years ago. You could learn a great deal straightening it out, and have a happy time doing it.

I think Mo. Bot. Gard. is decidedly "wise" in making such a proposition, and I should hope that after a year you could offer a graduate course of the type Dr. Griggs gives at George Washington. You would have a wider representation of grasses and could widen the work in morphology. I could suggest some improvements in Dr. Griggs' course.

For the sake of agrostology I hope you will have that honorary curatorship for training. Come down here when you can to widen your knowledge.

With best wishes,

Sincerely yours,



Agnes Chase
Custodian of Grasses.

(COPY)

Missouri Botanical Garden
2315 Tower Grove Avenue
St. Louis 10, Missouri

May 31, 1946

Mrs. Agnes Chase
Smithsonian Institute
Washington , D. C.

Dear Mrs. Chase:

The new chairman of our Mathematics Department at Washington University is interested in adding to his staff a Dr. Van Schaack who, it appears, is a valuable teacher of mathematics and a good friend of our mathematic chairman, but who is more interested in doing research in botany than in mathematics. Our mathematician has asked us, therefore, if it would be possible to offer Dr. Van Schaack a joint appointment in mathematics and botany.

I understand that Dr. Van Schaack has been assisting you in the grass herbarium, and since we know nothing whatever about him I am asking you to give us some confidential information concerning him--whatever you think bears upon the case. Since we understand that he has no formal training in botany it seems unlikely that we would be able to offer him a teaching position, at least at present. However, we did think that it might be possible to give him the facilities of the Garden for his study, say as honorary curator of grasses in the herbarium. We shall be gratefully obliged if you will give us a rather full and candid statement.

With best regards.

Sincerely yours,

Robert E. Woodson, Jr.
Assistant Curator of
the Herbarium

(COPY)

June 5, 1946

Dr. Robert E. Woodson, Jr.
Missouri Botanical Garden
2316 Tower Grove Ave.
St. Louis 10, Mo

Dear Dr. Woodson:

Your letter of May 31 has just been received. Dr. Van Schaack made such a remarkably fine collection of grasses on Attu (of other plants, also, according to Dr. Walker) that I was greatly interested in his desire to take up taxonomic botany. While he was here I gave him the short course in structure and gross morphology of grasses which I have given a number of students. He showed himself to be a very keen student. Later I asked him, for experience, to sort U. S. grasses into tribes, genera and species for distribution in the herbarium (the grasses had been identified, naturally), I found no mistakes when I distributed them. I would have been more than glad if he could have been appointed here as assistant in the grass herbarium. He would be able to revise the grass collections in your herbarium, having access to your valuable library. (I wish he could come here to copy annotations in many of the books he would have to use.) Dr. Van Schaack worked over his other collections from Attu with some help from Dr. E. H. Walker. Personally Dr. Van Schaack is well bred, kindly and cooperative.

Sincerely yours,

Agnes Chase
Custodian of Grasses.

SMITHSONIAN INSTITUTION
UNITED STATES NATIONAL MUSEUM

WASHINGTON, D. C.

January 25, 1946.

Dr. George S. VanSchnack
West Coxsackie, New York.

Dear Dr. Van Schaack:

Your letter of Jan. 24 has been received. Dr. Walker showed me your Guggenheim statement. I have had occasion to recommend three men for Guggenheim fellowships and I think Dr. Moe takes a very liberal view. First he wants to know the importance of the project. That is why I noted on your sheet the study of material in the U. S. Nat. Herb. never adequately worked up. Your collections far outnumber all others combined but you will want to account for all. Your work on Attu flora will include grasses and at least two species are still to be found or described and the complex of *Poa lanata-hispidula* worked out. The morphology of the northern grasses is very simple but after office hours, as the days lengthen you can study more complex grasses. I have unmounted specimens for you to dissect. I think Guggenheim awards are made in the fall (unless some exception is made in favor of ex-service men). If so you could not begin flora of Attu until fall. In the meantime could you use your "GI" college fund to take botany at George Washington and Dr. Blake's course in taxonomic botany evenings also, and besides put in all your spare time on grasses here? Dr. Griggs would, I think, give credit for your work here. If you decide to do this you can state in your Guggenheim application that are to have courses in botany in the meantime. Better ask when awards are made, You did not mention your Ph. D. This will be greatly in your favor.

