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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.

STATE OF INDIANA
CONSERVATION DEPARTMENT
DEPARTMENT OF PUBLIC WORKS

Rept. 10/26

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INDIANAPOLIS

Bluffton, Ind.,
Oct. 22 1937

Administrative Officer
V. M. Simmons

Dear Hermann: I have your letter with enclosures. I am sending you with my compliments a set of dissecting needles and return those you sent. These needles are to me like "mothers cooking", nothing as good as the good old black needles. You can easily see them on table or among white sheets. Too they are square and do not roll. I have been thru the mill on needles. For the first 15 years I used grape vine sections and stuck sewing needle in them. They answer the purpose. I tried out straight sections and then tried out slightly curved sections but I concluded the straight ones the best. I now have (bought) three extra needles so if I lose one I am not broke.

Yes I think you will find Moldenke a real fellow. I can easily understand the disadvantage he is at in the gang at N.Y. Moldenke had an illustrious father. He is independent financially, reared like a gentleman. Even I am prejudiced against such as he but it is unjust. He only acts his part, being reared on a standard a little higher than the "mine run". I came from the back woods and still have cockle burs et al in my tail and quite natural I resent the guy who never had to go thru the bush as I did.

Well you will see from Camp's letter the Ind. Vaccinium are impossible for me.

Now as to the publication of your paper. Your suggestion O.K. Now as to Dr. Fernald. If you give him all the types and then if he charges you a penny for the paper, he should be "scrapped". Your suggestion that it be published in the Amer. Midland O.K. By the way the Amer. Midland is now about the best in the U.S. and I do not believe it will go backward. You know I greatly admire Fernald's ability but he is do dam dogmatic. OVER

I think I will finish *Dioscorea* today. I think I shall use *D. quaternata* for *D. villosa*. There has been pages written on the nomenclature of this species and is no good. We have here in Ind. two forms of *D. hirticaulis*, - one a glabrous form and one a densely pubescent form. Now Bartlett described *D. hirticaulis* as a glabrous plant (I refer to the under surface of leaves) Now it seems that Fernald et al do not know there is a plant of this species (or I should say another species or a var, or forms of *D. hirticaulis*) that is pubescent. In a letter to me Fernald this summer said it is possible that Linnaeus *D. villosa* was *D. hirticaulis*. That is the only mention I know of that Fernald knew there is a pubescent form of this species. Too certain forms of *D. glauca* come close to *D. villosa*, if you do not have the lowermost part of the stem. So far as I know the type specimen has not been described except that the under surface of leaves are pubescent. Now when it comes right down to brass tacks we have no data to distinguish the type from the pubescent form of *D. hirticaulis*, certain forms of *D. glauca*, so I plan to follow Bartlett and drop all uncertainties and take of *D. paniculata*. I am certain no one knows *Dioscorea* of Indiana or e. U.S. I have no literature. I have one *D. villosa* from Posey County that differs from all others in that the staminate flowers are copiously punctate. The greenish-white flowers α have light-brown punctate glands, plainly visible to eye from either in bud or from within when flowers are expanded. Now to me this is not a freak but something that is worth while to think about. Punctate flowers are so far as I can recall of generic importance, note *Hypericum* and *Lysimachia*. May be I am way off on this but that Posey County plant needs a follow up. Well I have had *Dioscorea* in cultivation here for at least 10 years and unfortunately I did not have permanent labels but all plants are from Ind. I harvested a goodly lot and I will send these to Fernald to study. The genus is a tricky bunch. I found one sheet with the seed small little things and I thought I had something new. I had made three sheets of this plant and I held the capsules up to the electric bulb when I could see right thru em and all the seed were small except on one sheet I found several capsules with (page 3)

page 3

the normal sized seed. Now what? If I did not have the third sheet I would have used the small seed to set the plant off. So Fernald proposes to separate plants on shape of capsules, etc. All of my specimens of *D. hirsuticalis* have slightly obovoid capsules. All of Kriebels plants have elliptic capsules, all wider than long. You are O.K. with one or two specimens but when you have a large number your name is Dennis. You will note that Anderson in *Rhodora* a year or so ago made *D. glauca* a synonym of *D. quaternata* and Fernald in last *Rhodora* makes *D. glauca* a var. of *D. quaternata*. There is something queer about the pubescence on the under surface of the leaves. The leaves are either more or less pubescent or glabrous. No glabrate forms but the pubescence does vary in density. I am convinced that glabrous forms are entities and have varietal or forma rank. We must first know our onions before we come to decisions. In the live plants the petals of the flowers may vary considerable. The number of fertile stamens may be worth something, etc. So I am decided if I am alive next spring I will build a long fence I plant. If you people want some rhizomes next spring let me know. I have a wheel barrow load here I can dig. ~~XXXXX~~ Well this is not your problem.

Say I'll be dam if I am not going to cut the acquaintance of that Madison bunch if I can. That man Blum wrote me for *Sagittaria brevirostra* and sent me some 3 dram bottles to put the heads in, about half large ~~enough~~ enough. Well I spent an hour down along the river getting material for him, had to wash my gum boots, etc. and then I wrapped the heads (scapes) up nicely in wax paper and sent them to him plus the bottles. As yet I have not had a word from him. Now such discourtesies just be noticed and the gentleman should be diciplined. I must desist until the *Flora* is off press and then I will bear down on em like the devil. Let me know if Blum acknowledged receipt of what you sent him. Now no monkey business. Madison to me is only another university and not ^{an} ecca. *Yours*

As to the payment of publishing the Paper, let me know cost if Fernald has the guts to charge and I will pay it. OVER

I send you the Lemnaceae paper. Hicks sent me another so I still have 2 copies
Say I must implore ^{add} in describing some new forms if I use them. If I can
enveigle you down here I can get you to do it for me. of it is not asking
too much I might send them en mass to you and let you work em out. I tell
you I am so darn feeble I do not know what will become of me. Yesterday
I was so dizzy I could scarcely walk. Have no idea what it is all about.
Expect I had better go see the doctor but I would about as leave die as go
to a doctor

Well I presume Fernald and his Cassia hebecarpa is orthodox
but he does not know these species as I do. I have had em growing side by
side for years and I have noted the difference in leaflets in the field
and he should know the species if he can separate them. If I was to pass
judgment on the type specimen from plate in Rhodora 480 I would call this
plant *C. marilandica* of manuals. *C. Medsgeri* has wider and more ^{oval} ~~over~~
leaflets. The small inflorescence has no significance. I would like to know
what Fassett things of this change. I know *C. Medsgeri* in Ind. I have seen
really acres of it in creek bottoms. For some reason cattle and horses
and probably other animals avoid it. They never browse it. This I have
studied and know. *Cassia marilandica* of Manuals grows in dry situations.

Cassia marilandica is not a hairy plant. It is pubescent in lines
and hairs on inflorescence and on petioles and stem are spreading while in
Medsgeri they are appressed. The crucial test will be to ascertain if the
hairs on petioles are appressed or spreading. The leaves in plate are those
of our manual *C. ^{marilandica} Medsgeri*. I have made the change in my Ms. but against
my best judgment. If you write to Fassett ask him about it. There is no
letters to Fassett from this place, only laconic replies to inquires any more
Fieldbook of Illinois Wild Flowers was pub. March 1936. Think it cost 50
cents. Not worth that. Fact is I never looked thru it only casually. If you
wish a copy send 50 cents to Nat. Hist Dept. Urbana, Ill. and ask for
"Illinois Nat. Hist. Surv. Manual 1". I did not even catalogue my copy so I can
be sure where I got it, at Urbana or Springfield. It was compiled by
Theodore H. Frison. He was a forester when I was in forestry) ~~YRRx~~ ^{not} ~~OVER~~ 65

The book is O.K. and probably fills its wants, for a popular treatise. It is better than the one recently gotten out by Missouri at 50 cents. As to Chenopods will say I do not know if Just will name em or not. Doubtless you can name them yourself if Just makes a key. I doubt if Standley has brought himself up to date (A la Aellen)

A memo on ~~Xxxx~~ Oxalis violacea var. trichocarpa Fassett. Just got a letter from Friesner who has gone over their Oxalis for me and he says their specimens are not on the whole well marked. I have 9 sheets that are well marked. Friesner has 6 sheets. One he says: glabrous in upper 2/3, sparsely glandular in lower 1/3. Another "Mature leaves glabrous, immature leaves sparsely glandular in the lower 1/3, this number probably should go to the species"

Have you gone over Fernald's Baptisia tinctoria yet. This one is quite nebulous to me. I sent you some capsules of our plant, some small and some larger. Doubtless the plant I have here in garden belongs to his var.

projecta but what the other is, I do not know, if the species or his var. crebra.

Doubtless you will attend the Indpls meeting?

When are you coming down with a cart load of Carex, -excuse to come down. ?

Gosh I have got to get busy on Dioscorea

Signing off. I have washed the slate and it may be sometime before you hear from me again

Sincerely yours

Chas. C. Deam

emos on Paper.

Recd 10/21

Page 7, Clark County reference. After tract no 36 you should add Clark County State Forest. Otherwise Tract 36 is intelligible. A large area in southern part of Clark County is laid out in 500 acre lots and numbered and it might refer to one of these tracts or lots, or change to Clark County about 2 mi. nw. of Henryville.

Page 12 line 4 from bottom transpose, from to form

Dear Hermann: So far as I can see your paper is O.K. My God I had no idea you had dug up so much stuff. Fernald should give you paper immediate attention since you have given him all the types. Types are not passed around very often. I believe the British Museum pays \$5,00 for every type it can get. Of course I admit that types of Carex are not top notchers.

Well I will take this to post office at once and get it traveling.

When I come back I will tackle Dioscorea.

I am anxious to know when you plan to arrive here.

More when you and I have time to write

Sincerely yours,

Chas. C. Deam.

- Missouri Bot. Gard. Bull. (St. Louis) (451 M69B)
Anderson, E.
A white blazing star. Missouri Bot. Gard.
Bull. 25: 122. S.1937. no.7.
Liatris pycnostachya forma *hubrichti*.
- New Guinea Agr. Gaz. (Canberra) (23 N453)
Dwyer, R.E.P.
The diseases of coco-nuts (*Cocos nucifera*) in
New Guinea. New Guinea Agr. Gaz. 3: 28-93.
illus. Ap.1937. no.1.
- Dwyer, R.E.P.
Report of the economic botanists, year ended
30th June, 1936. New Guinea Agr. Gaz. 3: 11-18.
Ap.1937. no.1.
Includes notes on plant diseases.
- Phytopath. (464.8 P56)
Chester, K.S.
Serological studies of plant viruses. Phytopath.
27: 903-912. S.1937. no.9.
- Henson, L. & Vallean, W.D.
Sclerotium bataticola Taubenhaus, a common
pathogen of red clover roots in Kentucky.
Phytopath. 27: 913-918. illus. S.1937. no.9.
- Kent, G. C.
Some physical, chemical, and biological prop-
erties of a specific bacteriophage of *Pseudomonas*
tumefaciens. Phytopath. 27: 871-902. S.1937.
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- Kienholz, J.R.
Isolating single spores without special
equipment. Phytopath. 27: 950-951. illus.
S.1937. no.9.
- Leach, L.D.
Report of the twenty-first annual meeting of
the Pacific division of the American phytopatholo-
gical society. Phytopath. 27: 953-954. S.1937.
no.9.
The 1937, Denver, Colorado summer meeting; in-
cludes abstracts of papers.
- LeClerg, E.L.
Relative efficiency of randomized-block and
split-plot designs of experiments concerned with
damping-off data for sugar beets. Phytopath.
27: 942-945. S.1937. no.9.

Memo to Hermann

Sept. 10/26

I note that Palmer & Steyermark lumped *Rorippa*, *Armoracia*, and *asturtium* into *Rorippa*. That is they have in one genus yellow and white flowered plants. Color of corolla in Crucifer seems to be a good character. I see ^Fernald uses *Rorippa aquatica* (*Rhodora* 39: 409. 1937. This is one of those new combinations without a description but ^Fernald recognizes it I have my Ms. in three genera and I believe I will let it go at that. Wiegand has three genera and thus we can keep white and yellow flowered forms separate.

Tree Pest Leafl. Mass. For. & Park Assoc. (423.9 M38)
Spaulding, P.

Red ring rot of conifers [Fomes (Trametes)
pini (Thore) Lloyd]. Tree Pest Leafl. Mass.
For. & Park Assoc. no.17. [4] p. illus.
Jl.1937.

Spaulding, P.

Root rots of conifers (Fomes annosus Fr. and
Polyporus schweinitzii Fr.). Tree Pest Leafl.
Mass. For. & Park Assoc. no.18. [4] p. illus.
Jl.1937.

Spaulding, P.

White trunk rot of hardwoods [Fomes igniarius
(L. ex Fr.) Gill.]. Tree Pest Leafl. Mass. For.
& Park Assoc. no.20. [4] p. illus. Jl.1937.

Tribune Hort. (Bruxelles) (80 T73)

Debrui, L.

La réforme des études botaniques. Tribune
Hort. 22: 129-132. F.27,1937. no.1050.

English translation in Gard. Chron. III, 102:
180-181. S.4,1937, attributes original to
L. Reychler.

U.S. Dept. Agr. Plant Dis. Rep. (1.9 P69P)

Barss, H.P. & others, editors.

Proceedings of the root-knot nematode confer-
ence held at Nashville, Tennessee, Feb.2 and 3,
1937. U.S. Dept. Agr. Plant Dis. Rep. suppl.
102: 97-122. S.1,1937.

U.S. Dept. Agr. Yearbk (1 Ag84Y)

Boswell, V.R.

Improvement and genetics of tomatoes, peppers,
and eggplant. U.S. Dept. Agr. Yearbk. 1937:
176-206. illus. 1937.

Boswell, V.R.

Improvement of vegetable crops, appendix.
U.S. Dept. Agr. Yearbk. 1937: 340-378. 1937.

Bressman, E.N.

Fundamentals of heredity for breeders.
U.S. Dept. Agr. Yearbk. 1937: 1419-1449. illus.
1937.

Brunson, A.M.

Popcorn breeding. U.S. Dept. Agr. Yearbk.
1937: 395-404. illus. 1937.

Oct. 10/56

Well I have messed again with *Polygonum dumetorum* & *scandens*. Fact is all the difference I can find is that one is a small-fruited and the other (*scandens*) a larger-fruited form. The whole thing seems goofy to me.

Linnaeus described *P. scandens* in 1753 and *P. dumetorum* in his second edition. Wood never recognised *P. scandens* at all in any ed. and never referred it to synonymy or any thing. Then why take up the *P. dumetorum* which is the later publication. Gray did not recognise it in 1840 but in 5th ed recognized *P. dumetorum* and var. *scandens* and all the difference when boiled down is size. Linnaeus in his description of *P. scandens* saus to distinguish the two species that *P. scandens* has a hole on the under side of the base of the petiole "poro pertusis". Now so far as I can see all of my plants of both species have this hole (whatever it may be, that is on cauline leaves

Now my belief is that we have but one species. All the difference I can detect is the size of the fruit. Of course you can find large and small leaf forms but last week I noted this difference and there is nothing in that. I think I shall recognize the two species and a note that I believe the two are identical. In looking over my plants I tought some had the nerves of the under surface of blades scabrous but this character will not hold for any thing

Small in his Monograph of *Polygonum* gives a key as follows
 Racemes leafy; fruiting calyx 1 cm long; wings crisped. *P. scandens*
 Racemes leafy-bracted; fruiting calyx 0.5 mm long; wings nearly flat
P. dumetorum.

In description he says achenes 2.5 mm long for *P. dumetorum*
 achenes 3.5-4.5 mm long for *P. scandens*

Mahoney gives only *P. scandens* for Wisconsin.

Peattie in Dune Flora gives *P. dumetorum* only and says achene 2.6-3 mm
 Rydberg reapt what Britton & Small have.

Wiegand: Flora Cayuga gives *P. scandens* and var. *dumetorum* as a synonym
 Steward in Contr. Gray Herb. 88: 92-93 gives key to the Section as follows
 Wings of fruit prolonged little, if at all, along the pedicel; fruit
 , including pedicel, about 1 cm. long. *P. dumetorum*

Wings of the fruit prolonged towards the base of the pedicel; fruit, includin
 the pedicel 1.5-2 cm long. *P. scandens*.

Steward in his description says achene triangular, 2-3 mm long for *dumetorum*
 achene 4 mm long for *scandens*.

The difference to the layman is that of a sausage and a weiny
 House follows the band wagon and makes no comments.

Polygonum cristatum I think is all bunk, nutritional at least
 for the major part

I think the proper thing to do is to give *P. scandens* and make *P. dumetorum*
 a synonym with discussion. "hat say ye?"

Flora Mo. has *scandens* only and no mention of *P. dumetorum*.

For *Rhus copallina* var. *latifolia* Engler see *Rhodora* 37; 168

Mem. Low Temp. Res. Stat. Trinidad (295.9 Sa2) (cont.)

Wardlaw, C.W. & Leonard, E.R.

Antiseptic and other treatments in the storage of Trinidad citrus fruits. Mem. Low Temp. Res. Stat. Trinidad no.5: 37 p. charts. Ap.1937.

With an appendix: Mycological notes on citrus wastage, by R. E. D. Baker, p.24-27.

Nature (London) (472 N21)

Small, J.K.

The proposed Everglades national park, U. S. A. Nature 140: 263-264. illus.(map) Ag.14,1937. no.3537.

Naturwissensch. (Berlin) (474 N213)

Meyer, M.

Die negativ doppelbrechende komponente der kutikularschichten pflanzlicher epidermen.

Naturwissensch. 25: 539. Ag.13,1937. no.33.

Wuhrmann, K. & Meyer, M.

Die orientierung von zellulose und primärsubstanz in der wachsenden avenakoleoptile.

Naturwissensch. 25: 539-540. Ag.13,1937. no.33.

New Zeal. Journ. Sci. & Techn. (Wellington) (514 N48)

Blair, I.D.

An investigation of foot rot of wheat in New Zealand. New Zeal. Journ. Sci. & Techn. 19: 1-21. illus. Je.1937. no.1.

Northwest. Miller (Minneapolis) (298.8 N81)

Isely, B.

The Plymouth Rock of Turkey hard wheat. Hand hewn threshing stone used by Mennonites in threshing first hard Turkey wheat grown in Kansas, now preserved at Bethel College in Kansas. Northwest. Miller 191(6): 23. illus. Ag.25,1937.

Nytt Mag. Naturvidensk. (Oslo) (410 N99)

Arwidsson, T.

Meeresalgen aus Vestagdor und Rogaland.

Nytt Mag. Naturvidensk. 76: 85-149. illus.(maps). 1937.

Gustafsson, C. E.

Vorbereitende Rubus-studien in Norwegen.

Nytt Mag. Naturvidensk. 76: 151-153. 1937.

Nyhuus, O.

Floraen i Trysil. Nytt Mag. Naturvidensk.

76: 21-72. port. 1937.

Introduction with biographical sketch of the author by Jens Holmboe.

Repl. 10/20

STATE OF INDIANA
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INDIANAPOLIS

Bluffton, Ind. Oct 12 1937

Administrative Officer
V. M. Simmons

Dear Hermann:- I have your letter of Oct. 8 and I answer now because of the enclosed letter. Doubtless some of those seed I sent you as separate of Sagittaria Randolph Co, would still be viable. If you have not discarded them please send the boy some. May be we can help some. You need not return the letter, just junk it.

Now since I am writing I will answer your letter. I note what you say about funerals but you do not indicate your objections. Doubtless one objection is the time consumed. If some one would die and leave you a large fortune and you would have to resign your job, well that would be just too bad. No kidding, death is bad enough at its best

Please send me bill for the two sets of needles you sent me and oblige.