What I have suggested would give little time for "recreation" but if you enjoy botany, especially grasses, as I do, you will not need much recreation. I shall be ready with a graded series to dissect when you return if you decide to study grasses.

With best wishes,

Sincerely yours,

Agnes Chase

Agnes Chase
Custodian of Grasses.

*If you decide to study
grasses primarily from
now till summer I think
you would be ready to
take Dr. Chase's place in July
if you want it. If you have time to read now
I can lend you Hitchcock's Methods of Descriptive Systematic
Botany - a mine of information on taxonomic work. Or
you may borrow it when you return.*

January 24th, 1946.

Dear Mrs. Chase,

Although I don't think I spoke of it to you Dr. Wadley has probably mentioned to you that he urged me to spend some time in Washington studying my collection and preparing a report on it. When I returned to New York last week and related this to a friend of mine there he suggested that the project might be worthy of support from the Guggenheim Foundation and urged me to consider applying for a ^{post-service} Fellowship.

I don't feel that I am able to evaluate the advisability of doing so and I am appealing to you, to Dr. Wadley & to Prof. Bartlett of Michigan for advice. ~~As~~ ^{As} you ~~wish~~ ^{would} ~~the~~ ^{the} ~~support~~ ^{the support} of such an application I would ~~like~~ ^{like} ~~to~~ ^{to} ~~make~~ ^{make} ~~for~~ ^{for} ~~such~~ ^{such} ~~an~~ ^{an} ~~application~~ ^{application} ~~which~~ ^{which} ~~would~~ ^{would} ~~be~~ ^{be} ~~of~~ ^{of} ~~great~~ ^{great} ~~service~~ ^{service}. ~~I~~ ^I ~~am~~ ^{am} ~~able~~ ^{able} ~~to~~ ^{to} ~~seek~~ ^{seek} ~~support~~ ^{support} ~~only~~ ^{only} ~~from~~ ^{from} ~~the~~ ^{the} ~~three~~ ^{three} of you. Dr. Wadley may already have spoken to you regarding this application. And today I am sending him a 'test' copy of the application ~~for~~ ^{for} that he may see how he ~~is~~ ^{is} ~~able~~ ^{able} ~~to~~ ^{to} ~~advise~~ ^{advise} me. If you feel that I would be at all justified in making an application I would

appreciate your looking over the copy I
am sending Dr. Baker and your making
any suggestions for its improvement.

You will of course wonder whether my
considering this application indicates that
I am not interested in the proposal which
you made to me regarding my ascending you
following July first. But I know you
~~will~~ realize that at this early stage my
plans for taking up botany are in an
ambiguous state and that for a time
at least my proper play is to have several
noises in the fire. I assure you that I
am definitely interested in your ~~paper~~ offer
and that my application for a fellowship
would by no means imply that I did not
intend to keep your offer under consideration.
In fact were ~~I to be awarded~~ an award to be
made me I would still wish to consider
your offer and would hope that it might
be possible to work out some method
whereby I could ~~both~~ both work on the
project for which the award was made and
at the same time ^{still have the opportunity of} benefit from working
for and with you.

I would be grateful for your advice and, should you feel that you could support my application for a fellowship, I would appreciate your allowing me to use your name as a reference.

It was a great pleasure to meet you in Washington. I apologize for having paid so little attention ~~to~~ to the work you had done on my grasses - ~~this was because~~ I was thus negligent ~~and~~ because of my confusion with so much on hand, ~~and~~ because of the fact that I at once realized I must return, when I should have more time to spend with you on the grasses, and because I hesitated to take your time when I saw you were so busy.