Thanks for the name of the Ann Arb r firm that will clean lens. I have just written the Spencer Lens Co. I sent them the Objective Sept.9 and the money on Sept.15

As to Aster sag. var. urophyllus(Lindl.)Burgess. You will find this in first ed. of B. & B. and in Britton's Man. ed.2(1905) on page 954.

Probably our best write up of Aster is that of Burgess in Britton's Man.ed.2

As to Polygonum dumetorum I think I run across oodles of it last Friday I tried to measure the achene in the field and as near as I could make out it is P. dumetorum. I can send 1 or 2 specimens. When I study them I will have about 10 sheets so I can study width of variation. As I now have it length of achene is the only thing that separates them. Probably Fernald when he works this will make it a variety. The plant I found last week was on the east side of a black oak woods(sandy soil), along roadside it forms almost a pure stand on every bush and weed and was common in the open woods. OVER

Will send you the Moldenke letter soon. I sent it with Camp's letter to Harriet. I do not know the etiquette of peddling correspondence but in the spirit we exchange letters I think it O.K. You will be interested in Camp's letter which I will send also.

No hurry about the Sagittaria, let it ride as long as you like. I am thru with them.

As to Ailanthus peregrina (Barclay),, , Barclay in his monograph, Ann Mo. Garden 24. no 3. page 499 you will find that Barclay changed back to Ailanthus altissima (Mill.) Swingle. Seems that E.D. Merrill called the young man's attention to the error. So make the change at once so you will be ready for the next break.

I note what you say about McVaugh Lobelia spicata, etc. You will find a key to the varieties on pages 262 & 263 of Rhodora July 1936. I have had in mind that McVaugh did a good piece of work ^{and} but I do recall that the vars. in L. spicata are not well marked although his vars. have a geographic range and it may be we are in the overlapping area. Just as in Heuchera.

I do not now recall who called my attention to Sagittaria esculenta but I believe it was Fassett.

As to Carex will say there is no Carex disperma from Putnam County. I know that from habitat. All Carex maps are at Lafayette. I have just gone over all the lists you sent me that are here and I do not find the C. disperma of C. Bicknellii. I do not understand this. I have made a memo with the hopes it will come out in the "wash".

I am sorry you did not send me your wants sooner. I did not collect and duplicate this summer. Of all the items you ask for I do not have a duplicate I believe. I will make a record of them and in the event I did collect any of them I will be glad to give them to you. I was not on the water once this year so you see Potamogeton are absent. I did have a long series of Solidago ulmifolia with long leaves but I think I gave them all away

Think this is all. I am sending to Mo. Gardens my Polygoantum, 261 sheets Now I will list and send to Clausen my Geum, Najas, and some other genus he asks for. ad to spend \$4.00 again this morn for boxes. Chas. C. Dea.

Hermann-3

Real. coff

I think the carp or muskrats have been working on them there. If these hunters keep on the Sagittaria will be exterminated. In looking over my plants I find I should try to rediscover one I have from the Kankakee R. I go to Bass Lake Friday and I will desert the foresters in the morning and beat it for the Kankakee R. A few Sagittarias are worth a whole lot to me. I will keep you in mind if I chance upon any of the latifolia sect. Now tomorrow I will send you the Randolph Co. plants I just collected and some junk from the Wabash R. All I could find. To find Sagittarias we must go to the roadside or dredged ditches.

Now when I collected I took about 10 scapes from which I cut sections of the scape to show the surface, ridges, etc. I cut off the tops of the inflorescences which I send so you can study variation of the achenes. They have not been under heat and if you care to play with growing them here is your chance to get some seed. Do not return the seed scapes. I hope you will have to go over my Sag. brevirostra and australis

Well my present trouble is Dioscorea. I had hoped to get to southern Ind to get mature fruit but I can not take the time. Kriebel sent me a large box full, he is a jewel. Got it this P.M. and in morning I take it up and must complete (close the genus, right or wrong) Fernald wrote me he could not go it. I have a lot growing here but so badly entwined I can scarcely separate them. Think I need about 1-2 new species or varieties to make it a go.

You know I am so rattle brain I forget what I wrote you. Think I told you I would send Moldenke's letter. I am holding until the specimens come and so I can use his dope and close that genus.

"ell it is now just ten o'clock and I must go to roost. So should you and live longer.

Think this again brings me up to date. I am sincerely yours

Chas. C. Deam.

over

Seems to me that you or Fassett told me that Rydberg change *Sagittaria*
latifolia var. *obtusata* to *Sag. esculenta* Howell in his Prair. & Plain Flora

Will say I have Howell's original description and it can not fit any
our species. He says Achenes about 3 lines long. Our longest are 3 mm long
rarely a chene nearly 3.5 mm long. The bracts he says are ovate, obtuse,
3-5 lines long which is a little long but O.K. Achenes too long

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Wago



THIS SIDE OF CARD IS FOR ADDRESS

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F. J. Hermann,

C/o U/ of Mich. Botanical Garden

Ann Arbor,

Mich.

Dear Hermann: Never occurred to me to this minute
when I asked you to send seed of *Zygactaria* to
Blum of the number you have under consideration
So if you did not do so. O.K. This was your problem
and I was too thoughtless to understand it. Please
excuse senility plus.

Sincerely yours,

Chas. C. Deam.

Memo to Hermann

Did you get this change by Mathias in Brittonia 2:243. 1936

Eulopus americana Nutt now becomes

Perideridia americana (Nutt.)^Heichenb.

I have just looked into Fassett's distinction of *Cyperus ferruginesens* and *Cyperus erythrorhizos*. Think I will let my key stand. The scales Fassett refers to is the caducous(?) wings of the rachis. These persist in unripe fruit but often in mature fruit fall off. Since the character belongs to both species, and these are difficult to separate I think the application of measurements will win oftener than wing business. ~~If you get this differently let me know. I respect your opinion~~

Mathias says *Eryngium yuccaeifolium* Michx is the correct name for Ind species

Translations (cont.)

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Repl. 10/5

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INDIANAPOLIS

Administrative Officer
V. M. Simmons

Bluffton, Ind.
Oct. 5 1937

Dear Hermann:- I have your letter of Oct. 2 and the package of plants returned. Find postage 11 cents enclosed.

Please send me a blank label for the *Bidens vulgata* for Wash. Co

Say I find that Kriebels *Carex* were all named correctly. Wonder if he did it or if he sent them away. Will find out if he such a *Carex* shark.

Say I am delighted to learn that you plan to run down here with the *Juncus* etc. Now come any time but be sure to select a time that you make the longest possible stay. In the meantime make memos of the things you wish to look up. If you bring specimens along I will try to check specimens against the Ms. maps. This will be some job along but I think it is worth it. We want no errors. Now I would like for Wilson to meet you and you and he could talk over the separate business and the proof reading. However that will take time and probably I can negotiate it here O.K. Your time here will be precious and we must plan to economize on it

Many thanks for the specimens you sent me. They are very valuable especially the *Juncus*. I would like for you to look over my *Lespedeza violacea*.

I note you collected *Polygonum dumetorum*. Can you distinguish it by any thing else than length of achene. Look at what I call *P. dumetorum*. Many thanks for the tabulation on *Eragrostis*. This complex worried me and I put in two weeks on it. Pretz sent me a good lot of specimens and I feel certain we do not have *E. perigrina* here. As I caught the change of name on *E. Frankii* Meyer You say it is rare with you. It is frequent in our lake area in moist sandy areas, especially on stream bars, dried up wet places, ect. You can nearly always tell it at a distance (OVER

because it is white with aphids. This rarely fails and the aphids are rarely on other species(My observations).

I note you change the *Bidens* to *vulgata*. I expected that because your plant matches mine, except it is small. No I have not send Sherff's Monograph, doubtless the Museum has not sent it out yet. I watch the U.S. Dept. Agr. bi-weekly list of publications and it has not been in it.

I do not have the specimens of *Carex Bicknellii* here, if so I have not arranged them. I do not have this species on either of my county lists, - Gibson or Morgan. It would hardly be in Morgan County. Probably an error. I note what you say about *Gentiana quinquefolia*. I have not been out

Friday I go to Bass Lake and home Saturday. This will be my last trip out. Nov. 4, 5, 6 the Ind. Acad. ci. meets at North Manchester. Do not come here on that date. Any way you let me know a day or two in advance. I may take a notion to go some place. I really should go to all the herbaria and check on complexes. I am expecting an upheaval when *Rhodora* comes. By the way where is your paper in *Rhodora* where you plan to publish that *Eupatorium* and other items. Get it in P.D.Q. All things you publish should be cited. Miss Banta is getting nervous about that *Eupatorium*. By the way I made some more specimens this year, about 6, if you want them O.K.

Say I recently lost one of my dissecting needles. I have used the black handled sort with 4-sides and about 13 cm over all, single needle stationary, needle about 3.5 cm long. "onder if your boostore sells them if so buy me a pair and oblige. If not give me the address of some dealer preferably in Chicago who sells them

On Sept. 9 I sent one of my microscope objective to the Spencer lens Co for cleaning and adjusting. I have not yet received it. I also ordered the needles but in due time they said they did not carry them. Dam em if they ever clean any thing else for me. In about 10 days they wrote me it would cost 1.65 to clean it and in same mail I sent them check. If you perchance know of some firm, probably in Chicago that cleans and adjusts lens, microscope repair shop, give the address so I will have it in case of an emergency. My grand childred got to monkeying with it I guess or my eyes are going bad. I need it badly I have a high power and I can not see thru it

Now as to that *Sagittaria* var. Just keep that in mind. Many thanks for the suggestion. I have taken the time to go over all my *Sag. brevirostra* and while this Randolph plant is aberrant, not enough for a variety. I was down there last week and I got what I could. I send you the whole mess and you take out what you can use and return the remainder when you come down. They are pretty ripe. River was up and specimens are bum but the best I could get. See page 3

Hefmann-3

Thanks for calling my attention to the character of *Cyperus erythrorhizos*. I have a memo of this and will look into it. Thanks.

All my *Carex*, *Luzula*, and *Juncus* maps are at Lafayette. I will delete the Putnam County record of you do not give me the species. Please send me *Carex* name and I will attend to it when the maps come into my possession which I presume will this Saturday. I go to attend the foresters meet. at Bass Lake, Ind. and MenUyle of Lafayette is to bring all Mrs. Winch's work up to date to me at that time. I have asked for the maps.

As to soil preference of *Carex diandra* will say as I now recall, all I have seen has been in sedge meadows, peatty stuff. Think we did find a special specimen at Pine on the wet sand. These low dunes are an enigma to me as to soil acidity. You will find acid and lime preferring plants almost side by side. I especially noted this on my trip last Monday up there.

As to my photo. Glad you think it is O.K. W.N. Clute and wife were here last week and both said it did not look like me, and they took one from an old vintage. The recent photo records all my grouchiness, etc. and when visitors come I shelve that so I am not natural.

Samuelson's Monogray here O.K.

Have you seen Barclay's treatment of *Rhus* yet and what do you think of it? Guess I told you about finding a hybrid *Rhus*, etc. So here is now my predicament. Is it a hybrid? *R. glabra* var. *borealis* Britt; or Greene's *Rhus pulvinata* Greene. I plan to rewrite this genus in a few days. Barclay now calls the hairy fruited *Toxicodendron* var. *littoralis*. He even calls the low plant about the dunes that var. I will let you know what I make out of this complex and can send you plenty duplicates if you care for them because I was fortunate enough to get some this year. I bought a duplicate of Barclay's Monograph to have bound. I got a copy this morning but no bill. May be Barclay has sent me a gratis copy.

Enough. Now I am up to date and will write as occasion demands
Chas. C. Deam.

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Bluffton, Ind.
Oct. 4 1937

*Solid
Desmond*

Dear Hermann:-At last I have got around so I take sometime to answer your letter of Sept. 16. I have just been snowed under. I am not doing a thing at writing the Flora. Have been out on a few short trips, most all to my disgust Sat. I went down the Wabash River to get more Sagottaria where you and I were a year or two ago. Now there is not a plant in sight. I take it that the Muskrats have eaten them all. Those below our place are nearly all gone. Most of the leaves are now eaten off at top of water. I never knew they were so destructive. I know they live on aquatic vegetation and eat their weight in it about every 36-48 hours. Dam em, this includes the squirrels and rabbits.

In morning mail I got a letter from Moldenke and he says the Lippia lanceolata var. is no good and he calls Lippia of Gray's man. Phyla Lour. (He does not give place of publication. He corrects the specific name to Phyla lanceolata (Michx.) Greene but does not give publication I can look it up. He says: In regard to (Guess I had better just send you his letter he calls attention to other combinations you may be interested in. I am just too busy to do any extras. You return the letter when you have used it.

Also have Mildred Mathias letter from Umbellifera. She went over my Ms. and has written me a key to the genera which she says is an improvement in that she combines both fruit and flower characters. So you see I am getting somewhere if not very fast on the road. "Now your letter

I note what you say about the recognition of smaller genera. O.K. Fear I will not have time to tear up the Ms. so much. Kyllingia will stick where it is
OVER

Stenophyllis has already been changed to Bulbostylis

In regards to the barkings of Fernald will say Mrs. Chase wrote me a personal letter about him. Seems as if he has created an atmosphere among botanists that is not conducive to a good reputation. Mentioning his name reminds me that I spent the whole of yesterday again on Dioscorea. I feared frost so I harvested all I have growing here. I can not go this genus. What I dug yesterday seemed to confuse my conception of the rhizome characters. Kriebel has promised a good collection of seed but I do not believe seed will clarify the situation. I was to send Fernald a good lot of seed but my Fall trip to southern Ind. I had to call off for want of time. They want the Ms. of the Flora.

As to the Solidago question I have not touched Solidago for nearly a month and it will be several weeks before I get to it again. I now plan to close the many genera I still have open and leave Solidago for the last thing to do. Many thanks for the data from Ehlers.

Think I wrote you about ~~Saxifraga~~ Aster sagittifolius var. urophyllus

I think your Lespedeza, 9,205 perfectly typical L. violacea. You mention the short calyx lobes. Evidently you measured the lobes of the cleistogamous flowers because of the plant you send the lobes of the petaliferous flowers are long. There is a narrow-leaf form of L. violacea which I am not able to place but I am putting it into L. violacea. Your plant is what I believe is the typical form. I wrote you about the plants you sent me, if I am to return them or not. I shall await your reply. I shall be glad to return all sooner if you used my key and got lost. If so I want to fix it up

consider
I return the Silphium seed and some others. I had Mrs. Winch measure seed here until she was sick of it. She measured entire length, width of wing width of sinus, depth of sinus, if one or both sides pubescent, etc. Then she took a large plant and found the variations of seeds of one plant and net result is that no character can be depended upon on achenes.

Recd. 10/2

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Bluffton, Ind.
Sept. 28 1937

Dear Hermann: I am sending you the very last packet of Carex, etc. They are from Kriebel. I thought they might be a new record or two. Return the specimens to me and I will send them back with some other stuff I have here. I know it is an insult to ask you to name these. But I want every record to appear that I can get. Butler University have this years collecting on hand but I told them it was impossible to get them in now. You know how their specimens are and most have been collected in the interior part of the state. In Henry County there formerly were some lakes and they still have some marl bogs and Kriebel's stuff is extending the range of some species 75 miles southward. While most of his stuff is only mine run yet now and then we find a good one. So it goes. I am so buried in work I have not taken time to answer your letter. Your card came yesterday thanks for the information about Blanchard.

No hurry about the return of the Alisma paper. Any time. Yes I got the Okla Flora a long time ago. Worthless but I must have it. Doubtless you have had a glance at the Barclay Monograph on Rhus. I was up to Notre Dame last Thursday to see the Greene types but none could be found. They have moved to the herbarium and it seems Just can not locate stuff (Some alibi) I hope I am as dumb as I look. I do not know just what my study of the Rhus will result in but I may make some statements. I am going up tomorrow to Steuben Co. to get live material of the hybrid and I have not yet located where my brains were when I was at the dunes a week ago and saw this pubescent Rhus glabra when I had a spade and plenty of oil cloth. Now I would give five dollars for one of these plants. Say I must close this Flora before
OVER

they lead me to the asylum.

Say I got a package of plants from you and you did not say what to do with them. Are they for me to check determination and return or do you mean for me to keep them. This is an awful sticky place about here and when specimens get here I must know the reason why they leave. Let me know about this. One of these days I will take up your letter and answer and let you know about the *Silphium* seed

Say I got a private letter from Mrs. Chase about Fernald. She pities him. She thinks his condition is pathologic

I wish it were possibly you could blow in for a day now and then. My position is islandic here. I appreciate meeting with my inferiors or I probably had better express it this way, persons who are not in my class in botany. But I rarely meet fellows like you. Say got a card and a note from Fassett on *Sagittaria* again. He says he was at Gray this year and Fernald is now calling *Sag. australis* the *S. longirostra* of Gray's Man. yesterday I read Micheli original description and it is worthless except you see the type. Micheli did not know of *S. brevirostra* and his description will not tell you which he had, *S. brevirostra* or *australis*. I think there is little difference between *S. australis* and *S. brevirostra* as I understand it. About all is the ^{Keels} keels on the faces of achenes and this may be only a form or var. You may recall the Randolph County plant I got last year has traces of more than one keel which made it *S. australis*. I came thru there about 3 weeks ago and collected a good supply but upon drying I find there are too immature to show well the keels on achenes. I plan to go down there this week end of the first of next week and make a killing. I must go before heavy rains. By the way the collecting season will be over for me on next trip and that applies to the Flora. The Flora must be closed. I had hoped to get to s. Ind. for *Dioscorea* and *Smilax* but nix. It must go undone and I must add fancy to facts and write the genera as best I can. They way I feel today the truth will not appear until after I am insensible so what should I worry. Well Hermann here are my very best wishes. Come down as soon as you can and spend a day with me.

Sincerely yours, Chas. C Deam.

Repl. 10/2

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Bluffton, noon
Wednesday, Sept 22 1937

Dear Hermann: So busy I am cutting circles. I should have written you yesterday but forgot it.

Wilson and I go to Notre Dame tomorrow. So far as + now know Wilson is not planning to see you but he may be. If so we will get to Ann Arbor late Thursday night. It will take me most of the day at Notre Dame. Now you go to no trouble except you may wish to tidy up your shop. If we get to Ann Arbor before 10,00 Standard Time I will call you by phone so you can know we are there. Then we can call on you in A.M. probably about 7,30 the time you go by up there, I do not know what it is. We will stop at hotel in Ann Arbor. Now this may all be a Will 'of the "ish again. But I had to surpise any one. That borders on the brute instinct.

Well while I have my "pen " in hand I wish to tell you I was to the Dunes at Pine for Solidago but did not godd. But did find Rhus glabra pubescent form, whatever that is, Dwarf, no fruit. We could doubtless have found it but we did not have time Found what I take to be a Psiloc-rya species probably nitens. It is in press and I forgot my pocket magnifier and I swore for two days. Laid down on lounge for a rest and it rolled out of pocket, -never rest to be on sure side. Your package of plants came this morn. I will try to look at them. This P.M. Governor is here for speck and I must go up town, Street Fair and Centennial Do not know when Wilson will blow in.

I enclose a letter from Mrs. Chase. which return sometime
Sincerely yours Deam

Recd 7/16

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INDIANAPOLIS

Bluffton, Ind.
Sept. 5 1937

Administrative Officer
V. M. Simmons

Dear Hermann: This is Sunday P.M., 2,00 and I will try to write you. Have a gang down in arboretum making a collection of leaves.