I hope to be back in Washington in about two weeks and ^{am} looking forward to seeing you then. With kindest regards,

Sincerely yours,

SMITHSONIAN INSTITUTION
UNITED STATES NATIONAL MUSEUM

WASHINGTON, D. C.

December 17, 1945.

Captain George B. Van Schaack
West Coxsackie, New York

Dear Captain Van Schaack:

Your letter with 3 grasses has been received. They are
Bromus secalinus L.
Andropogon virginicus L.
Elymus canadensis L. This has lost so many florets it does not
well show the structure. In *Elymus* the two spikelets at each rachis
joint are alike and sessile. In *Hordeum* one spikelet is sessile
and perfect, with a reduced pedicelled spikelet on each side. In
Hordeum the rachis disjoints with the 3 spikelets attached. In this
Elymus the rachis is continuous, the florets falling from the glumes.

We shall be glad to see you when you can come. You made
some interesting finds.

I am holding the 3 Michigan grasses in case you want to see
them.

With best wishes,

Sincerely yours,

Agnes Chase
Agnes Chase
Custodian of Grasses.

SMITHSONIAN INSTITUTION
UNITED STATES NATIONAL MUSEUM

WASHINGTON 25, D. C.

July 2, 1945

Lt. G. B. VanSchaack,
Ordnance Dept., Navy 163,
Fl. P. O. San Francisco,
Cal.

Dear Lt. Van Schaack,

Thank you very much for the copy of your Flowers of Island X, which came two days ago. I am very glad to have it. It will certainly be very helpful to anyone who is at all susceptible to inoculation with botany. It is to be hoped that many of the men on island X will find the vegetation interesting. The preface is encouraging and the illustrated glossary ought to remove any fear the beginner might have.

Thank you again,

Sincerely yours,

Agnes Chase

SMITHSONIAN INSTITUTION
UNITED STATES NATIONAL MUSEUM
WASHINGTON, D. C.

April 23, 1945

Lt. G. B. VanSchaack,
Ordnance Dept., Navy 163,
F. P. O., San Francisco, Cal.

Dear Lt. VanSchaack,

Your letter of the 8th with enclosures came the 18th. I am returning the grasses you sent. The sedges and Juncus I turned over to Dr. Walker. They are so immature he will probably not be able to name all of them.

I am very glad you are finding grasses fascinating--I have found them so for 50 years. Scribner & Merrill is out of date, but I sent it because it was the only thing available. We have a mass "Grasses of Alaska" prepared some years ago by Prof. Hitchcock but never printed, he felt that more collections were needed to work out the many puzzles. Your *Poa stenantha*, for example. I cannot see that it is anything else, but we have a few specimens with a few hairs at base, but yours is rather copiously hairy. Poas vary greatly in the amount of "web," but it is used as a key character, because on the whole, it brings allied species together. There is a vast amount of work still to be done on *Poa*. Hultén has published pt. 2, Flora of Alaska containing the grasses, and a copy has just reached Washington at last, but it is not yet available from the library. I shall be able to use it when you send this year's collections. But from what I have seen of the work--in an hour or two--I do not think he has solved all the problems. I had taken fragments of some Alaska grasses for you and send them with your specimens. With your eye piece and lens you will be able to dissect the spikelets and get some idea of the genera. The far northern grasses seem to be even more variable than the general run. If you can collect and send us good specimens of grasses they will be a great help in working up the grasses of Alaska eventually.

Dr. Walker told me a few days ago that he had received the payment for the lens he sent you.

With this I am sending a copy of a recent paper by Mr. Swallen, who plans to work up the Arctic grasses. He was sent to Brazil for the "*duratin*" and we do not know when he will return. *Puccinellia* is about the worst of the Alaska puzzles. He wants all the specimens he can get. I shall be glad to help you in your study of grasses in any way I can.

With best wishes,

Sincerely yours,

Agnès Chase

I find I am out of Smithsonian franked envelopes of the needed size, so am using Dept. Agriculture, but my address is Smithsonian--Mr. Swallen is in Agriculture.