I have nothing especial to write but will try to get up to date. Spent some time this morning in going over the "Vegetation of Peten by C.L. Lundwell of U. of Mich. This is a botanist I have not met and know nothing about. I take it that he is Bartlett's Assist. Too busy to make comments on the book.

Last night I started Fernald's article in Rhodora. I have read only about 10 pages and I run across on page 325, line 19, Psoralea psoraloides (Walt.) Cory. He speaks of the interior plant as a variety. Have you seen any think of this sort described. Doubtless he will take some of the many Rydberg species and make it a variety. He does not recognize Rydberg's genus. Doubtless I will find some items in this article to interest me.

Say I just received from Weatherby an answer to my questions which I send. Please return.

Doubtless you have Saumel's Monograph on Alisma. If not I shall be glad to loan it you. It is only a small pamphlet. I do not believe we have it in Ind. var. brevipes.

Well my trip I fear was a frost. Can not tell until get my stuff worked up. The Cassia and Toxicodendron mya give me some dope.

As to Bide ns vulgata v. puberula I am excluding it although reported. I do not know this variety. I had what I thought fine specimens of it I collected nw. of Dana about a mile east of Illinois State Line. I sent a specimen to Sherff and he said it was only the species. It is very puberulent all over. I am taking Sherff as authority on it.

OVER

If you have a spare plant send it to Sheriff at Field Museum . He still has a room there.

Thanks for the Kodachrome photo. Well the Rudbeckias must now go in the flora as they are. On my last trip I was hoping to get more dope, but I did not get a thing and my stuff here was ruined by my workman. However I plan to rework them if I have time. A month or two of delay in the book should not wreck things. The Gray's Man. will be postponed years by Fernald's discovery of Virginia.

Thought I had more to write or I should not have started this note.

Now I am up to date, wishing good luck, sincerely yours,

Chas.C.Deam

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INDIANAPOLIS

Bluffton, ^Ind.
Sept. 4 1937

Administrative Officer
V. M. Simmons

Dear Hermann:- I have your letter sof ~~Zug.~~ ^{for} 29 & 31 and package today with the photo in. Many thanks ~~xxx~~ all. I must answer you today because I see you need the dope. I am all in. Trip was very hog, first night out I did not sleep. I thought hotel had a motor in basement, almost shook the house but ^Uen Uyl told me in the morning it was a fan in room next to me. Then the eats get me. I eat no meat just because I can not chew it with my teeth and I do not like it so ^I must be vegetarian. I eat no butter, milk, ~~x~~ or ice cream. At Bedford I ordered a vegetable dinner. I got spinach, rubber tubing (spaghetti), string beans, cucumbers, none of which I can or will eat so long as I can get any thing else. Out of the 50 cents dinner I had 2 biscuits, peas (I did not count them but not in excess of 25, and a few pieces of french fried potatoes. Yesterday at Shelbyville I had the same dam thing. All I got was the potatoes. I would like to gun for the guy who invented spinach, string beans, etc. You can not get away from because they can the darn stuff and you now get it winter or summer. Well my trip was a failure. I tried for the Rudbeckia ^{beata} Miss Banta found was in same field but not to be found. Dioscorea I searched for it until rain drove me in. The Solidagos are not yet in flower. I did find what I take to be Cassia nictitans var. leiocarpa in two counties. Fernald reported it from North Carolina only. Will send you specimens. I got a good series of Rhus Toxicodendron, the low growing form. I took a lot of it see if the var. littoralis is O.K. or what it really is

Well I have just been bothered by a caller. I will answer your question so it will go out tonight.

OVER

As to the Carex key ,etc. First I think the title Carex should be starred with a footnote. In it say what you like but I suggest Written by... as partial fulfillment for ~~RxM~~ Ph D. ,etc. Then that would at least ^{you would like to put it all} suggest that any departures from my style was your set up and be O.K. ^{at least}
As to the Key and in many things, Decisions I make may not be the ones you or others would make. In my keys I have endeavored to include all the species treated in the text and those species reported that might be found in Ind. Species reported that seem absurd so far as distribution go, etc, and are certain to be an error I omit them. Their inclusion only pads the key. Now I am placing all excluded species in the back of the book in one list. Yours are to be an exception so as to keep the paper as a whole. In my Excluded species when I come to Carex. I will simple say see pages----- ^{in whole}

As to citation of vars. forms etc. when given as synonyms I have not used the authority for the species. There might ^{be} cases when it should be done I have done this for brevity sake because I know the book will "life size". I leave it up to you. If you prefer to use them go ahead. As to common names for Carex to hell with all of em. That tussock Carex is just absurd because that applies to several species.
As to the glossary it is not written. Holding to get any new terms that may bob up. I will include all of your names but I wish that you would list them and define them for me. I do not know the meaning of most of them and it will be best for you to interpret them. Of course make them as short as you can.

Think this answers the Carex inquiry. May write you tomorrow. I am just so darn busy today I must sign off.

Sincerely yours,

Chas. C. ^Aream.

She
should
leave
left
out
of
your
letter

Memos on Fernald's paper in Rhodora Sept. 1937

I would not call attention to these changes but Gray's Man. may not appear for years yet

He uses *Rorippa aquatica* (Eat.) Palmer & Steyermark for *Radicula aquatica* of Gray's Manual. I have divided the genus according to Wiegand in Rhodora 27:186. 1925.

I agree with Wiegand that in *Curcifer* it is bad business to unite white and yellow flowers plants in same genus. This applies to *Cruciferae* only. I make so dam many errors I must double-space.

I have followed Wiegand in the disposition of this group and made a genus out of Section 3 of *Radicula* of Gray's Man. What do you think. You know Greene made a genus for this species. I do not have the literature and do not know what the *Planzen Reich* handles it. If Fernald keeps going down to southern Virginia we will never get a New Gray, he will die before it comes out

Page 341, line 12

He lists *Lysimachia* (*Steironema*) *radicans*. Wonder why? Is he deleting the genus *Steironema*?

Page 341, line 17

I note that Fernald is using *Tovara virginiana* (L.) Adams and adds that our interior plant probably is a variety. Our plants are pubescent beneath and h. he says their plant glabrous. Since he will doubtless describe this var.

in next number of *Rhodora*, possibly I had better divide my *Polygonum* and use *Tovara*. What do you think? I have been using the Gray concept of the genus and not Small (B. & B.)

More on this memo. I have just tried to find what I had in mind but it is mislaid. I have the original description of Hooker's description of *Lysimachia radicans* (*Steironema*) and I think Weatherby wrote me that the type was from Florida. Now Fernald tries to make it a western species. This is 'all.

Page 341, line 11 from bottom. He uses *Paspalum fluitans* for *P. repens* Berg. of Deam's Grasses. I have written Mrs. Chase about this name. Will let you know results.

Page 352, line 18. *Schwalbea americana*. Say if Fernald can not say some of the meanest, caustic things without warrant. Say some guy will come along some day and knock his block off. I know Hitchcock would like to have done so but too much of a gentleman. It will take some young guy like you to perform the feat and do it to an admiring audience

CHERRY

Of course you will read his whole article and all thru it he continually refers to *Juncus brachycarpus*. Glad to learn it is so erratic in its distribution.

Lord I wish I was young enough to stand the "heat" I would like to go with you down there for a trip. You would not have to wear yourself out to find species new to you. But I guess we had better stick to our own territory

page 359, line 3

Cyperus densicaespitosus Nutt. & Kuk. for *Kyllingia pumila*. What do you think of this. *Kyllingia pumila* is Michaux species and the other authors must be recent. Should I try to investigate this. Darn if I will write Fernald and I hate to write Weatherby about it. The species stands out pretty distinct but morphologically it may be a *Cyperus*.

Rep. L. F. / 31

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Thurman A. Gottschalk
George H. Newbauer

INDIANAPOLIS
Bluffton, Ind.
Aug. 28 1937

Administrative Officer
V. M. Simmons

Dear Hermann:- Your letter of Aug. 26 just received. I am sorry you had "green apple" trouble and I am glad you have over come it. Be careful of your health. That is your working capital and do not impare it if possible.

Now to answer your letter in bits. As I got the fragment of Polygonum achoreum which I return. I have gone over it and I think without doubt that you have it named correctly. I have two Wisconsin specimens here from Fassett that it matches as well as some of Victorin material. A help in identification of this species is the data on label if sprawling or erect or semi-erect. I have specimens from Ind. of Polygonum buxiforme but these are sprawling with long branches and the internodes, at least the ~~last~~ basal too long for achoreum. House's key in Flora of N.Y. is bum, not correct. Blake says the sepal lobes are greenish or whitish. Your have the plant named O.K. I think. Fawell reported P. achoreum in Amer. Midl. Nat. 10: 209. 1927. Doubtless he has something else. Read what he says about sepal lobes being pink and the size of the leaves, etc. He misses the important characters that set off the species. I am planning a one day trip to northern Ind. Steuben County about Sept. 20. I will keep on the look out for all Polygonums. I just hate them, yet I take every one of the Aviculare Section I chance upon except true P. aviculare.

Now as to Carpinus I will write this and later go over this thing for the last time? All of my material is at Ind. U. but Weatherwax will bring it up when he comes up in about two weeks. *about 60 sheets*

Say I shall be very glad indeed to have you come here. If you do make it convenient to stay some time because doubtless we can see-saw somethings that need study. In the meantime list the things you would like to see.

Tuesday I go to s. Ind. I am to meet a forester who wants me to be with him when he goes thru the State Forest. I am not interested in the Forest but appear to be but I will keep my eyes out for copperheads and plants. Now this letter must be orthodox and to be it must be as erratic as all preceding it. When I write ideas come across the horizon and to fix em I must make record at once or they will be gone forever (may be it would be best that they did)

Well here is my big idea. Think I did call your attention to it. In Manuals Helianthus rigidus (scaberrimus) and H. laeteriflorus are maintained as two species. H. laeteriflorus has a yellow disc (that is the disc corollas are yellow. In true H. rigidus the disc corollas are red. Now you can not tell the two species apart by descriptions except where authors have confused the true H. laeteriflorus. Last year I drove nearly a thousand miles to find both yellow and red flowers in the same hill and I did find one red one in a large colony of yellow ones. Well I have both growing here in garden side by side and color of corolla is the only distinction. I am going to press a specimen of each for you to sweet or sewar about.

OVER

Now I know so little about flower colors but Paul Cook has a good book on the subject and I will get it tomorrow. I told Cook what I had in mind and it was he who drove me last summer to find the two in one hill. Well here is my conclusion that the anthocyanin of the *H. rigidus* becomes recessive and what we really have in the yellow-flowered *H. laeteriflorus* is an "albino" of the *H. rigidus*. Now should I record this. I am so firmly convinced of this truth that I am willing to go on record. Ind. Authors do not have the true *H. laeteriflorus* which is a western species but what they do have is this yellow form of *H. rigidus*. Probably a discussion of it and just let it go at that would be best. But I will have to key it out since one major leg of my key is disc yellow or red just as our manuals. Please tell me how to handle this.

"ell what made me think of this, is that I am stuck on *Solidago bicolor* and *S. hispida*. Authors do not distinguish them sufficiently to separate them except on the color of the rays. One white or sometimes yellow and the other yellow. I have *S. hispida* from Ind. so named by Fernald himself but I think all of the Ind. plants like Fernald has so named or are *S. bicolor*. I have one plant from Ind. named *S. hispida* that is entirely different from the two named for me at Gray Herb as *S. hispida*. One was named by Fernald himself. Now I presume you may know *S. bicolor*. It is a "hard scramble" species. Usually found on exposed washed ridges, at least usually in impoverished soil. The *S. hispida* in better soil but the difference I can not see. But here comes up that *Solidago bicolor*, petals white versus yellow. Now I believe here again we have one species and the white-rayed form (*bicolor*) is only an albino of the yellow *S. hispida*. That is why I plan to go to n. Ind. on Sept. 20? I know of a colony of *S. hispida* that grows on a sandy shaded bank (not the type of habitat of the typical *S. bicolor*). Of course if this is *S. bicolor* you would expect in the shade a different plant. Authors give the range of the two as the same and in fact the older authors did not separate them but just understood that God made some white and some yaller. Sometimes a little larva is a dangerous thing. Now I have only got started on *Solidago*. I thought it would be a snap since Friesner had it all worked out, etc. Probably O.K. if I blindly follow Friesner. Although my head is functioning only just above water level I think I sense that Friesner has done a good job but not in the sense that he has very carefully did it. I have already found two of my specimens wrongly named (not may be either). So this has given me a cue but it may have just been a slip. Now to the point. Do you think that the *S. bicolor* and *S. hispida* might be the same?. I mean those I have which of course you have not seen but I have several "exotics" specimens that conform to the *S. hispida* type. Then I have an exotic that matches my dune plant that Friesner has O.K. as belonging to *S. hispida* but which is quite different. Of course I can see that you giving judgment in this instance is like "giving absent treatment" by the Mental Scientists. Here is one consolation, -others have their troubles so cheer up

By gosh, my next letter will be double space so I can't read this mess

es the box of specimens came O.K. Many thanks. Yaw feller what is the matter with you. Are my specimens so bum you will not take any of em. You sent them all back and all the labels. I meant for you to keep labels and just send me a list. You say you kept a *Carpinus* but back came the *Carpinus* label. I would like to know if you kept all you wanted. Do not covet any thing, just take it and forget it. Keep your conscience clear and bright, never use it (to do so.)

J. Sp. a *Rogus* was here and I met him. Williamson, he, and I went out here in the country to look for a cray fish that Williamson found here and as I recall has not been found elsewhere. This shows Rogers wide interest.

Now in regards to *Panicum occidentale* will say I have never recognized it. I have a specimen of Lunell which he so names and says, it matches Nash's type. Well it has the short basal leaves and the attenuate spikelet about 3 mm long.

page 3-

I have gone over my Panicum capillare and I find one sheet from "Lake County collected in 1930 at Pine (where we got the arex Richardsoni) which agrees with P. cap; var. occidentale. Weatherwax will be here in a week or two and we will go over this together. I hate to recognize it. The leaf character means nothing. I have quite typical plants with the short leaves but the spikelet is about 0.5 mm longer, attenuate. Doubtless the western representative of the species is distinct. I have two New Mexico plants so labeled but there appear to be typical P. cap. Well I guess the "Good people" will live on do matter what I do with it. Of course I think I should insert a paragraph to discuss the matter now since my attention has been called to it. I recall that I worked this carefully before I got the grass book out but my Lake County specimen has been collected since that time. I am hoping to get to Lake County to look for Solidago if I can in sept. and may I can get some "tickle grass".

As I noted how Fernald roasted Palmer & Steyermark. For goodness sake keep me from the same fate. I want you to read both galley and page proof if possible. Wilson will write you about the charge and now for heaven sake ask enough. Boobs & merrell pay 67 centa an hour for scientific proof reading but Wilson wishes to make it a lump sum, thing this is for the reason he has gotten consent to spend so much money to get this book to the publisher. You can come down on the price. Remember what I told you, - you have two commodities for sale, your time the big item; Do not hold em up but do not rob Hermann. Now do not let Wilson know I have let the cat out of the bag about price, etc. He is fortifying himself in advance of any offer he or you may make. Get me Al.

I believe I shall take up Toxicodendron for this reason. I have tried to reason it out but Rhus radicans should be discarded for Rhus Toxicodendron. The last comes second on the page where Linnaeus described them, etc. Now if taking up the genus Toxicodendron you can not use any thing else I get by this obstacle. There are not two Rhus radicans. As I take Linnaeus had one that climbed and one that did not, not that he had two species but only two forms of the same thing. ^{= radican v Toxicodendron} I have seen an acre of Rhus radicans in the illinoenan drift in flat sweet gum woods and not a one climbing and all the same plant. I took a spade one time and dug until I was convinced that the whole darn thing was one and the same plant and only rarely did one branch (the height of the plants usually 16-24 inches high) have an inflorescence. This should be observed, May be a dry season would induce flowering but wet years the plant would depend upon vegetative reproduction. What do you think of such reasoning any way??? By the way Barclay in his monograph takes up Toxicodendron. I am afraid Barclay is a little weak in his monograph. He is recognizing Rhus Ashei and cites several of Nieuwland plants. My belief is that Nieuwland selected small plants for
OVER

Daniele character

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for specimens. This is one of the things I must take up at Notre Dame.

As to *Alisma brevipes*. ^{Will} be darn if I know if we have it or not. Several years ago I loaned all my material to Dr. Just and he or some one went over them and returned them as all one thing, although on a specimen of Umbach from Lake County is written var. *brevipes* but I can not see that it differs from my other material. From Greene's original description on short petioles about half of mine are that. I note that I made a key to separate them and doubtless I must have used it but I did not divide them. I have two of Gleason's plants. One no. 295 Aug. 7 1933 has short petioles and is labeled var. *brevipes*. The other 196 same ~~ix~~ name has petioles up to 8 inches long and blade about 2½ inches long. Dr. Just did not see these. I have Samuelson's monograph but it is in foreign language and hard for me to ^{dig} ~~scramble~~ out. So when I made my study I contrasted *subcordatum* and *brevipes* and I came to the conclusion we did not have it. I will put this on the list to look at when you come down or if you wish to see my specimens up they P.B. Q

^{Wing} ^{with} es I had a fair or rather a half a crop of *Rudbeckias*. I read a recent article in Bot. Gaz. about rare minerals for plants and I had our flunky man to dissolve some and I thought I would put some on my garden. I told him to spring some about the garden here and there, etc. Well he went and watered the plants from the top. he did a half job and I have a half crop left. I killed all my best *Rudbeckia* but *R. Deamii* escaped. I have one *Rudbeckia* with a very small head, appears greenish, and it is quite different but now I do not know it will be killed out entirely or not. I got the zinc for our butternuts. They had rosettes on last year and some of the branches died. I can not close *Rudbeckia* satisfactorily. Miss Banta thinks we have *R. discolor* and this year I planted seed of it from N.Y.G and it is nothing at all like what she has. Then there is the long-leaved form of the *hirta* complex which seems to be a perennial. It blooms in Sept. and Oct. Doubtless a different species but I am not able to tackle it. When you learn of a guy who wants to tackle *Rudbeckia*, let me know. About 10 years ago I found *R. fulgida* on a poor ridge in Perry County. I transplanted it here and this year it looks like a millionaire. ~~xxxxx~~ Fact is I do not know what the darn thing is. I have made specimens from my garden and if you wish to be burdened with 1 or more holler.

I have gone over the *Carpinus* and I confess Fernald has got something although rather vague. I think the teeth of the serratures is the only thing that will hold. Also the subcaudate apex and the usual ovate type of leaf. Leave the fruit-bracts and calyx lobes alone. I will collect every thing I run across in southern Ind and will get you duplicates of all that appear to mean any thing. Many thanks for the loan of specimens. They are packed and will be sent Monday morn. Well it is now supper time and I will sign off. I hope I will live thru my trin and may be I will pick up some news. Sincerely Chas. C. Cram

STATE OF INDIANA
CONSERVATION DEPARTMENT
DEPARTMENT OF PUBLIC WORKS

Recd. 6/26

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INDIANAPOLIS

Administrative Officer
V. M. Simmons

Bluffton, Ind.

Aug. 21 1937

Dear Hermann: Sorry we had to call visit off. We went to Notre Dame and found that Just had gone on a vacation. Since seeing him was the principal thing Wilson wanted to come back home. It was develish hot and I had done myself up on Thursday P.M. I went to Kokomo Thursday night and he was to pick me up there at 6,45 A.M. So wife and I went over the night before and staid all night with an old friend there. Well I drove 196 miles that P.M. on poor roads and the last place I was in nearly fixed me. I knew of a fine woods but now cut and grown up to weeds. We got there just about dark and when I was way back in woods I found I must get out before dark. Well I was in weeds so high I could not see out but soon found a stump and then took nearest way out I had no hat and the large Ambrosia trifida scratched my face and pollen fell into my hair. Well getting out of this place over exerted me and I am not yet rested up.

Well the big idea to see you about was the reading of proof. I told him I wanted you to read both galley and page proof and that I was going to pay you the current price. You are working now for two things for money and honor. There is nothing the proof reading but drudgery and you must be paid for it and Wilson is quite agreeable to it. He knows well one of the publishers of the Bobbs-Merrill Co abd he is going to find out what they pay for such reading(technical) and then come at you with a proposition. Now be firm and get out of it all you can. Wilson is quite favorable to paying you the price.

Say I just received a separate of the Orchids of North Carolina by Donovan S. Correll. Published in Jour. Elisha Mitchell Soc. This seems to be a worth while publication. Write Correll for it (Duke University) OVER

Durham, N. Car.

Well this is all the "news". Now probably you will be down to see me. Wilson says I can not get the Ms. in by Oct. 1 and I now feel sure I can't either but I will do my best. The "finishings" take so long. Well I have read the last Rhodora and I have now closed Silphium and Eupatorium. I still have a number of genera to close, most notably is the Dioscorea.

best wishes, I am sincer ly yours,

Chas: C. Veam

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CONSERVATION DEPARTMENT
DEPARTMENT OF PUBLIC WORKS

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INDIANAPOLIS

Bluffton, Ind. Aug. 15 1937

Administrative Officer

V. M. Simmons

Dear Hermann: Since you have nothing to do but to work for me,--and on the side take care of your job at U. of Mich and look after a family, I do not hesitate to give you jobs. Seriously I have been at this *Carpinus* and I'll be darn if I can see any thing in *ternalds* var. See *Rhodora* 37:424. Last Tuesday I was down in Switzerland County and I found two clumps of shrubs both heavily fruited. They grew about 20 feet east of a low woods. They grew in a fallow field to the east and I have know the area for 11 years and no fire. The shrubs seem to come from some underground stem and ~~xxx~~ radiated in a diameter of about 15 inches. There must have been about 8 shrubs to a clump. I neglected to count them. They must have been about $1\frac{1}{2}$ inches in diam near the ground. Like a fool I did not observe them closely to see if terete or fluted, etc. Well I thought these surely were the true *Carpinus caroliniana* Walt. Unfortunately all my specimens are at Ind. University except two mounted ones and a few un mounted ones. Now I wish you would pass on what I have sent up. Take one or two of each number of the Switzerland County plants and I will get the rest when we come up at. Fernald has enough characters to tell a nigger from a white man but I will be darn if I can separate these plants. The subacuminate apex works O.K. on the larger leaves but the calyx lobes seem to be alike and the teeth of the sides I can not make out. Take the bracts on the series I have from Switzerland Co. you can find rounded and acute ones, and variously lobed ones. Now if we have both types in Ind. they are in that lot I send you. The Marshall County plants are quite typical of all our *Carpinus* in Ind. The Switzerland County plants seem to be OVER

diminutive specimens but why I do not know except they are different things. This year has been an exceptionally wet one for Indiana.

Now I hate to bother you again on this but Lord I do not want to be caught on this thing. By the way I went down to my Carpinus tree to get some fruiting specimens from it and on my way back I saw a tall ^{lettuce} letter in an Aster bed. It is typical Lactuca canadensis var. typica except it has lavender flowers and the latex is ^{white} and discolors but slightly. These lettuce are going to set me crazy too.

Have struck a snag in Helianthus which I now attack. Guess I had better stay at home. The more you find out the less you know.

Think I wrote you that our plan is now (mine and ⁺ wrote Wilson) is to leave early Friday morning, go to Notre Dame and leave there in P.M. and get to you after supper. If you do not hear from me again, this arrangement stands.

I am sincerely yours,

Chas. C. Dean

Fansett

Recd. 9/13

STATE OF INDIANA
CONSERVATION DEPARTMENT
DEPARTMENT OF PUBLIC WORKS

INDIANAPOLIS

Wednesday eve Aug. 11 1937
Bluffton, Ind.

Administrative Officer
V. M. Simmons

Board

Governor M. Clifford Townsend
Lieut. Gov. Henry F. Schricker
Virgil M. Simmons
Dick Heller
Earl Crawford
Thurman A. Gottschalk
George H. Newbauer

Dear Hermann:—Your letter of Aug. 6 was duly received but I was out of town Monday & Tuesday. I have nothing important to write but this is just a ~~gossip~~ gossipy letter. I do not indulge only with you because none I have on my string are worth it.

Well here is why I write you. I think I wrote you that Wilson wanted to see you, etc. Well he says he can not go this week end but can Aug. 20 & 21. Now what we want to know is if we can come then, etc. Also if you days when you can not see us. Now we will not bother Mrs. ^Wermann for eats or bed. State of Ind. pays our way so do not bother us along that line. I presume an hour will be all that is necessary to talk to you and just visit. I think Wilson has nothing to see you about but wants a joy ride at state expense and wants to take me out for an airing. Now this P.M. something else came up Got a letter this A.M. from Barkley, giving a list of Rhus & Toxicodendron he plans to give Ind. Well here is the situation. I do not feel like spitting in the contribution box in church when it is passed. I do not wish to forget my position and where I belong but I will be darned if I like to acknowledge Rhus species that I think are punk as ell. You will recall that ^eGreen had about "57" vars. Rhus glabra, etc. Well Barclay has resurrected two of em. One R. pulvinata Greene. I have a specimen. It is only R. glabra with a little R. typina blood in it. It is typical R. glabra with a very slight pubescence in leaflets, very scattered hairs and the same on the stem. Then Barclay includes R. Ashei which so far is known only Piedmont in N. Car. Grows about 18 inches high, etc. Now I will bet we never had such an animal in Ind. Father Nieuwland collected three specimens or sheets. Now I wrote Barclay today. Nieuwland was notoriously careless, even Dr. Greene told over

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me that while he was alive, although Nieuwland achieved greatness and was a great man. Now here is my belief. Nieuwland was circa Wash. D.C. for several summers, part time, etc. and I think he must have collected these, stored until he had time to work them and then carelessly used Indiana labels. Now all of Nieuwland's collecting was done in St. Joseph County and in the dunes. The net result is that I must go to Notre Dame to see these specimens. Why not do this enroute to Ann Arbor. of course it will make a full day but it will save me a separate drive up there. Now I will be damned if I am going to be stampeded into recognizing something that I believe is strange to Ind. I know I have found strange things in Ind. Well when I see Nieuwland's data I can better make a statement. Now you know Dr. Just will stand for Nieuwland until the last ditch. Now here is my line of attack. Get the date of the specimen and then try to learn when Nieuwland was circa Wash. D.C. If he was not in Ind. on the date then something is wrong. If I prove this wrong Dr. Just will always regard me as an enemy. Well that is what it will be because Science and Truth above all to me. I made my trip to S. Ind. to verify some records. One the report for *Castanea* in Ripley Co by Dorothy Parker. Well I found her tree and I learned from a neighboring farmer that he had three trees on his farm and all died last summer on account of drought. The reason I doubted the report is that the woods I directed them to is a low flat one but to the east end is a ravine and this tree is on the bank of it. When I was in quest of *Rhus* I found a species that Greene described for Clark from Lake Maxinkuckee that I had entirely overlooked. It is *Rhus gymnoclada* Greene pub. in Fedde Rept. 5:45. 1908. I happened to have a separate of this paper and by chance I noted it. So now I will have to look for that type and see what it looks like and I will probably put it in synonymy of *Rhus glabra*. Barclay says he expects his paper to be out in Sept. The way things are piling up on me Deam is going to be the guy who needs punching up. I was working *Solidago racemosa* var. *Gillmanii* and S. Deamii and while there is some difference I am afraid in this we have a widely varying species and I would like to look the area over about Sept. 15. I have followed Fernald and made two species but against me ideas of it.

Well on my trip to s. Ind. I found in a fallow field (hard white clay soil) on the border of a woods (20 feet out) a clump of *Carpinus caroliniana* Walt. This field has never been fence or burned over that I know of and I have known it for probably 10-15 years. The plant looks as if it had been coppice, no it looks as if it was one thing and about 10-15 shoots came up about a central stem. I was in such a hurry I did not take notes. I found two of the plants and ^{clumps} I was so busy I did not look for more, -had several things to investigate and drive 160 miles that P.M. Well the foliage is quite diminutive and the bracts one-lobed, etc. Will send you specimen id a few days. I took a specimen of *Carex* and I have *Juncus* or two here yet and then I will call the season off. I got more of the *Steironema lanceolatum* (?) and yet I do not know what to call it. I tell you one must watch his P. & Q. this year in making identifications. Plants are extremely luxuriant. I found *Helianthus hispidus* I did not recognize (while I was ~~sitting~~ ^{saw them there} eating sandwiches at noon.) Told wife the "*Helianthus* key was N.G. I just could not recognize this plant but when I began to look into it I found it perfectly good *H. hispidus*. I went especially to investigate *Lactuca canadensis* and its vars. I did not get good. I did not find a single specimen of *L. can* var. *obovata*. All my specimens of this var. are from the Ohio River cos. Wiegand gives the range as Maine to Ind. Mo. etc. and southw. I am of the opinion from my few specimens that this may be a species. I went back to try for the lavender flowered *L. canadensis* var. *typica* but it was too old. Well on a hurried trip like this you really do not know what you have until you have the junk worked up. We were too hurried to do much but we had a fine joy ride. I always travel at my own expense except Wilson told me when we go to Ann Arbor he will pay.

By the way did I send you (unsolicited) one of my recent photos? Frank Wallace was here in May and took a snap of me and he liked it so well he made an enlargement of it and if you can stomach one of em I will send you one if I have not already done so.

Hermann-4

Many thanks for the list of Carex, Juncus, etc.

Now to your letter. As to maps if you need more I can send you as many as you can possibly use. I think I still have 1500

No I never indexed Watson's Monograph. Too bad I did not. After this I shall always ^{do so}. I have just had the ^{material through} Reisinger Rumex and McVaugh Lobelia bound in buckram. Makes them more accessible.

Euphorbia nutans versus E. hyssopifolia. I noted this and wrote Weatherby Jan. 24 1934 about it, here is his reply. When I ask him a question in order to make it short, etc. I write E. nuts or E. hyssopifolia (Small Flora 796) and then he underscores his decision in the matter and ^{he} has underscored E. nutans. He did not assign reason and in fact I do not care for it. This makes it far easier for him. I would not be competent to dispute with such a scholar as he is. So that is my answer.

Hitchcock did not visit me. I had hoped he would do so. I have not seen

Weatherby to learn what he thinks of him

Fassett likes to get into print. fact is he may know aquatics better than I think he does. I mean if he restricts himself to his own region. But a reliable key will take work. He wrote me twice about Sagittaria brevirostra latifolia, and S. longirostra. He does not seem to agree with my findings. I do hope I can get some more this fall but the heavy rains here have just cleaned the streams. It is raining here now

I note that Camp has written you on taxonomic points. Complimentary. I have seen both V. angustifolium and nigrum in same large colony or area and I took measurements of corolla and at same place noted shape and color of fruit. Think I have this all in my Shrubs of Ind. If V. nigrum is a species it is a queer actor. As to Camp's articles in N.Y. garden. he is O.K. he is only feeding his egotism. He likes it and wants to be a hero and probably he is. I was over his Mitla trip in 1900 when it took me a day to make the trip ^{had} two drivers. One to whip and the other to hold the lines. We had 3 horses ^{abreast} abreast behind and two abreast in front.

Hermann-5

Thanks for the compliment on being spry next Spring. Let us say so and let it go at that. By that time the Flora of Ind. should be off hands but I wish I could nurse it along until I get some of these bad things straightened out.

Got a long letter from Ek today and some specimens. Damn such a student. I have tried now for 3 years to teach him how to make a specimen. Practically all he sends I would not incorporate in my herbarium.

You did not say if you wishes the cultivated Helianthus or not. They are life size. I made a failure in drying them. My corrugated paper is all flat and specimens moulded. I still have some plants in beds I think will do and I will put them in press as soon as I get what I got yesterday dried

Well I think I will close this letter and finish in the morning. You ask about Polygonum achorum and I will have to go back and get some specimens and I can that better in daytime. - now am

Now as to P. achoreum. I do not have it from Ind. You know the Sec. aviculare

I regard as difficult, probably we have no good key and then specimens with good achenes are not always at hand. House in Flora of New York, page 289 has the most complete key I know of but it is punk. For instance in this key he says pedicles of P. achoreum are exserted but Blake says included. I have some good specimens of P. achoreum from Minn., Wis. and Canada. I have tried my best this year to run down some of this Section and found only one immature one which I put under P. aviculare but it is not that I feel certain. Think I discussed the exserted achene with you before. All plants I think of section aviculare have exserted achenes in autumnal phase So that character falls down and ruins much of the work along taxonomic lines, I mean herbarium determinations. Even Small in his Monograph makes error.

No I never heard of Blake's Polygonum Sec. aviculare. Guess he must have gotten into too deep water.

Just received your letter of Aug. 10 and I will notify Wilson that Aug. 20 & 21 will be O.K. with you. Now do not let our coming in any way disturb you.

OVER

Now you really have the whip in hand and when Wilson comes up you ask for all the separates you want. I will tell him it would take any one 3 mos to write what you have written in a most careless way. If I had written it it would have been a blind following of Mackenzie with all his errors and many added and at the salary I am getting it would cost the state 500,00 so what you ask surely is a modest sum. Sure it wirth a lot to you to have it published but that is not the way that things should be valued. If a man is dying of thirst and you know he has a 100,00 and you demand it and get it that is not business that is high jacking. So in this case, what it is worth to you should not enter the picture. Its value depends upon how much it is worth to us. Now so about the proof reading. You find out what it is worth and ask that price. Of course I would like to have you read both the galley and page proof but if too much then the galley proof. In our State, insertions and corrections in the page proof are charged for at advanced price I think. I will have to have two page proofs. Now that is a matter I have made no decision on. What should be at the top of the page under in his Trees & Shrubs has the family name in the center and genus at the side and page below. I always say dam the bottom page. In the trees and shrubs I have the family in center and genus in hinge and page on the outer corner. I think that is the way I will try for this book. Of course the printer will kick like a mule but I will stand for it to the last ditch. Now I do not want you to do any thing for me any more than I can possibly help. You and Weatherby will certainly celebrate when the parasite Deam is brushed off.

Now if a paper cover will answer for the separates with printed title page O.K. Have some separates of the Mich Acad. Sci. to show him. ^{or one like your paper} The titles on these are good and the quality and color of the paper you can designate to suit yourself. But the cheap blue paper the Acad. uses I do not approve of. The cover should be of extra good paper and a flexible one is good or have one with stiff sides.

Say just received a letter from R. T. Clausen but specimens have not come. Think I will send you his letter after I have checked the specimens in I will never forgive God for making Botrychium any way. Chas. C. Deam.

Botrychium

Real. 5/10

STATE OF INDIANA
CONSERVATION DEPARTMENT
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Board
Governor Paul V. McNutt
Lieut.-Gov. Clifford Townsend
Virgil M. Simmons
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INDIANAPOLIS

Administrative Officer
V. M. Simmons

Bluffton, Ind.
Aug. 8 1937

Dear Hermann:--Just have a letter from Wilson and he still wants to go up and see you. I do not know why. But no matter. Wilson is no tight wad and the Lord said ask and ~~xxx~~ Ye shall receive. No ask no getty anything" To the point. I do want you to read the proof of this book. I wish you could read both galley and page proof. Then you should be paid what is customary for such work. Item no one. Now I have never mentioned separates to Wilson. Neither have you or I discussed it. But I believe you will profit most by any liberality that Wilson wishes to make and putting some of it into Separates. I would like to see them all with good covers, possibly a stiff board cover. Not less than 100. Now accordibg to our state law I think I am right but to repage a paper they charge the same as if the whole page is reset, Probably would ~~prfx~~ prefer to have it appear as a separate, etc. Now this is a mater that must come to a head and I would like to have you and Hermann make decisions on that. Remember the motto. No ask no~~x~~ getty anything. You should always take pie when it is passed. I will be with you to the limit. Now if can in any way steal the time I want you to read the proof. You are well aware how very important proof reading is. A few rotten apples in the barrel makes it in class of rotten apples.

Wilson wrote like he would like to go up soon. I wrote him I would write you and find out if you had days when you could not see us. Let me know or write him directlt, E.P. Wilson, Assist. State Forester, C/o

State Library Bldg, Indpls, Ind. I told him the last of next week would suit me. By the way we could bring back some specimens if they are ready. here is the dope. Govern yourself accordingly. I am sincerely yours

Chas. C. Ueam

STATE OF INDIANA
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Lieut.-Gov. Clifford Townsend
Virgil M. Simmons
Paul Fry
James D. Adams

INDIANAPOLIS

Bluffton, Ind.
Aug. 3, 1937

Administrative Officer
V. M. Simmons

Dear Hermann:-Your letter just received and I wish to inform you that I am very happy that you can finish your job so soon. I was fearful I would hear you say it would a year or 6 mos. I have just heard from Dr. Just and he says he can not get his in by Oct. 1. Well I will write him again and try to hasten matters. I would be glad to drag this matter along but my health is going and I wish to close as the State Forester is anxious, the why I do not know. Well you go right ahead and get the dope to me as soon as possible. If you finish the Juncus and Luzula send that right on so I can have it copies if needs be. You know Weatherwax is to write the names on the maps. He has a scheme whereby he can do it with some sort of a planograph. Well since he is head of the Dept. of Botany now he is busy and he has not started to write the names because I do not yet have them numbered. Now a matter has come up for me to decide and this is my decision. I mean when I have a species and variety I gave the species a number and call the variety the same number but give it an "a, b, c., etc" standing. Now I think it best to make the maps conform to the text and where I have a species and variety, both to have maps, is it not better to use the "a" number with the variety instead of giving it a higher number. Do you get me. In reply all you need to say is give species and variety same number or not. You are too darn busy to take any time on me.

As to the maps, I will send them on at once. No charge. I have a thousand or more I can send, that is of the kind I plan to send. They are not like the map I will use. All the same except the scale. No charge for the maps.

As to the var. of arctitecta will say, yes I shall be glad to go OVER

with you ^{to} the locality in Vermillion County if I am alive and can be moved about but all at my expense. Will you always bear in mind while you are here your money is no good. I feel this Vermillion plant is just a freak you will recall I revisited it (same locality) and all I could find was typical *Carex varia* (arctitecta). Well you will be "Director" and when you are about ready to sail let me know. If this book ever gets off my hands I will quit the Dept. and then my salary will stop and then all I will have to do is to wait for the hearse, and mow weeds around here. I feel like hell since Sunday. I revisited the Jasper-Pulaski Game Preserve and had machine trouble that almost fixed me. The story is too long for a letter. Machine got vapor choked (a new thing to me) and while we were on a sand road where no one could pass us an old car drove up with 3 Chicago (bandits) in it??? Well they tried to fix car and I think one was a real mechanic and he put the ^{wires on distributor} ~~wires~~ in all wrong, etc. and all the time kept telling me it would cost me 20,00 to get out of there, etc. Well this 3 hr. experience about undone me. Dam the bunch I would have died before they held me up.