Identifying grasses is "official business" for me.

SMITHSONIAN INSTITUTION
UNITED STATES NATIONAL MUSEUM

WASHINGTON 25, D. C.

March 22, 1945

Lt. G. B. Van Schaack,
Ordnance Department, Navy 163,
F. P. O., San Francisco, Cal.

Dear Lt. Van Schaack,

Your letter of the 17th with check for \$3 enclosed was received this morning. I have mailed to you a copy of the Manual, \$1.75, and Genera of Grasses of the U.S., 40 cents, total \$2.15. The balance, 85 cents, I enclose in stamps. I hope you can sell some of them to fellow soldiers. There are no copies of the two I send for free distribution, I paid \$1.75 and 40 cents for them respectively. Before the Manual was first printed I ordered and paid for 150 copies because I felt sure it would soon be out of print, and because the number to be printed was governed by the advance orders. The Manual was out of print in less than 2 months. There have been 8 reprintings, and between printings I have supplied copies at the price I paid for them. I now have but 3 copies left and am not sending them to any who have access to a copy. A new edition has been prepared by Mr. J. R. Swallen. It was ready in the summer of 1941, but was delayed by the Bureau temporarily, and soon after, when war was declared, for the "duration." A number of additional species have been found, some extensions of range from Mexico, some old world weeds, some new species. If you will read pages 6 to 14 you will have a good general introduction to the study of grasses. I am glad you find the First Book useful. It was planned for those who took up grasses, as I did, without any teaching in the subject. I send also a copy of Scribner & Merrill's Grasses of Alaska, which, while out of date, will be of some help. When names differ from those in the Manual take the Manual, Hierochloa for example, instead of Savastaha.

Such a notebook as you describe would be of the greatest help if the plants had been studied and notes made on them, with sketches of dissections. Grass spikelets, which are morphologically flowering branches, must be taken apart if they are to be understood. By ordinary mail I shall send you packets with a few spikelets of most of the genera so that you may dissect them to learn their structure. All the northern grasses are very simple in structure. The difficulty in studying them is because of their variability, the species seem to run together in *Poa*, *Puccinellia* especially. But if you will collect the grasses giving them numbers I shall be glad to name them for you, in the meantime you can call them *Poa* 472, or the like. It is better to use a single series of numbers for all collections. I cannot take time to make the notebook you suggest, and to be of the greatest use to you you should make the notebook with notes and sketches no matter how crude, yourself, in studying the spikelets. You will have time to do this before the snow is gone, I hope. I am sure you will find the grasses a most interesting study. Of course you need a lens to study the spikelet. I am sorry I have no extra one to lend but Dr. Walker said he thought he could lend one. The Smithsonian has none for this purpose—I think it would take a special act like Lend-Lease to obtain permission if it had one. Our microscopes are supplied but so far as I know we all buy our own lenses.

With best wishes,

Sincerely yours,

Agnes Chase
Custodian of Grasses

SMITHSONIAN INSTITUTION
UNITED STATES NATIONAL MUSEUM

WASHINGTON, D. C.

Jan. 11, 1945

Lieut. George B. VanSchaack,
Ordnance Dept. Navy 163,
F. F. O., San Francisco, Cal.

Dear Lieut. Van Schaack,

Dr. Walker has shown me your letter of Jan. 4--he had also shown me your fine specimens when he was working on them.

We shall be very glad to have any grasses you may be able to collect. The region is important from the standpoint of plant distribution, and while we have a good many grasses from the Aleutians there are doubtless species not represented here, and we are eager to add to our collections. I shall be glad to study your grasses and report to you. There is no work on the Aleutians except Hulten's Flora of the Aleutian Islands which is difficult to obtain under the present conditions. We have a copy in the Agrostological library here. With this I am sending you a book for beginners on the structure of grasses, that I hope will be of help to you, also Scribner & Merrill's Grasses of Alaska. It is old (1910) and does not have much from the Aleutians, but it will give you all the genera, at least. A copy of Swallen's Puccinellia of Alaska is also included. We shall be grateful for any grasses you can send.