I went after more of the *Utricularia*, Got two sheets only, ditch dried up. I am now especially interested in *Lactuca canadensis*. I am going to the country in a few minutes to a woods I know to see if I can get some plants. Stebbins named some of my plants I sent him last year and he either does not know any thing about them or I do not. Sunday I found a typical *L. canadensis* var. *typica* growing with 3 inches of var. *integrifolia*. The var. *obovata* gets me. Rare in Ind. and seems to be in s. Ind. only. I had planned to make a trip (2 day) to s. Ind. to collect it but I feel too rocky and now since you tell me you can "produce" on time it is up to me to get my job done. I still have *Solidago* and some closing up to do such as *Rudbeckia*, *Dioscorea*, *Steironema*, and probably a few others. These are all written but I hope to revise them. *Polygonatum* must go as it is. That man Anderson is not a very good correspondent. He said he would take the red mayapple and I wrote him for directions for shipment, etc and he has never replied. I now have 3 apples, fine ones. One very large

Hermann-3

and two smaller ones. The plants are nearly dead but they fruit sticks and I thought I would leave them on until they drop off or nearly so. I have supplied the roots with plenty of water ever few days.

So far as I know there has never been a report for *C. Woodii* or *C. styloflex* for Ind. You have all the data on your maps I sent you. I have added nothing since I sent you the ones I sent. I see that Mackenzie does not list either for Ind. He usually did mention each state if rare. I tried to be careful to list every report and it might be possible I missed them but I think not. So I think you are safe in reporting both as new. Do you need more maps? I have 2500 here. Can send you 1000 as easy as one because I will not need them and if Ind. University needs em let em buy them. It is up to you to take while the pie is passed if you wish pife tak take it.

Say the *actuca campestris* experience is surely intersting. I had no idea any plant had such pressure. This reminds me did you get a start of the *Baptisia*? Mine here this year has acted queer. It is not flowering right. I believe this is a dry (moderately dry) sand plant and we have had such a wet season that it has "drowned out". This is a queer thing to say and I do not know any physiology of plants. Some plants manifest great vigor when they have more than a maximum of water. Too I have seen plants that do not seem to thrive when they have an overdose of water. It may be my plant is growing old (probably 10 years old) But I counted this spring and I think it had 39 buds but only a few flowers at a time and all have promptly fallen off after flowering. Not a ^opid so far.

I had planned to make several collecting trips but now since you can come across with your Ms. I must cancel some of them. I wanted to get as many stabs on the map as possible for Deam, for after this year I will get no credit and since no salary, I will probably just wait for "ather time to execute me.

No I have no idea about the clepitogamy of *L. campestris*. This might me an intersting thing to follow up but ^oabcock and Stebbins have pre-empted that field.

Right here I went to the country to collect *Lactuca*. I found one mile of country road that was lined with *Lactuca canadensis*. I found only one colony of *L. can. var. typica* and *v. latifolia*. But all other colonies were *var. typica* or *var. integrifolia*? That is the upper 1/2 was *var. integrifolia* and the lower half *var. typica*. The flowers varied from bright yellow to dirty yellow, that is the back of the involucre bracts and rays were tinged with lavender. The branching was varied. Now I am more than ever convinced that we have one species with a multiplied forms. However, I did not find *var. obovata*. Think I shall go to s. Ind. to study this. You telling me you will have the Ms. ready soon makes me think I must stick to get mine done. I do not get to do much, so many things come up to keep me up my time.

Got a letter from Wea her wax who is now head of Dept. and he says Mottier's place will not be filled. There are to be 3 teachers now. He wants a good taxonomist. Say that word taxonomist surely covers the ground. I just bought E.E. Stanford's textbook on botany. He formerly was a taxonomist and the book was highly praised. The darn thing is n. g. for me. I want a book written on the "Primer, Elementary treatise on Systematic botany. Something like Grays First lessons but greatly amplified so that Garden Club members and elementary students in botany in college could learn to name plants, wild, cultivated, (taking in fruit trees, etc. Some thing that one could learn with profit, that is he could remember all his life with profit

Many, many thanks for the reading of *Helianthus*. Will see later what you did.

Well here is another thing I have not sprung on you. That is the reading of a box of excluded species which I will send with the maps. You take your time to reading this Ms. The only thing is I do refer to it quite often.

No I do not know Constance. He is a westerner and I do not know of any of his work.

You say you need 168 maps. Do we have that many *Carex* or does that cover *Juncus*, *Luzula*, etc.

Say I must sign off or I will not get any thing done today on Solidago.

I enclose the Index to the *Rumex* monograph. I got it a little balled up but it will serve you so that you can make a new one without trouble of going thru it.

I do not find a sheet of memos to you. I usually do have.

Well here are my very best wishes

Sincerely yours,

Chas. C. Peam.

Pyl. 8/1

STATE OF INDIANA
CONSERVATION DEPARTMENT
DEPARTMENT OF PUBLIC WORKS

Board
Governor Paul V. McNutt
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Virgil M. Simmons
Paul Fry
James D. Adams

INDIANAPOLIS
Bluffton, Ind.
July 29 1927

Administrative Officer
V. M. Simmons

Dear Hermann: Wilson, State Forester, was just here and was anxious to know the date when he could expect the Ms. for the Flora. I told him I could get my end of it done by Oct. 1. I told him I had no idea how far you had your work along or how you thought it would take you. He asked me to write you to set a date if possible. Also to ask you if he would get you an assistant for a month or two if it would help. He wanted to go up and see you but I got him to postpone the trip until I heard from you. He plans to be back in about 3 weeks when we can come up. He drives 60 mi. per hour. I fear the trouble is that there is so much trouble at the State House (politics) Wilson is for me and has the money to publish the book but just recently there is an under current to try to displace him. At least that is his suspicion. Politics are bad in Ind. Nothing "too good for em to do"

Well Dr. Just sent me Sister ~~Therax~~ McDonald's Thesis on Life Forms of the Ind. Flora. She is listing all of the Ind. species I spent from Monday noon until this noon to read the paper and bring her list of plants up to date and the nomenclature.

Now as to date of Ms. I think we had better make it Nov. 1 since I still have Dioscorea I wish to study the last of Sept. That darn Steironema heterophllum complex has me. Found some plants last week tht will not come thru the hoop Plan to revisit the place and get more plants.

Well I hope all is coming along fine with you. Your work and health of the family. Did I write you that Dr. D. M. Mottier has retired.

Weatherwax is now head od ^Uept. That is all I know. C. Leo Hitcock is to be here Sunday, maybe. Sincerely yours, Chas. C. ^Aeam.

Dear Herman:—Here is the fruit of several weeks or months work on the *Helianthus*. I have preceded the genus with a discussion which is a sort of an apology for not following Watson and for not using involucre bracts as characters, etc. The involucre are usable but only to one who after he knows the species complexes or whatever you wish to call them. The series of *H. giganteus* I sent you illustrates this. Watson called some of my plants of *H. giganteus* *H. altissimus*. This species is surely a tantalizing thing. I found it in an old tamarack and it run out on the bank of a black oak slope. Oh boy what a difference

Well if you have a chance sometime to go over the species of this genus and do not agree with me, please call my attention to departures.

You will note I have seraped *H. laeteriflorus*. So far as I can learn it is the same thing as *H. rigidus* but has yellow flowers. I do not have typical *H. lateriflorus*. Watson named my *H. rigidus* and *laeteriflorus* but no difference at all that I can see. The type must be seen to know just what it is. See discussion under *H. rigidus*.

Well you read this at your early convenience and when copied the Flora will be done except *Helianthus* and Hermann and Just's parts

Best wishes, I am sincerely yours,

Chas. C. Deam.

CROP INDEX (cont.)

TEA - Wellensiek,15.

TOBACCO - Sobolevskaja,10; Ter-
novskij,10; Vickery & others,
13; Pittman,13; Brain,29; Col-
lins,29; Stinson,29.

TOMATO - McGillivray & Samson,
19; Mack & Lachman,19; Mac-
linn & others,19.

TURNIP - Hudson & others,16; Rigg
& others,16; Snyder & Donaldson,
23.

VEGETABLES - Roe,31.

WHEAT - Voss,3; Gerlach,10;
Thomas & Venton,13; Throssell &
Cishubl,13; Shellenberger,17;
Sigemura,25; Takahashi,25; Miede,
28; Miede,32.

22
14
01

STATE OF INDIANA
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INDIANAPOLIS

Administrative Officer
V. M. Simmons

July 23 1937

Dear Hermann:- Many thanks for the two separates you sent me sometime ago.

I got your letter this A.M. and I have sent the records on to Harriet for stabbing. This is all except yesterday I was down to Franklin County and I found a small bunch of *Juncus macer* and one of *f. anthelatus*. These will go in later.

ay I am just so darn busy I scarce know what to take up first. I did start *Solidago* this week but I am off on siding at present.

In regards to the migration of Coastal Plain plants you are right so far as Lake Mich. goes. What I have reference to is the Kankakee R. Valley. I have never had time to go into this subject, take it all from memory. We have a lot of Coastal plain plants in Jasper that have never been found about Lake Mich. I believe it a good idea for you to keep a list of these plants with their direction of migration. The way I feel I will never get to it. I feel rotten.

The darn *Rumex* paper is not indexed. It cost me \$1.58. I want to get a cloth binding for it. I will make an index for it and will make a carbon copy for you which you can recopy, thus saving you the task of lasting them, etc.

I have not heard from Anderson about *Polygoatum* I wrote him I had a good lot of em.

My red may apples are still sticking, larged ^{et} now 2 inches long.

I note what you say about chromosomes. I am not acquainted this kind of angle works ^{ms} but I agree with you. I have spent \$4.00 to see what sort of a botany e. ^{with} E. Standford has written. The review leads one to think over

he has treated the subject in a new way. Doubtless you have seen it. When I get it I may let you know what I think of it.

I note what you say about Hanes work and his desire to publish. Will the Mich. Acad. Science not publish it, especially if some one like you will edit it for him. Of course these days no flora should appear that is not back up herbarium specimens.

Was down to Franklin County yesterday. Nothing in particular except I found *Steironema lanceolatum* in abundance in a low white oak woods. This must be studied again. I will send you a specimen in due time. I have never seen any thing like these plants. Sorry I did not take more of them but I was short on paper so I did not bear down very hard, took about 7-8 sheets.

This year I have been busy looking for *Thalictrum* and I have not seen a single one. I want to get *T. polygamum* and if I do I will get you a specimen. This man C. Geo Hitchcock who wanted to go with me on a trip about the state will probably not go now. He wrote me he thought he might be here Aug. 1. Just to make a contact is all. I note in last night's paper that Indiana University has retired Mottier. Fact is he has retired himself. He was in hospital and an operation for stomach trouble. Think Weatherwax is looking Hitchcock over to offer him a place at I.U. Weatherwax had him out to Turkey Run State Park and will go with him to the dunes next week for a few days. So you see Ind. U. is to have a change. Hitchcock said he wanted to see my herbarium, so that is the data for any conclusion you may wish to draw.

Yes the plants you sent from driftless area were received O.K. Many thanks if I did not already thank you. I did not check the det. of *Sullivantia*. You should have sent live plants of it to Rosendahl. He wants all the live material he can get. I sent him an old dried up specimen of *Sullivantia* that Miss Welch collected a few days ago in Ind. that she called *S. Hapemani* I did not take the time to try to check it. I must put all my time in on drilling on *Solidago*. I want to get it done before Hermann gets his *Juncus* and *Carex* papers in. By the way when

am I to expect the Juncus and Carex papers???

In regards to *Silene dichotoma*, 5 or 10 ribbed. Will say I have it from 3 counties and all are 10-ribbed. One was determined by Blake while he was at Gray Herb. I have one from Minn. ditto. Will say Gray is wrong and that all of the ribs are strong and the intermediate ones are so prominent that no distinct^{ions} should be made. *I see I have my copy of*

Gray marked 10-rib

Well I guess this brings me up to date so I guess I will sign off.

I am sincerely yours,

Chas. C. Deam

Memos of Hermann

Quercus prinoides in Cass Co, Mich S $\frac{1}{4}$ of S $\frac{1}{4}$ of sec.15, Jefferson Twp.

On farm of the elder Mr. Banks.

I found it in Elkhart Co, 1/4 mi. south of the Michigan line about 6 mi. ne. of Elkhart

Say read the "shot" that Fernald gets in Science July 16, page 53

Do you care for specimens of *Helianthus* Daleyi
Nuttallii Yale.
Dowelianus, grown from seed from

Priroda Akad. Nauk SSSR (cont.)

Poplavskii, K.M.

Opyt okoreneniia iabloni steblevymi cherenkami
(An experiment of planting apple trees by means of
stem cuttings) Priroda Akad. Nauk SSSR 26(3):
71-74. illus. Mr.1937.
Russian.

Rabotnov, T.A.

Eshche o ved'minykh kol'tsakh (Again on fairy
rings). Priroda Akad. Nauk SSSR 26(3): 97-98.
Mr.1937.
Russian.

Savich, V.P.

V.L. Komarov - prezident Akademii nauk SSSR
(V.L. Komarov - president of the Academy of sciences
of the USSR) Priroda Akad. Nauk SSSR 26(3):
1-7. illus. (incl.port.) Mr.1937.
Russian.

Vasil'chenko, I.T.

Zamechatel'nyi sluchai prorstaniia semian
efedry (A remarkable case of germination of the
seeds of Ephedra ciliata S.A.M.) Priroda Akad.
Nauk SSSR 26(3):95-97. illus. Mr.1937.
Russian.

Vul'f, E.V.

Geografiia rastenii i teoriia Vegenera (Plant
geography and Wegener's theory) Priroda Akad.
Nauk SSSR 26(3): 28-37. Mr.1937.
Russian.

Proc. Biol. Soc. Washington (500 W272)

Peck, M.E.

New plants from Oregon. Proc. Biol. Soc.
Washington 50: 93-94. Je.22, 1937.
Fritillaria adamantini, Limnanthes bellingeria-
na, Downingia pulcherrima, n.spp.; Navarretia proli-
fera var. breviflora var.nov.

Proc. Hawaiian Sugar Plant Assoc. (65.9 H314)

Borden, R.J.

Agriculture. In Report of Committee in charge
of the experiment station ... for the year ending
September 30, 1936. p.50-94. 1936. Proc. 56th
Ann. Meet. Hawaiian Sugar Plant Assoc. 1937.

Repl. 7/20

STATE OF INDIANA
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DEPARTMENT OF PUBLIC WORKS

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INDIANAPOLIS

Bluffton, Ind.
July 13 1937

Administrative Officer
V. M. Simmons

Dear Hermann:- I am sending the last of my Juncus, Carex, etc. and with them a few items I thought you might be interest in.

You keep all the stuff I send, except where I say only sheet and it is new to the county, divide it and return me a part so I will have a representation. Think all is common stuff except two Junci, superficially one looked like J. dichotomus. The other is that long fruiting thing that appears to belong with J. macer. Well this is "your baby" and I will just await your determinations. This will probably be all I will send you this year. Friday and Sat. I plan to visit Elkhart County in a low sandy area just south of the Mich. line. This is an area new to me and I have no idea what it is like. May be I can not resist impulse to pull some Juncus, etc. I leave late Thursday and return Sat night or Sunday Kriebel came up here Sat. P.M. and on Sunday we went to Steuben and Lagrange counties. It was all new to him but I found only two new records Acer saccharinum L. and Juncus bufoxius for Steuben Co. But since I have 1,000 species from Steuben I do not easily add new species to it.

No I did not get the Gray Century no.4. I hate to ask them any thing about any thing or ask them for something. In a letter to Fernald about 2 weeks ago I incidentally mention Dioscorea and he wrote me a 2 pg. letter saying he had just attempted to write the genus but gave it up awaiting mature fruit. My opinion is that this will not save him. If I recall correctly I tried this character. he can not distinguish between D. glauca and D. quaternata. either can Steyermark. Well I am planning to make a special effort to get more material this fall. Fernald now thinks that Bartlett's D. hirticaulis may be the D. villosa of Linnaeus. He will have Weatherby look up the type. OVER

In this he will run up on a snag at once. Bartlett says the under surface of leaves pubescent but I have specimens growing here that have plenty hairy enough stems that have under surface of leaves glabrous. This Fernald seems to not know. Well this fall I went send him a mess of stuff that will give him something to think about. I have gone over this genus now three times.

Say in one of your letters you mention that Anderson is working on Polygonatum. Now I egotistically believe I have the best selected collection of this genus in the U.S. and he should by all means see my material. I can give some pointers on growing the species. Anderson and I have always been friendly but about 2 weeks ago or longer I wrote him about my red may apple and asked him if he knew any one who would be interested in this freak. He has never replied. I thought it possible that he was away on a leave ~~xx~~ of some kind but usually one lets his mail follow him. I wish to god someone would do something with this genus before I am compelled to publish. My write up is worse than puerile it is just bunk. If you can contact Anderson tell him to see my Polygonatum

Thanks for calling my attention to Kalm's Travels. I have the Foster edition and that will have to suffice in my financial condition.

Are you crazy or what. In one letter you say you are stoking furnace and in next letter you say it is 102.??? Well we had the same thing here. You keep the *Carex cumulata* from McFee. She was here and brought me a nice specimen. Sorry I did not take more of the *C. subimpressa*. Can get a bale of it next year if that comes. I got Fernald's Mem. of Robinson. Have you had time to go over Reehinger's Mon. of Rumex. Field Musgum Bot. Pub. 17: no. 1, just out. You should read his discussion, pp. 8-13. He has my idea of species, subspecies etc. I have not had time to go thru this as a whole yet. Will do so this week.

Thanks for the determinations you sent in. Best wishes. Hope you dug up some good things on your trip with Haney.

Sincerely yours,

Chas. C. Deam.

Say the *Utricularia radiata* Small is a good find and make the Coastal Plain introduced species a real problem. Got a letter from Camp about *Vaccinium* distribution, etc. Think he will have to come across to the Miss. entry of of coastal plain plants. The evidence continues to pile up.

Deam

Repl. 7/20

STATE OF INDIANA
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INDIANAPOLIS

Bluffton, Ind.
July 6 1937

Administrative Officer
V. M. Simmons

Dear Hermann:-I have your letter of July 3 and I hasten to reply so you can get the Friesner junk (many probably immature) I would say look it over if you can so as to add new counties, even for the common species. If I did not say so I would be in line to have the same said to me. Sunday wife and I went to Winona Lake to make dinner with folks. Enroute I tried to check up on *Rhus pulverulenta* but the whole thing is gone, due to "road improvement" so that is off the slate. In P.M. I drove to Elkhart Co, to check up on *Utricularia fibrosa* but I could not find it. High waters washed away the bridge I formerly went into the marsh over and by the time I went around the section and came in on the other side a rain (deluge) came up and drove me out. Rained so hard I parked along the road for an hour and doubtless 2-3 inches of rain fell. Corn fields were just flooded. Well on this trip I got nothing. Then yesterday wife and I planned a trip to the Jasper-Pulaski Game preserve and two other places. While eating breakfast we received a telegram that friend of Mrs. D. had just died so she came home and I proceeded. Takes more than a friend to die to keep me from the field. Well I went to the Peelle woods to get *Baptisia* (You will recall that that Fassett says our *Baptisia tinctoria* is not that species and Pennell says it is the true Coastal Plain *Baptisia alba*. Well I got there so late I made ~~it~~ only a hasty examination, I found a most excellent marsh^h (?) probably a marsh plowed and left go fallow because in it were all kinds of stuff, some *Juncus*, *Carex*, etc. Well my objective was Jasper-Pulaski Game Preserve to search for *Utricularia inflata*. At last found oddles of it in roadside ditches thru what was formerly Clear Lake. Then the dam starter would not work but I did. I messed around for a half hour and wore myself out and at least I got it to go.