Another botanical student is sending plants from the islands, the particular islands unknown at present, Robert G. Morehouse, 20902195, H & S Co., 203d Inf. B.N., U. S. A. P. O. 726, c/o Postmaster, Seattle, Wash. Possibly you may meet some day.

With best wishes,

Sincerely yours,

Agnes Chase

Custodian of Grasses



Sphacelot
Trees
Books

March 17th 1940

1080
35
1.10
1.50
1.00

Mrs. Agnes Chase
Curator of Grasses
Smithsonian Institution
U.S. National Museum
Washington, D.C.

Dear Mrs. Chase,

Your letter of January 11 with enclosures, and the copy of your 'First Book of Grasses' reached me rather long since. I wish very much that I had realized last summer the importance of grasses and my opportunity here to collect them. But beginner that I was and knowing nothing of grass structure I almost completely ignored them. ~~The perusal~~ ^{study} of your book has ~~changed my~~ ~~attitude~~ I have perused your book with much interest and I trust some understanding, and hope that I may soon have the chance to go through it thoroughly with live grasses at my disposal. At any rate you have been successful in arousing my interest and in the future I am sure a ~~new~~ grass new to me will be quite as exciting as ~~such~~ a new

showing flower.

I have recently had the opportunity of meeting and talking with Dr. P.F. Scholander, a botanist & physiologist of Norwegian birth & education, but now, I believe, living in the States. He has suggested that ~~the~~ ~~most~~ one of the most helpful aids an inexperienced collector can have is a notebook of specimens which can be expected to be found ^{in the area studied}. In the case of grasses, ~~sedges, & rushes~~ a single epithet would ~~probably~~ in general make positive identification possible. In sedges & rushes a similar small piece would do. Dr. Scholander recommended my ~~suggesting~~ ~~to you~~ that asking you if you would be able to send such a notebook made up ^{for this area} ~~for the area~~ ^{of specimens} from any duplicates the museum may have, regardless of the location of the specimens used. Such a notebook would be of great help in directing a search as well as in identification. No #

From the interest I have observed during my time here I think it is likely there will be a respectable number of interested collectors

here this summer. Should I not be fortunate
enough to stay here myself I would pass
this notebook on to some one who could
use it and who would collect for you.

I am wondering where I can obtain a good
sum of about ten dollars. Is it possible
that the Smithsonian has any to send out
or loan for the use of those collecting for it?

~~I am enclosing a check for \$3.00.~~

I am also wondering if you would have
sent to me the two ~~Smithsonian~~ Hitchcock
publications: U.S. D. A. Misc. Publ. # ~~200~~ 200
and U.S. D. A. Bull. # 772. I would put the
idea in myself were I sure of the prices, but
I know only that # 772 did cost 40¢
in 1937. For this purpose I am enclosing a
check for \$3.00.

I trust you will forgive me for delaying
so long in ~~acknowledging~~ your acknowledging
your letter & publications. At about the
time they arrived it looked as if I might
be transferred - but that has not come
about and now there seems at least a

4

fighting chance that I may be able to see
at least part of the summer here - ~~but~~
you may believe I am keeping my fingers
crossed.

I tried to find ~~Mr. C.~~ Robert C.
Marchant - soon as I heard from you
but he has already returned to the
States.

With many thanks for your letter and
publications,

Sincerely yours,

March 22
1920

My dear Professor Hitchcock:

I am in receipt of your letter of March 1 relative to the publication of Mrs. Chase's account of the grasses of Oklahoma.