OVER

I have never seen vegetation ^{so} to luxuriant and I just could not resist the temptation to pull stuff. It was 3,00 P.M. and I should have been on way home but here I was in an opportunity of a life time so I just pulled Juncus and gave them a number and then another hand fill and a number, ^{be} may 2-3 are alive but that will come out later. One Carex rare every where except in the bottom of that Clear lake and then I found an acre of it. As soon as it is dried I will forward all to you so you can have to ^{it} study with your other stuff. I found a lot of that long fruited Juncus that looks like J. monistichus, but immature

Guess this is all. I found 3 acres of Euphorbia virgata?? in Starke County. ^{cur} I first authentic record. That man surely has a "boil" on that farm Also checked on Salvia silvestris(?) Found it about 10 years ago in a pasture and I found two large colonies in an adjacent pasture yesterday.

well I noted what you say about your trip. Experienced collectors will be turning ^{things} thegs up yet for sometime to come. We need experienced men to cover the entire area.

You mention you plan to collect two more days. I suggest that you keep Thalicttrum in mind. To me this genus needs much work. A few weeks ago I found a specimen with lavender inflorescence. I planted it. I have several colonies growing here. You may recall I relegated T. polygamum to the Ohio River counties, based on very short anthers, 1 mm. long or less, the connective not extending beyond the anther sacs. I am anxious to know if you really have it or not. Think authors are mixed on this but with me it may be Indian lost and not the wigwam. At any rate I believe the tall Thalicttrum will bear study. I have several colonies here and one is polygamous. Only specimen I have that is so. I am anxious to learn how much of a character the anthers and filaments are. My polygamous plant is pubescent. Look into pubescent of whole plant and check on stipitate carpels. Say you must come down to write a whole book. I am glad you have a good opinion of Fassett. I am afraid he is working too fast. At least when he borrowed my Dodecatheon he did not acknowledge them and returned them without every saying he sent them or thank you, go to hell or any thing. Never annotated a single specimen. "ell this may be O.K. but it is not. my way Here are my best wishes keep up the good work

Sincerely yours, Chas. C. Deam

I have no letterheads

Sunday 4,00 P.M.

Rec. 6/12/37

Dear Hermann:-I have just reread your letter of May 27 and I see I must answer before you leave for June 10. I am glad you are to get away for some field work.

Last Sunday Wherry, Benedict, and Steyermark and I went to northern Ind. Then Monday Steyermark and I went to the western part of the state. We collected in A.M. and to Big Wea Creek just after dinner and I left my press near the car (You know where we parked to get the *Carex heliophila*) and we went up the hill. Were not gone more than 10-15 min. When we returned my press was gone with all the plants I had collected in A.M. I had in it a good series of *Luzula bulbosa*, almost past fruiting. We found out two boys on bicycles were along so Steyermark headed his car after them and caught them about a mile out and they confessed that they had taken press and took it over in bushes to examine it and found it was worthless they left it. So he came back to get it where they said it was but we could not find it. So he took after them again and overtook them 3 miles out and they told he was at wrong place so they sped in a direction just at north of bridge, etc. He came back and no press. Well I lost the A.M. collecting and the shawl strap cost me 1,35, Kaki cover, lumber and making will run up to about 3,50. Motto carry your press, but I am getting too old to do so. Well we went on to ~~Kent~~ and Kent and Steyermark on to Chicago Monday. Tuesday I went to that sand road about 5 mi. nw. of Morocco and they have just finished "improving it". Where we got the *Triplasis*, etc. They right of way has been plowed and leveled off and not a green thing remains. Dam em. The center has a single track of crushed rock. No one travels this road. Well on this whole trip nothing of importance. I did get *Myosurus minimus* in Newton County, former records, Posey & Gibson cos.

I find I have some 1933 Gleason *Carex*. Let em ride. Now this brings me to a question. When I thought we might take two days off and visit you and bring some *Carex* back we might have done so. But the works are now all gummed up so we can not possibly get away. I am in no hurry about the return of the specimens. I thought I might just help you out in returning

OVER

some of them. So please keep them for ⁰some time yet. June 10 my Wild West Show comes and we need all the room both inside and outside for the 3 boys etc. After June 19 they will be gone at least most of them and then you can come down any old time. If you can come yourself and then we can ^{scout}scutt out some place for a few days or week make it at that time. August has more more things to get. Last of Aug-Middle of Sept. Oh we can find something any old time but Carex etc. will be past. Any way no hurry about return of specimens.

Now I must have taken 10-12 nos. of Carex. Believe the best way is if it is not too much trouble for you to look up is for me to send all the material with label and in the event I already have the Carex from the county you keep all the material and you return me the name so as to fill out my accession book. I will probably not get any more or but few because I am getting panicky about getting done. *with flora*

Steyermark was here and went over some of my stuff and if I get it right he thinks I am all off on some stuff. He seems to not agree with some of the Fernald species vars. etc. He thinks *Antennaria fallax* and *plantaginifolia* the same, and questions *A. Parlinii*. He can not go my *Hemicarpha* species; *Fimbristylis* and a few others. He things *Asclepias syriaca* var. *kansana* a good variety. Well he made me a week's work to rework some things. Well I am pretty easily persuaded but some times I am as obstinate as Fernald. My trouble is I do not have material from a wide area. Well I hope no one will expect the Ind. Flora to be perfect and then no disappointment.

Steyermark told me you wrote him about his Carex. I gave him a good lecture on it. I told him it was too bad he had to call you and you (Steyermark) had a lot of nerve to assume the man to whom you send material has more time or is in any way under obligation to clean your material. I told him a plenty He saw my field press and he insists it is too time consuming to use a field press. and insists that a tin can specimens is O.K. Well we would not agree on that point if we talked until doom day

Do not know what I pay for sheets Can let you know soon as I am out and

must buy some. I think about 5 cents a pound is reasonable for a newspaper. Merchants, etc. are now jacking prices up to meet the higher wage schedule. I note your objection to single sheets which is O.K. but it never bothers me. In the event a label does drop out it can be reinserted, of course at some expense of time. This is more than compensated by the loss of time in studying specimens in between folded sheets. ^{Maybe} I would get used to this though. Single sheets I believe are best at least for me.

Well we have had about 50 here today to see our weed patch.

Recently I wrote Camp (N.Y. Gardens) if he would look at some of my Ericaceous stuff and he writes me to send on Ms. and any plants I wish to so he gets them. Think I will send on my Botrychium to Clausen. Wherry was here last Sunday and told me to send them to him. These fern men are getting things too attenuated for me.

Well I see no end to the problems on my Flora so I just must close it as soon as I can.

I hope you will have a profitable trip on both trips. I shall be anxious to learn what you find out on your trip with Stere. Tell me about it when you come down.

Say many thanks to Mrs. Herman for her gracious letter inviting us up. We must now call it all off. Wife now has company. ^{gr} A lady friend who is an old teacher who came to visit an old teacher here is seriously ill. Wife is busy. She tries to run her garden and arboretum. Having labor trouble. Our care taken for 3 years quit Saturday night. He and his wife separated and he goes to Mich. to avoid paying her weekly keeps.

I am signing off. Sincerely yours,

Chas. C. Deam

Repl. 7/3

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INDIANAPOLIS

Bluffton, Ind.
July 2 1937

Administrative Officer
V. M. Simmons

Dear Herman:- "ell I suppose you are home now "trying to find some job".
I know how it is to be gone a week or two. I do not wish to stress you
but I send this note.

Last week I sent you two boxes of specimens. They included the
mounted Carex which are for you to keep. I sent you all this year's
collection of Juncus, Carex, and Luzula. I did not say so in pkgs
but I intended for you to name all items I sent. If I have the species
from the county already, you just keep all of the material I send if you
can use it. Of those species I do not have from the county, please return
one. But please send me list of determinations so I can enter them in
my accession book. The Carex impress x lanuginosa?? you keep all I sent.
I retained a good specimen for myself. Now as to the Helianthus the names
I append are not guaranteed, even to check against my Ms. By the way I
wish you would read my Ms. I still have two pages to copy. I preceded the
genus with some "beloney" and I have felt so bum I have not not felt able
to correct my first write up of it. I wish when you get the Ms. that you
would knife it unmercifully. It is too lengthy

"ell I do hope you had a good trip and that you got some light on
Smilax. Did you find S. ecirrhata? I had it in mind to ask if you found a
certain species but it has escaped me. My ^{memory} mind is so bad I can not rely
upon it at all any more. Have you any notion on Dioscorea. Presume not
because you are north of the species except D. paniculata or villosa L.
I prefer the ^{Latin} ~~later~~ name but I have a memo to ask Weatherby

I have been out only two days in June. Did not good. OVEⁿ

I plan to get out Sunday and Monday. I want to check on *Rhus pulverulenta* Greene that Barclay plans to include in his Monograph. Then I have a very good specimen of *Utricularia fibrosa* from Elkhart Co. Barnhart so named it for me. It is so far out of range that I have omitted it from the Flora. I want to try to get more of it to make sure that we have it. *Utricularia inflata* occurs in Ind. I never collected it but Miss Welch has and I saw the specimens. "ill try for it on this trip.

Say you will recall that nice sand road nw. of Morocco we worked last fall. "ell it is a memory now. I went up there June 1 and they had just finished improving it, the whole was graded level and not a spear of vegetation left.

The Tryon Bros were here Wednesday. They have been working our northern bogs for orchids. Did nothing startling. Potszger and I went to n. Ind. on ^{June} July 17 for grasses. he found several new to him and he was happy.

"ell this is all the news and gossip. I hope you had a very profitable trip. I hope you did pull some *Panicums*. I plan Monday to collect and dig some of that *Baptisia tinctoris*?? no in Starke County. Mine here at home has been in flower now several days.

I enclose all the "emos I have made for you

Sincerely yours,
Chas. C. Team.

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Memos to Hermann

Please abbreviate Wahlenberg to Wahl. That is we are using George Wahlenberg as Wahl. and Frederick as Wahlb. That is what B. & B. do. Gray's Man. uses Wahlb. for George. and ~~Wahlb.~~ Wahlenb. for Frederick. If you have any comments let me have them. Mackenzie uses Wahl.

What do you know about *Helenium autumnale* L. D.T. Darlington in flora of Porcupine Mts. reports *Helenium altissimum* Lin (Gray's Man. name for *H. autumnale* L.) Do you know if Gray people are recognizing Rydberg's split of this species. I have now gone over my material twice and all I can make out of it is that we have one extremely variable complex and I have it in my Ms. as *H. autumnale* L. I have a memo to take it up with Weatherby when he returns. At least make a memo to take care of this report in your Flora of Mich.

Non-current indexing (cont.)

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Socket, H.

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38: 22-26. 1934.

Theriot, I.

Quelques mousses du Chili austral recoltees
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v pl. D.1935.

The American Society of Plant Taxonomists will hold two summer meetings in August, 1937. One will be at Acadia University, Wolfville, Nova Scotia, August 18-21; the second will be at the Summer Biological Station of the University of Michigan at Douglas Lake, Michigan, August 24-27.

Neither one of these meetings is intended in any way to conflict with the regularly scheduled meeting at Denver, Colorado, and each is organized solely to provide opportunity for various workers who may not be able to attend the Denver convention to meet each other.

The meeting at Wolfville is in conjunction with that of the Botanical Society of America, and is at the invitation of President Patterson of Acadia University. The program is being arranged by the officers of the Botanical Society of America.

The Douglas Lake meeting is a week later than that at Wolfville, and the Botanical Society of America and the Ecological Society of America have accepted our invitations to join us. Accommodation may be had in cabins, at a charge of \$3.00 per person per day for board and cabin space with bedding and care, or \$2.00 per person per day for board and cabin without bedding or care. These should be engaged before August 15 from Dr. George LaRue, University of Michigan Biological Station, R.F.D. Route 1, Cheboygan, Michigan, and paid for in advance. Since students will occupy them until Saturday, August 21, guests should not plan to arrive before Sunday. The nearest hotels and tourist rooms are at Cheboygan, a distance of 13 miles. There is ample space for trailers.

The Biological Station has laboratories and conference rooms, dark rooms, boats, and other equipment which will be at the disposal of the Society.

There will be opportunity for the presentation of papers; titles should be sent to Dr. J. H. Ehlers, University of Michigan Biological Station, R.F.D. Route 1, Cheboygan, Michigan.

Roll 5/27

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INDIANAPOLIS

Administrative Officer
V. M. Simmons

Bluffton, Ind.
May 24 1937

Dear Hermann:- I have your letter of May 20 and it is always like getting a letter from "home" to hear from you. The specimens came Saturday. Enclosed find postage. Many thanks for all of them.

By the way I got a letter from Mudge McKee she will be here this Thursday for me to check some more specimens. I am sorry to hear you must rewrite so much. Can you not get some typist to copy for you and send me the bill. I have not tried to set a date when I hope to turn in the Ms. because I can not tell when you plan or hope to turn in or Dr. Just will get his or when Mrs. Winch will get her part done. She is not progressing very fast. The stabbing is no short job.

Well I have E.T. Wherry and J.A. Steyermark here this week end. Steyermark and I will go over some of the Fernaldites and see what we can make out of em. Friday I went to Winona to attend the Acad. Meet. I found a large colony of Dodecatheon (1000) specimens Flowers white to deep pink, otherwise same so far as I could see. Wherry says he is interested in this genus.

All the new Carex was a surprise. Thanks for the specimen. Why not send that man Deam out there to get more of it and root around in other places I am feeble but I 'll be darn if I can stay in. Friday I took kit and walked a half mile and got that man Hermann a few specimens of Luzula.

You know I am getting "occupational disease". I want to get out but I dare not be out too much. I suggested to wife we drive up to Ann Arbor some day and I could bring home some specimens if you are thru with them. If we make the trip we will take two days. Land at Ann Arbor for supper, go to your place to visit after supper, and start for home early and stop off enroute home to get a few weeds here and there. We would not make you or wife the least bit of

OVER

trouble. The only think would be to watch wife that she did not steal any live plants. Would enjoy having a chat with you. Think I will miss all the other botanists up there. Too busy now on the Flora to be sociable. Gosh I have no time to tattle around when father time and senility are at my heels.

Say send in postage bill for all the things you have up to date. By the way if we find we can get away for two days I will give you due notice.

Thanks for the National Herb. list. I will forward it to Harriet and hear her swear.

My memory is so poor I repeat myself so often. Did I tell you I wrote Munz about that *Oenothera pilosella* business. Rafinesque wrote the species in Annals of Nature. Raf. says plant 6 inches high and flowers in August. Plant is much higher and flowers much earlier. "all here is where I follow authority for truth".

"Well I must sign off and get to work I did not collect any *Carex* last Friday. All to immature. Did not see a single *Ranunculus* of the *Macounii* stripe.

Sincerely yours,

Chas. C. Team

Resl 5/20

STATE OF INDIANA
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INDIANAPOLIS

Bluffton, Ind.
May 10 1937

Administrative Officer
V. M. Simmons

Dear Hermann: I have just received your letter and I hasten to reply because I may go crazy soon. My head seems as if it would burst and I am so nervous. Guess these Helianthus have about got me. Say I have about a pigeon hole of Helianthus for you. Do you care for more than one number of a species except necessary to show range in variability. Let me know about this because I will soon send them out. I have written to Kriebel to come up and go over the lot with me. He has good judgment. I hope my head clears up so I can finish and make a key. Not necessary to rehash this by mail. Will send the Luzula dope on to Mrs. Winch when I hear from her. She is sort of lying down on the job. Think she is not feeling well. She thinks she is crowded to death with details in this job.

"ell ordinarily I have a lot of Memos for Hermann but I do not find any now.

Where did you get those maps.

As to collecting I do not see how I can help it when I get out if I ever get out again. I just have no strength. Our Spring Meet of Ind. Acad. takes place I think May 20-22 at Winona Lake. Enroute and while there I may run across some Antennaria or Luzula I do not have and Carex and Ranunculus Macounii? et cetera. I do not wish to burden you in any way but may be you would find time to name up the few I collect this summer. Doubtless Kriebel will have a lot from Henry County, no key county but it is not represented on our maps except by few. Well Hermann I do hope you and family are feeling better. Think I will feel better when the hot weather comes.

Thanks for the stabbed maps. OVER

Does you send on the types to Gray Herb.

Well I am glad to know you can now definitely weed out the *Carex*. I hope you will soon be able to get down to business and write this *Carex* paper. I want to go to Florida this winter.

Well I shall be glad to hear from you from time to time. If I ever get this *Helianthus* paper off hands I will feel like I am out of jail. Then I will revise the *Arabis* and the *Kneiffia* section. You noted in last number of Bull. Torrey Club that Munz has revised this part of *Oenothera*. I do hate to call the Gray Man. *Oenothera fruticosa* var. *hirsuta* O. *pilosella* Raf. I remonstrated with Munz about this. They have no type and the date of flowering and size of plant would definitely exclude it or put it in nomen ambiguum. But "authority for truth" and not truth for authority, dam the new deal.

Sincerely yours,

W. C. Deam.

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Memo to Hermann

I have 37 sheets of mounted *Carex* from Gleason from N. Mich. Would you like to check them for Mich. records. You probably have a duplicate set if these are a duplicate. Let me know and will send them if you care to see them. *No, have seen them*

I have you have *Carex Muhlenbergii* from the east side of Clear Lake and the variety from a sandy field about 1/2 mile east of the first. You will recall the fallow sandy field we collected it. Do you not think these may both be the same thing?? According to my plants this is the only variety sheet.

P.S. I note you use var. *inervis* a synonym of *C. plana* (1934) Will you use the varietal name or *C. plana*. I will then change the names on my sheets. I want the "very latest"

Do we now have *Carex brachyglossa*?

Carex stricta, paniculata (Cider) Wieg.
Dec 4, 1927 Pokey Co.

Find enclosed label for the *Carex laxiflora* var *serrulata* Hermann Will you please attach a new label. I enclose one with the data on

it and a blank label so you can discard and rewrite it if you like

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V. M. S. 5/8

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INDIANAPOLIS

Administrative Officer
V. M. Simmons

Bluffton, Ind.
Apr. 26 1937

Dear Hermann:-Glad to hear from you again. "any, many thanks for the favors you have done for me. Fortunately I have few "give mes" at present. Will unload later.

I am now working on Helianthus. My health is bum and I plan to go to the doctor today. I have no pep. I fatigue and just give out. Too my head does not function so I really can not study the Helianthus. I have studied the specimens Watson named for me and then his descriptions and keys and they do not hitch up. Even a blind man can see that we have specimens that can not come thru the hoop of the Gray Manual but in some instances ~~six~~ it is not difficult to get lineal series and Watson admits the intergrading. Now I find it is quite impossible for me to work this out so I am going to lump them very much according to the Gray Man. M. Rae Johns of University of Iowa has the best treatise of Helianthus I know of and I will follow it some but what I have decided to use the Gray Man. species where I can and where I can not to use one or more of the Watson ~~keys~~ ^{species}. When I get thru with the genus I will send you a few duplicates (all I have of the species) together with the Carex.

As to the Chicago Acad. Science, I would address the Director, Chicago, Ill. Lincoln Park at Center St. This will reach them. I have been there and the botanical collection is handled by some one not a botanist but the plants are well mounted

Yes you write Weatherby about the Juncus. Glad to get this off my shoulders, I have enough to set him crazy.

Sorry to hear you are still having sickness. I do hope you will get clear of your troubles.

OVER

Say I had one *Lepidium virginicum* var. *macropetalum* Thellung and to have it checked I sent it to C. Leo Hitchcock and he reports it is a strong variant of the typical species. So that settles that. He says he teaches at Urbana, Ill this summer and wants to come over to Ind. and have me go with him to get acquainted with Ind. I may try it but I fear about all I can do is to ride.

Got a letter this morning from Miss Welch wanting me to tell her of all the good places in Ind. to collect mosses. This is too much of an order, I have no idea where mosses grow.

Well Hicks has come across with the *Umnaceae* article and Dr. Just will publish it in the July *Midland Nat.*

Suppose you read that J. A. Steyermark has accepted a position as assistant at the Field Museum. Good man I think. Doubtless Standley will interest him in South America while the weeds and bushes will take North America.

Well I hope you had a very profitable trip to New York. I shall be glad to keep in touch with you results at Gray, and at other points. Remember if there are charges please list them all and send them in.

Guess this is all. Some Boy Scout High Up from New York wants me to tell him all I know about Ivy Poison. I will refer him to J. B. McNair

Best wishes, I am sincerely yours,

Chas. C. Deam

Memo to ⁴ermann

Think I got the genuine *Junipersu virginiana* var. *crebra* in Miss. Will send you a specimen.

Do not go to any trouble about this. How about the spelling of disc or disk, -as to apply to *Helianthus*, etc. I ~~xx~~^{see} that Webster gives both ways but seems to favor disk. Gray, B. & B. & small use Disk. Watson in his monograph use disc. I prefer disc but seems as if the Bot. Fraternity should rule on the preferred spelling of this word. B.D. Jackson places "disc" first. Schneider in his *Handwörterbuch der botanik* seems to use the "disk" I have been using disc but probably I should go to disk

As to *Dracocephalum denticulatum* Ait. Nothing to this except they have the specimens. Here follows the original description:

floribus spicatis remotis, foliis obovato-lanceolatis ~~denticis~~ ^{denticulatis} . Nat. of Carolina.

This description can not fit any thing we have. Well I guess we will have to await Epling's write up of it A.D. 1950?
Many thanks for the references.

Zentralbl. Bakt. Abt. II (Jena) (448.3 C33)

Stapp, C.

Der bakterielle Stengelbrand der Erbsen.

Zentralbl. Bakt. Abt. II, 96: 1-17. illus.
Mr.8, 1937. no.1/4.

Der Züchter (Berlin) (442.8 Z8)

Harder, R., Fabian, I. & Denffer, D. von
Lichtintensität und photoperiodismus.

Der Züchter 9: 41-46. illus. F.1937. no.2.
Vorläufige Mitteilung.

Lehmann, H.

Das heutige Ausgangsmaterial für die Züchtung
Phytophthora-widerstandsfähiger Kartoffeln.

Der Züchter 9: 29-35. F.1937. no.2.

Unter Berücksichtigung der bisher aufgetretenen
Biotypen von *P. infestans* de Bary.

Stephan, J.

Die Heimatgebiete der *Serradella* und ihr Klima
in ihrer Bedeutung für die Züchtung. Der Züchter

9: 25-29. illus.(map). F.1937. no.2.

Wartenberg, H.

Probleme der Forschungen über den Abbau der
Kartoffel. Der Züchter 9: 35-40. F.1937. no.2.

Exp. Stat. Publ.

Bryan, W.E.

Breeding for smut resistance in Arizona-grown
wheat. Arizona Agr. Exp. Stat. Techn. Bull.66.
123 p. Mr.15, 1937. (100 Ar4)

Stahl, A.L. & Fifield, W.M.

Cold storage studies of Florida citrus fruits.
II. Effect of various wrappers and temperatures.
Florida Agr. Exp. Stat. Bull.304. 78 p. illus.
O.1936. (100 F66S)

Rhoades, M.M. & Robinson, J.L.

The 1936 Iowa corn yield test. Iowa Agr. Exp.
Stat. Bull.355: 187-240. F.1937.

Harmer, P.M.

Methods of conserving Michigan muck soils.
Michigan Agr. Exp. Stat. Quart. Bull. 19: 182-
191. illus. F.1937. no.3.

Nelson, R. & Lewis, R.W.

Comparative effectiveness of copper dusts in
the control of celery leaf blights in 1936.
Michigan Agr. Exp. Stat. Quart. Bull. 19: 159-162.
illus. F.1937. no.3. (100 M58S)

Say, Dean I don't think I'm in a position to ~~comment~~ ^{comment} on your ~~statements~~ ^{statements} acknowledge-
ments: ^{which I enclose} ~~but I have better than anyone else~~ ^{above} you know who has
been of most help to you on the table in making corrections, (offering suggestions
etc., ^{and to what degree} so the statements you make here set up to your judgement).

I should think your ~~own~~ acknowledgements would have to be,

I ^{only} wish that I had had about 10 years ^{more} experience so that I, too, ^{might} could have
made some appreciable suggestions, ^{of your kind} like Weatherwax, instead of just having
~~read the manuscript~~

Repl. 4/23/37

STATE OF INDIANA
CONSERVATION DEPARTMENT
DEPARTMENT OF PUBLIC WORKS

Board

Governor Paul V. McNutt
Lieut.-Gov. Clifford Townsend
Virgil M. Simmons
Paul Fry
James D. Adams

INDIANAPOLIS

Bluffton, Ind.
Apr. 15 1937

Administrative Officer
V. M. Simmons

wet
marshes

Dear Herrmann:--I have your letter written from New York and in reply will

say I would delete the Jefferson County report for *Carex limosa* (Barnes) one
In 1876(?) Barnes and Coulter made a trip thru N. Ind. and could have collected this. Now I am not sure of the date of the ~~first~~ flowering of this species but I think they were in N. Ind. last of June or in early July. Well in the first place as I know this species (from memory only, I have no specimens here) it grows in peaty places and never has its feet in mud or caly soils such as occur in Jefferson County. I know of no peaty soil in that county. see above

Thanks for the dope on *Leavenworthia*. I am glad to know the plant is acaulescent. In my key I had it "Peduncles all radical" but the B. & B. drawing had me guessing. Suppose the artist had a "hang over" when he made that drawing

their dope

Thanks for deleting *Mitella nuda* and *Tiarella*. Wonder where the B. & B. got

Well I have just gone over the *Hieracium Scribnerianum* again. I am not able to separate it from *H. venosum* according to Small if you take his 1903 and latest Floras. I do not know the place of original description. Linnaeus is not very definite in his original description. Linnaeus quotes Gron. who says plant scapose. If true then my plants are not *venosum*. Small in his latest Flora divides the genus into two sections. One is scapose to which he refers both *H. venosum* and *H. Scribneri* but under description of *H. Scribneri* he says: "Cauline leaves few" Now my key to separate *H. paniculatum* and *H. venosum*, the only two species I have to separate here is as follows:
Cauline leaves 1-3; basal leaves generally purple-veined and purplish; inflorescence a loose, divided corymb. *H. venosum*

Cauline leaves usually more than 10, leaves not purplish; inflorescence an elongated, lax panicle. *H. paniculatum*.

Now I believe my plants will fit *H. Scribneri* and must belong here if *H. venosum* is scapose. I have one of Gleason's specimens from the Biol. Station which he calls *H. venosum* and it has one cauline leaf. My stock of *H. venosum*(?) is all from Clark County on the unglaciated area. One sheet May 30, just beginning to flower, and 3 other sheets, one June 29 and 2 June 30. The last of the same collection and number as you saw at New York. Now I wish I could get back there about June 25. It is hell to be too poor to do any thing or too busy to do something but is worse hell not to be physically able to do. If I was 10 yrs younger I would go down there and get a bale of that stuff but then I would have to know what the type looked like. Think I will just leave my stuff go as *H. venosum* since it has been so reported and later if it is found they should be transferred to *H. Scribneri* O.K. Although if I am convinced that they should not be *H. venosum* I will change. Guess I will add this to Weatherby's Look Ups at Kew.

OVER

Now as to Pilea. Seems as if I can not get rid of this darn thing. Many thanks for your investigation and findings. I note what you say about var. Deamii and var. typica. Fernald let all of my 125 sheets go in as var. Deamii and I had only one var. typica. Now this whole thing recalls to me the results of W.B.annon's work out in Arizona. Do not recall species he worked with, etc. but he dug plants from different altitudes and planted all at a low altitude and result was he had several species out of the transfer. That is he had plants that agreed with descriptions of plants as described as new. Now altitude and latitude are similar growth factors. I have forgotten but I believe a deg. of latitude is equal to 100 or 1000 feet altitude. No matter the exact figures. Now why not Pilea pum. var. Deamii. The difference is spread out a little farther. Of course you soon harken back to what is a species, etc. Last night I reread Watson's preface to his Helianthus and note what he says about the separation of species, etc. I had planned to start Helianthus this morning again but I got your letter and I wanted to get it out of the road first. I am getting so darn feeble I want to have every thing clean and cannot work with a lot of stuff at one time. While I read Watson's conclusions last night I decided to take the conservative road and the species that can not be separated satisfactorily to treat them as one species. Watson cites an example where he dug a depauperate H. divaricata with alternate leaves, transferred it into rich soil and next year leaves were opposite, plant very large and strongly divided. Why the change? Edaphic factors possibly for the most part. Now even if you deal with plants in the field or in the herbarium you run up against the same limitations. Now I do not wish to discourage the taxonomist in the least but in a state flora like mine I think I should not try to "show off" but be conservative. I am well aware that my Flora can not be perfect and all I can hope to do is to do my best and that is my criticism of most authors. Now you know Small covers too much ground. Take the Hieracium Scribneri if you read all he says in the 1903 & 1933 editions you take a chance that what he says in one place is correct and the other (?). You well know from experience that when you read Gray's Man. that is the "Law" but when you read B. & P. & Rydberg, & Small, may be it is O.K. and may be it is not. It will take many pages in the future to correct Rydberg & Small's errors. Like Marcus Jones.

I do not know Alexander. Never met him.
I am glad to get the low down on Camp. I sized him up as a downright egotist. Think I will ask him to go over one of my ~~xxxx~~ renegade Vaccinium, - a black-fruited one that grows in the Knobs.

Best wishes, I am sincerely yours,
Chas. C. Deam.

P.S. If after more mature deliberation you decide to delete the Jeff Co. Carex limosa, think it would be to mention that there is a specimen so named of Barnes in such a herb and since the exact locality is not given and that the habitat does not occur in the county that you believe best to pass it up. This reminds me that once I visited C.K. Dodge at his home and he had his specimens piled up in stacks with a slip of paper containing the collecting data for the pile in with the top sheet. Specimens in between sheets of news papers. Well Dodge in his eagerness to show me a peculiar Polygonum (was turned out to be Rumex) he upset a whole pile of stuff. Well specimens out of the papers and what not. He said Oh I will get em back alright. Now the old timers had no facilities for keeping specimens and I do not in the least wish to discredit their work, neither do I wish to hamstring future botanists by such records. Now if I recall Carex limosa correctly Barnes could not possibly have found it in Jeff Co. I am in a better position to know these things and most people because I know the country down there. Deam

Memo to Hermann

I note in text we use both Gray and A.Gray as authors. Don't you think this is wrong. The inference is that A.Gray is something different from Gray. Don't you think I had better go through the whole ~~text~~ and reduce to Gray. Of course where S .F. ^{Gray}ar is used that would stand.

I find so many places in the Ms. where we say var. typica but no author should the name of the one who says var. typica be appended. Now Ennell never says var. but just adds typica. But it means just the same

Say in your Contr. to the Flora will you please use the abbreviations of authors as in B. & B. or Gray's Man. In genus Carex you will note Mackenzie never abbreviates but I am using Mack. Likewise with Coville. In B. & B. where he writes the Juncus he never abbreviates but I am using Cov. I think these two abbreviations are now in common usage. Nicht var?

Yes I would write Chicago Acad. Sciences, National and Gray. The last by all means. They have assistants for that purpose and have all kinds of facilities for getting out and sending specimens. All them you will bear transportation both ways. In all three cases you pay and when the thing amounts to 50 cents or more you write me and I will send you a check.

If not too much trouble for you we must have this thing settled. These border liners should all be definitely settled. This excluding a possible species that might occur is important. You know how those distribution curves of boreal things come down about the lakes

Proc. K. Akad. Wetensch. Amsterdam (cont.)

Florschütz, F.

Palaeobotanisch onderzoek in verband met een
vermoede menschelijke nederzetting op het plateau
van het Belgisch Hoogveen (Hautes Fagnes). Proc.
K. Akad. Wetensch. Amsterdam 40: 181-185. F.
1937. no.2.

French summary.

Proc. Assoc. Econ. Biol. Coimbatore (442.9 As7)

Janaki Ammal, E.K.

Cytogenetic studies in *Saccharum spontaneum* L.
Proc. Assoc. Econ. Biol. Coimbatore 3(1935): 14.
1936.

Abstract.

Likhite, V.N.

Host range of the Gujerat cotton root-rot.
Proc. Assoc. Econ. Biol. Coimbatore 3(1935): 18-20.
pl. 1936.

Likhite, V.N.

Stenosis in Gujerat cotton. Proc. Assoc. Econ.
Biol. Coimbatore 3(1935): 15-17. pl.1. 1936.

Parthasarathi, N.

The inheritance of multiple pistils in rice.
Proc. Assoc. Econ. Biol. Coimbatore 3(1935): 32-
41. 1936.

Patel, J.S. & Chakrapani Marar, K.W.

Effect of certain cultural practices on the
coccomut. Proc. Assoc. Econ. Biol. Coimbatore
3(1935): 6-13. 1936.

Remiah, K.

Rice genetics. Proc. Assoc. Econ. Biol. Coim-
batore 3(1935): 51-61. 1936.

Tanaka, T.

Origin and development of citrus species and
varieties. Proc. Assoc. Econ. Biol. Coimbatore
3(1935): 49-50. 1936.

Proc. Imp. Acad. Japan (513 T576)

Majima, R. & Tamura, K.

Ein Beitrag zur Konstitution der Alkaloid-
alkaloids. Proc. Imp. Acad. Japan 12: 235-238.
O.1936. no.8.

I have tried to find *Vaccinium angustifolium* var. *nigrum* (Wood) but I do not find it. Rydberg in Flora of the P. & P. maintains *V. pennsylvanicum* and *V. angustifolium*. He says of fruit of *pennsylvanicum* with a bloom and *angustifolium* fruit bluish-black but does not mention the bloom. See ~~xx~~ my observations on these two things, pub. in Shrubs of Ind. Read under species about fruit and then the var. One (*pennsylvanicum* has oblate-spheroid fruit and the var. *nigrum* has elongated fruit and the corollas are different but hard to describe. Fact that they grew together and are rare might support the var. idea. I will have to take this up with weatherby ^{for name}

es I have the Hitchcock Mon. of *Lepidium* and he has given me trouble. I went over this once and I just gave it up. Thellung described a var ^{Share Thellung mon.} *macropetalum* of *Lep. virginicum* and I do not find where Hitchcock puts it. I have a specimen that answers this description O.K. ^{from Dept}

Then in Florida I collected two specimens of what I took to be typical *L. virginicum* in the shrub border, wet) next to the Gulf at Everglades. This is way down on west coast. The plants must be between 3-4 feet high and have pubescent fruit. I must dig these out and give them the first over and possible send on to Weatherby. It is not in Small's Flora. Small did nothing with genus (all old stuff).

Now by golly I am going to write you about that darn bog-small ^{swamp} business. The more I study it the less I know. Fear you will get lost in the labyrinths of my scrambled ^{brain} ~~maxin~~. I am free to admit I do not know what it is all about and if you are the Moses, stand up for God sake.

Chas. C. Deam

Trudy Prikl. Bot., Gen. i Selek. Ser.A. (cont.)

Kocherzhenko, I.E.

Razmnozhenie plodovykh derev'ev kornevymi cherkami (Propagation of fruit trees by root cuttings). Trudy Prikl. Bot., Gen. i Selek. Ser.A (Bull. Appl. Bot., Gen. & Plant Breed. Ser.A, Plant Ind. USSR) 19: 85-81. illus. 1936.

Russian.

Kostyuchenko, I.A.

Tavlenie prezhdevremennoi gibeli gibridov pri skreshchivanii pshenits (The premature perishing of the hybrids in wheat crosses). Trudy Prikl. Bot., Gen. i Selek. Ser.A (Bull. Appl. Bot., Gen. & Plant Breed. Ser.A, Plant Ind. USSR) 19: 127-137. illus. 1936.

Russian.

Krasochkin, V.T.

Novoe v selektsii svekly (New facts in beet-root breeding). Trudy Prikl. Bot., Gen. i Selek. Ser.A (Bull. Appl. Bot., Gen. & Plant Breed. Ser.A, Plant Ind. USSR) 19: 15-27. illus. 1936.

Russian.

Mel'nikov, A.N.

O svyatoj stadii v razvitii zlakov (On the photo-stages in cereals). Trudy Prikl. Bot., Gen. i Selek. Ser.A (Bull. Appl. Bot., Gen. & Plant Breed. Ser.A, Plant Ind. USSR) 19: 29-36. illus. 1936.

Russian.

Weidemann, M.G.

Vlianie iarovizatsii na vospriimchivost i ustoiichivost yachmenia k gribnym zabolevaniyam, glavnyim obrazom, Puccinia simplex Erikss. et Henn. (The effect of iarovization on the susceptibility and resistance of barley to fungous diseases, chiefly Puccinia simplex Erikss. et Henn.) Trudy Prikl. Bot., Gen. i Selek. Ser.A (Bull. Appl. Bot., Gen. & Plant Breed. Ser.A, Plant Ind. USSR) 18: 83-98. 1936.

Russian.

Trudy Prikl. Bot., Gen. i Selek. Ser. III (Bull. Appl. Bot., Gen. & Plant Breed. Ser.III, Phys., Biochem. & Anat. Plants) (Leningrad) (451 R92P)

Nilov, V.I.

Zakonomernosti v khimicheskoj izmenchivosti rastenii (Regularities in the chemical variability of plants). Trudy Prikl. Bot., Gen. i Selek. Ser.III (Bull. Appl. Bot., Gen. & Plant Breed. Ser. III, Phys., Biochem. & Anat. Plants) 13: 5-28. 1936.

Russian with English summary.

March 31 1937

Dear Hermann:-You are not only a glutton to work but every thing you touch amounts to something. Your letter and Ms. came this morning.

I enclose a dollar to pay recent postage on letters.

I am too busy to answer your letters just now. Got about 25 items to plant and I am going to do it myself to insure a fair job and keep my data and labeling O.K. Labor here right now seems scarce.

I can not get any thing done. First I am too obtuse and secondly I have too darn many "give me". This mail fellow wants some distribution maps or told where he can get the, Saw them in my Tree Book. He has been working on the distribution of Indiana snakes for 2 years.

Yesterday correspondent sent in a few specimens and another wants to send in a whole bundle. Cheer up, you see others have their warts on em like yourself. Guess you must expect them. But I hope to lay off you soon as I can and not bother you. Your letters to me are real food and I appreciate them more than any one else except Weatherby possibly. I sure am glad to learn your family is again enroute to get better and hope you all stay better.

As to the N. A. trip I will write you a list of look ups and if you have time you can look up as many as you care to with no obligations imposed. By the way I will write you about that pond, bog stuff and may be you and Gleason can have a conflag about it if after you get my idea if you think it is worth taking up. What I need to know if I am wrong or right so as to revise my Ms. to correspond to the true meanings of these terms. I started to write it night before last and barely got started. Will try to finish tonight. Now since you are up to date on me, lay off pay attention to some one who is worth while,

Wife will go up town this P.M. and mail this and what I wrote the other day.

Sincerely yours, Chas. C. Deam.

Nature (London) (472 N21)

Hutchison, I.W.