I have delayed replying in the hope that I might be able to make some suggestion as to the printing of this paper, since I realize that it is undoubtedly an admirable presentation of the subject and it would be unfortunate if it could not be brought out within a reasonable length of time. So far as publishing it in the Garden Annals is concerned, I fear this is quite out of the question. Aside from the fact that we have on hand more material than we will be able to print this year, we have found it necessary to make the rule of reserving the Annals for papers from our staff and students only. The pressure to print things prepared outside the Garden has at times been very strong and I would hesitate a long time before I broke the precedent which we, at present at least, feel to be absolutely necessary.

It certainly seems to me that it's up to somebody in Oklahoma to see that this paper is printed and, under the circumstances, even though Professor Stevens may have left the state, I think his obligation to carry out the original arrangement with Mrs. Chase is just as binding as ever. Don't you think, if sufficient pressure were brought to bear that you might be able to accomplish this?

There is a possibility that later in the year the Academy of Science of St. Louis may be able to print this paper. We have set aside a thousand dollars or more for publication this year but, since Mrs. Chase's paper would undoubtedly consume most of this sum, I would not be in favor at the present time of accepting it. I feel that the active members of the Academy have the first right and it is, of course, highly probable that we will receive enough papers from this source to exhaust the fund. Should it happen, however, that towards the end of the year money were still available, I would be inclined to recommend at least the careful consideration of the publication of Mrs. Chase's monograph. This is the only thing I can suggest at the present time, although should I learn of any other possibility, I shall inform you.

Very truly yours,

Dr. A. S. Hitchcock
Washington, D.C.

Director

American Association for the Advancement of Science

And Affiliated National Scientific Societies

LOCAL EXECUTIVE COMMITTEE:

GEORGE T. MOORE, CHAIRMAN
ALEXANDER S. LANGSDORF
AUGUSTUS G. POHLMAN
JOHN W. WITHERS
JOHN M. WULFING

1919 MEETING

ST. LOUIS, MO.

DECEMBER 29, 1919, TO JANUARY 3, 1920

OFFICE OF GENERAL SECRETARY:

MISSOURI BOTANICAL GARDEN
ST. LOUIS, MO.

November 10, 1919.

The meeting of the American Association for the Advancement of Science in St. Louis during the holidays affords a particularly favorable opportunity for those living in this vicinity to become members of the Association. Aside from the benefits of such membership, the opportunity to secure at considerably less than the regular rates, either *Science* or *Popular Science Monthly* is an additional reason for joining the Association.

It has been customary in the past for the Association to receive large numbers of applications for membership from those residing in the vicinity of the meeting place, and it is hoped that St. Louis will not fall below the records made at Pittsburgh and Baltimore.

Please give the matter earnest consideration, and if membership in the Association appeals to you, fill out the enclosed application card and forward in the addressed envelope.

GEORGE T. MOORE,
General Secretary.

UNITED STATES DEPARTMENT OF AGRICULTURE,
BUREAU OF PLANT INDUSTRY.

ECONOMIC AND SYSTEMATIC BOTANY.

Washington, D. C., March 1, 1920.

Dr. Geo. T. Moore,
Missouri Botanical Garden,
St. Louis, Missouri.

Dear Dr. Moore:

Upon the request of Professor Stevens, at that time Professor of botany in Oklahoma, Mrs. Chase prepared an account of the grasses of Oklahoma. She spent much time on this and the resulting manuscript was a well worked out article on the subject. By the time the article was finished Professor Stevens had left Oklahoma and the Government officials had changed so that at present nobody there is interested in the publication of the article. It was planned to appear in a Government publication. Knowing that you are interested in the flora of the south-west I thought possibly you might like this manuscript for publication in one of the Garden serials. It seems unfortunate that a good piece of work of this kind should not be made available to botanists, especially when treating of a difficult group in a region not covered by any of our standard floras. The manuscript contains about 112 pages. There are keys to the genera and to the species of each genus. The genera are described and the species briefly so. Should you be interested I will send on to you the manuscript for determination. Unfortunately it can not be published here, as it has not been the policy to include articles dealing with so limited a locality.

Very truly yours,

A. S. Hitchcock
Systematic Agrostologist.