Plant collecting on the Pribilof and Aleutian
Islands, 1936. Nature 139: 327. F.20, 1937.
no.3512.

New Flora & Silva (London) (80 N422)

Ballard, E.

Michaelmas daisies. New Flora & Silva
9: 35-39. O.1936. no.1.

Cox, E.H.M.

Codonopsis in cultivation. New Flora &
Silva 9: 25-30. pl.vi-xii. O.1936. no.1.

Heere, H.

Some beautiful Cape heaths. II. New Flora
& Silva 9: 60-63. 2 pl. O.1936. no.1.

Hillier, E.L.

Rosa ecae. New Flora & Silva 9: 64-65.
O.1936. no.1.

Rowntree, L.

California annuals. New Flora & Silva 9:
6-11. pl.i-iv. O.1936. no.1.

New Zeal. Journ. Agr. (Wellington) (23 N48J)

Dallas, W.K.

Spray schedule for control of principal
orchard diseases and pests. New Zeal. Journ.
Agr. 54: 15-24. Ja.20, 1937. no.1.

Hamblyn, C.J.

Subterranean clover in the North Island.
New Zeal. Journ. Agr. 54:25-29. Ja.20, 1937.
no.1.

Notizbl. Bot. Gart. Berlin (451 B45N)

Bolle, F.

Eine Rubus-sammlung aus Tonkin. Notizbl.
Bot. Gart. Berlin 13: 428-435. D.30, 1936.
no.118.

R. tonkinensis, R. parvalceifolius, R. corii-
color, R. intermittens, n.spp.

Burret, M.

Neue palmen aus Neuguinea. IV. Notizbl.
Bot. Gart. Berlin 13: 317-332. D.30, 1936. no.118.

STATE OF INDIANA
CONSERVATION DEPARTMENT
DEPARTMENT OF PUBLIC WORKS

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Governor Paul V. McNutt
Lieut.-Gov. Clifford Townsend
Virgil M. Simmons
Paul Fry
James D. Adams

INDIANAPOLIS

Administrative Officer
V. M. Simmons

Bluffton, Ind.
March.29 1937

Dear Hermann:- I have your letter of Dec.27 and I am glad the "Lake Maxinkuckee will be of interest to you. Doubtless the Evermann part is very good. Clark did good work but evidently made some few wrong determinations. Glad you saw that their plants are at Washington and went right after them. I fear you will be disappointed. I have now forgotten what it was but while in "ashington the last time I was there I looked for a certain plant and they did not have it, saying probably it was not yet distributed. It will certainly be a great satisfaction to you to either get them ⁱⁱ plants or word that they are not there. Then you can add to your statement in discussing the species that you made quest for it, etc.

No I do not get Parodi's reprints. Many thanks for calling my attention to them. Hermann I have lost all interest in botany. Why should I at 72 try to keep up any more. I must move along path of least resistance. I want to go to Florida and live all my winters and loaf while I am at home. I plan to cut down my reading matter at the end of this year when my salary will stop. I must ^{do it} make ends meet. My garden and arboretum will afford me enough to do. My Gott what it costs now to do soemthing. Our kitchen ³plastering came off in patches and we had to get it taken off and new put one and now it is on and in the rough and it has already cost us over 40,00 add yet to paint walls and woodwork and get new linoleum .

No we do not have Centaurea Picris in Ind.

I quite agree with you in following the International Rules. I will change my names of hiemalis, silvatica, etc.

Now as to the bog-pond business which I write on another sheet. Say man Your sickness in family must be dring you ~~deazy~~ dazy. I hope Junior Hermann will be O.K. ere you receive this and all be getting better. In the event you need financial help, may be I can help you out with a loan, Chas. C. Deam.

STATE OF INDIANA
CONSERVATION DEPARTMENT
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Board

Governor Paul V. McNutt
Lieut.-Gov. Clifford Townsend
Virgil M. Simmons
Paul Fry
James D. Adams

INDIANAPOLIS

Bluffton, Ind.
Apr. 10 1938, 10,00 A.M.

Administrative Officer
V. M. Simmons

Dear Hermann: Your letter just received. Also the additional Stabs for which I say thanks but I suspect the Mrs. Winch will say "dam you". Thanks for the Luzula Key.

Just received a copy of Flora of Isle Royale donated by my supposed friend Richard Lieber so you need not bother. In case you have gone too far and I receive a second copy I will return it to you for disposal.

Well if any one besides the Lord knows your troubles about Carex the trouble has spread farther than I anticipated. I do believe in the event the inclusion of a species hinges on certain specimens that they should be investigated if possible. You must include or exclude. If you included without seeing specimen the whole scheme is knocked into cocked hat. If you exclude without investigating every possible source you should indicate the places you did not search. The reader will say "why half a job". The only thing is I hate to delay this paper. "ell I will delay this letter but take it right to Post Office."

If you prefer I will take up with Weatherby the "look ups" you suggest. Please do not forget to nose over their Eupatorium for the var. polyneuron. In the event you note any Ind. plants of any kind, please list them and then we can stab them for N.Y.

You speak of Carex limosa from Jefferson County. I do not have it. If Miss Banta did it is O.K. because she had no chance to get outside plants mixed up with hers because she did not exchange. But I did take her into a bog in LaPorte County and it runs in my head we got it there. That should be pretty well thrashed out. I know Carex limosa habitat pretty well and it has no business down there. Carex eburnea is O.K. The Harrison Co, C. Buxbaumi is O.K. I took you to this very peculiar swamp OVER

but it has nearly disappeared. It has several peculiar things in it. Most of the Carex species you mention in S. Ind. are on the unglaciated area while the species as I recall are northern. I always thought the ways of women, mules, and the weather were curious and they go without reason and sense but I fear I will have to add the distribution of Carex by the Lord. Well may be we will yet learn but the way I feel just now I will ^{not} live long enough.

As to the Gray ^{Carex} material I do not believe you should hesitate to ask for the loan of certain Ind plants. Gosh the rocks we have helped steer the fellows off. I am sure they will not holler. Might be a good idea to give em the acid test

They are not perfect. I started to make a list of the authors abbreviation and I thought I would be safe to copy Gray's Man. list. before I did so, I began to check and I find they did not have all and I then started to go over my whole Ms. and I am now up to Epipactis and I find I have 21 omissions. Britt, Nieuwl. Farw. Chapm. Bickn. Hubbard, Planch, Mack, Wieg, Berchtol. C. Chr. Schk and others.

Say if you can keep a stiff upper lip you should wear a botanical crown someday. I am very glad that you got to New York. This will enable you to intimately meet some people. Personal contacts are just what you need if there is any thing in you and if like Prof. Low better stay at home.

Say now when you come home as ever you will be extra busy. Just bury me until you get the "deck" clear. Here is hoping you a fine time and profitable time.

Now do not forget if the time permits that the "goin" is ~~xxi~~ first class in southern Ind. all during the summer and I am raring to go with you if you can go. I will get you a pass.

Sincerely yours,

Chas. C. Deam,

Bluffton, Indiana.

STATE OF INDIANA
CONSERVATION DEPARTMENT
DEPARTMENT OF PUBLIC WORKS

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Lieut.-Gov. Clifford Townsend
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Paul Fry
James D. Adams

INDIANAPOLIS

Administrative Officer
V. M. Simmons

Bluffton, Ind.
April 4 1937, P.M.

Dear Hermann: Sunday is a good day in many ways. One is to catch up with correspondence. I always have had a mania to keep my letter answered right up to date. When I was in business and in the forestry game I always tried to have every letter answered the day it was received. You are really the only correspondent I have and I know you think the letters come too often but all things advance in undulations. Here is hoping a lean streak will come soon. Last night I finished that darn Introduction and the page of Acknowledgements I am sending you to dress up or rewrite. This kind of a job is just beyond me.

Well I take up your two letters and answer them. I will write you on a separate sheet about this darn swamp-bog stuff. Just read in Ecology of a peat bog, pollen study, and author says there was no sphagnum in the peat (bog in Wisconsin) ⁹ if no sphagnum no bog! He does not say if the surface has any or not)

In regards to the mounted sheets you are taking ^{but label no.} I think I wrote you it was not necessary to report species and counties. But if you do I will send the list right on to Harriet and she can stab an H for each county, etc. I will list what I have here after I finish this letter and send to Harriet. Now doubtless many of the labels on the plants you keep should be changed. If you have any one you can trust to write new labels for them do so. Send the names of the counties and number of labels needed and I will send them right on.

No I do not have the Clair Brown Flora of Isle Royal. Should be glad to have a copy.

Many thanks for the memos on bibliography. Glad to catch those Fernald
OVER

ones. I can easily account for it but I offer it as no excuse. All the plants Fernald reported I put on distribution maps and then cited his article on all my card index cards but forgot to put him on bibliography. I checked all the references you gave me and is the way it worked out.

I am glad you have got *Luzula* worked out. Be sure to publish it soon so as to have it in the Flora.

As to your trip to N.Y. Gardens, you will be too busy with *Luzula*, *Carex*, and *Juncus* you will not have any spare time. If you do, see about the *Pilea* problem. Get distribution of *Pilea fontana* and see if you can get it into your head what Fernald's *Pilea pumila* is and how it differs from *Pilea pumila* var. *Deamii*. Think Fernald is into a trap in this one. *Pilea* is such a large genus. Killip last year published about 100 new species from the Andes alone. Well this species business is some bug, witness the taking of plants from an altitude of 5,000 to a lower altitude and often they will be and have been described as different species. There are so very many factors entering into growth that the problem belongs to the specialist and he will have some tabulation and orientation to make ~~ix~~ before he can speak authoratively. Gosh I wish I was 20 years old and had good sense, I would like to snap into this problem. It is more than a one-man job because you do not have to go far until you run into a cognate subject you are a stranger to, etc

Then there is the general distribution of *Physostegia virginiana* and *P. speciosa*.

- ✓ Small reports *Hieracium Scribneri* Small for Ind. Investigate this
- ✓ *Leavenworthia uniflora*. See B. & B. Ill. Fl. 2:189. They show a stem plant, mine is aculescent with numerous scapes from a crown, No. stem and no scape with more than in flower.

Now in letter Rydberg in Flora N. Amer. 21:298; 1932 cites Ind. for the range of *Claytonia robusta* (Somes) Rydb. Rydberg says From Ind. to Iowa and Mo. Palmer & Steyermark reduce it to a forma, so I think we can just pass it up
None Both *Mitella nuda* and *Tiarella cordifolia* have been reported for Ind. by B. & B. but I have seen no specimens.

This is already too much. Pay no attention except you ample time. Give Gleason by very best wishes. Also you can tell Barnhart I will have some names for him to report on (I mean collectors I need data on. The rest of the staff there are unknown to me

Sincerely yours, Chas. C. Deam.

emo to Hermann.

You raise the question what is a bog, swamp, slough, swale, etc. Darn if I know. 15 years ago I tried to get Cowles to standardize ecological terms and I have been at it ever since and I have not yet got far enough to get a live committee ^{appointed} to report on it. I have discussed the subject of bogs with several higher ups and I will be darn if I can ^{git} thru my head what it is all about so I just use as I have worked out a definition.

Here is what I understand by a swamp. A swamp is a basin of any size covered with water for a part of the year, the depth of the water usually shallow. The source of supply of the water must be surface water. Hence such areas usually go entirely dry in summer or at least for the greater part. The area may be covered more or less with any kind of vegetation and surrounded by any kind. It is distinguished from lakes by the source of the water, all must be surface water, hence stagnant water. A lake has both surface and underground water.

Now a bog is any area that is fed more or less with underground ^{circulating water} water and never or only on rare occasions have any the surface in water.

The bog never grows entirely dry. Hence you have muddy bogs along streams; bogs about lakes (mostly probably decadent lakes, in the sphagnum stage, tamarack, Chamadaphne, soft maple, elm, stages, etc. Hence your bogs can be designated as you say by the vegetation found on them just as swamps are designated. You have buttonbush swamps, willow swamps, Hibiscus militaris, etc. A bog has a large number of species inhabiting it as well as surrounding it while a swamp has few species in it and few around it. I do not like the division based on vegetation but on source of supply of the water. Swamps get only surface water while lakes and bogs are fed by underground sources. So far as I know no one holds my idea. Isn't freakish enough to be original? This raises the question for my glossary where I really should define bog, swamp and marsh which I constantly use. To me a marsh is a sedge bog or stated positively a bog with a ~~carex~~ a sedge and grass flora. If I am away off on this will you please try to get me on the trolley so I can save my pelt in the Flora. This definition will apply to Ind, Mich, Manchuria, Great Smokies, and other unhabitated places except by snakes and mosquitos. The mushy scree at the base of a glacier would be to me a boggy place??? What say ye

Forschungsdienst (Neudamm) (cont.)

Wehrmann, O.

Methodik zur ermittlung des kalkbedarfs der
böden für die praktischen erfordernisse der feld-
düngung. Forschungsdienst (Neudamm) 3: 88-94.
Ja.15, 1937. no.2.

Gard. Chron. (London) (80 G162)

Balls, E.K.

Plant hunting in Morocco. I. Gard. Chron.
III, 101: 72-73. illus. Ja.30, 1937. no.2614.

Sweet, A.J.

The scarlet and other oaks. Gard. Chron.
III, 101: 74. Ja.30, 1937. no.2614.

Gartenbauwiss. (Berlin) (80 G195)

Haas, P.G. de

Studien über die "freimachung" and 27 jährigen
birnen- und apfelbuschbäumen. Gartenbauwiss.
10: 610-650. illus. Ja.19, 1937. no.5/6.

Halma, F.F.

The cryoscopic determination of the osmotic
value of citrus leaf sap. Gartenbauwiss. 10:
659-668. illus. Ja.19, 1937. no.5/6.

Herbst, W. & Rudloff, C.F.

Das verhalten der sommersporen (conidien) von
Venturia inaequalis und *Venturia pirina* bei der
keimprobe in dekokten und extrakten höherer pflanz-
en. Gartenbauwiss. 10: 688-698. illus. Ja.19,
1937. no.5/6.

Kemmer, E. & Marseille, O.

Ueber einige ökologische ursachen unterschied-
licher ertragsleistung bei den apfelsorten "Schöner
von Boskoop" und "Goldparmäne". Gartenbauwiss.
10: 557-575. illus.(map) Ja.19, 1937. no.5/6.

Rudloff, C.F. & Schanderl, H.

Befruchtungsbiologische studien an zwetschen,
pflaumen, mirabellen und reineclauden. II.
Gartenbauwiss. 10: 659-687. Ja.19,1937. no.5/6.

Sartorius, O.

Die entwicklung des blattes von *Vitis vinifera*
und einige gesetzmässigkeiten in seinem aufbau.
Gartenbauwiss. 10: 541-556. illus. Ja.19, 1937.
no.5/6.

Mystic maze on bog-swamp, etc.

In my glossary I had it in mind to include the words bog, pond, marsh, swamp, and a few terms not botanical. Now a "definition" I was taught in school must give the "genus" to which a word belongs and then set it off from all allied and related things.

First you will at once recognize that all these names are of the "vulgar" and the authors had no scientific training and doubtless the name was applied to a single or a few closeby things (bogs), etc. The time has now come when the promiscuous application of these words should cease but they will go on until they are properly defined. I took this matter up with Cowles at least 15 years ago, that to define ecological terms or common names that are descriptive of ecological things such ^{as} banks, wet, moist, dry, etc. Cowles promised me, like a politician would do, yes it should be looked into and promptly forgot it probably (be charitable, he is dead)

Now if I know what this is all about the geologist and geographer does not what our trouble is. ^{know} ~~can~~ have no terms for our place names. So it takes

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it is a botanical problem which to be answered must call in a goodly number of witnesses.

Now where shall we begin in time? How does a spade dug ditch, dredged ditch, canal, etc. differ from a like excavation made by nature long ago and today. I have seen dredged ditches long enough to see the vegetation in them change radically. The maturing of the soils on the slopes and the filling in of these ditches offer habitats which are promptly accepted by the species that can use them. We had a ~~marshy~~ swampy woods on our farm when I was a boy and I have seen cattle pulled out of it that got mired in it. Later the woods was cleared and drained. Now when you drive along this field you would never suspect that it was possible that a swamp ever occurred there. Doubtless you have lived long enough to see changes in the species over an area.

Visit a small, nearly extinct lake where the open water space is nearly gone. You note the aquatic plants, sedge zone, shrub, zone, then the woods, etc. I classified a woods in St. Joseph County for an old man. The woods was nearly a pure stand of *Acer saccharinum* (about 15-20 inches in diam) and *Ulmus americana* over

12-15 inches in diameter. The woods was dense. He told me that when he was a boy the area was a cranberry bog. Conjecture the succession of plant life in this woods. 2

Now you have a wider knowledge of what this is about than I do. My experience has been wholly in Ind. I can compare similar areas in the unglaciated with the glaciated. I told you I thought a bog was an area whose water level was rather stable, made so by underground streams or springs or both. That a swamp was merely a catch basin and that during the summer months the ^absin went entirely dry or nearly so. Sometimes a considerable area would not go dry and then the name pond should be applied and swamp if it usually did go dry. Now let us discuss this. We can see where we start but where do we come out?

Now the succession from lake to the mesophytic forest has been worked out. The bog follows after the water is shut out and in a general way in northern Ind. sedge stage is followed by shrubs and tamarack. In some places the Chamaedaphne comes in and shuts out the tamarack (being followed by red maple. No matter what the species. What I am getting at is the low pH of the water level. I do not know the figures but peat is under all tamarack bogs(?) At any rate is not decomposed because of what(?) I do not know. If I recall they say it is low pH, soil sterility, no bacteria, oxygen content I do not know or its relation to decay, etc. To maintain this high acidity, etc. it would seem that the bog would have no outlet but some our largest bogs

are along rivers and about lakes (reach to water edge.) This no outlet to me is rather ambiguous when you compare a kettle hole and a swift running river.

All right. Now I know of several bogs and they all have "moats" about them. The width of the ^{moat} ~~moat~~ will depend upon the volume of surface water that gets into the bog. Example where it is bounded by a high bank the width may be only a few feet wide (here is where you must try to get into it) then if on the boundary you have a ravine down which considerable volume of water comes the width of the ^{moat} ~~moat~~ may be 1-2 rods wide. Then here we have the tension zone of the aerobic and anaerobic bacteria, may be? Watch me closely that I perform no sleight of hand. Is the perimeter of the bog a swamp, if not how does

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Dr. Eklers' definition of a bog was an area without an outlet (my swamp p.)

the the tamarack along Pigeon River

it differ^d from an area the whole of which apparently is the same as the border of the bog.

Now let us jog down to southern Ind. You will recall the Smith swamp 2 mi. east of Livonia where you found the *Juncus dichotomus*? Well when you were there doubtless was quite an area in water. I was there late in summer and the water was gone except one place a few feet square was yet there and possibly 2-3 inches deep. Now I must draw upon my memory which is no longer reliable. But here is what I think was there at the time *Peersia oryzoides* abundant (too darned abundant), *Carex lupulina*? frequent, *Juncus* of the effusus type of some kind. and on the floor plenty of *Ludwigia palustris* var. In it are scattered buttonbush. Floor a mud. The shrub border had been cleared. I found on the north side a real thicket of *Rosa palustris* and *Rubus* sp. Now this is located in the unglaciated area. The Erwin swamp in Posey County is also in the unglaciated area and was dry when I was there the last time. It has quite a few buttonbush, plenty of *Carex lupulina*, *Juncus nodatus*, ^{or *Carex lupulina*} *Hibiscus palustris*, etc. Bottom mud. Now I am afraid you did not see much more down there. We have what are locally known as sloughs and ponds. They mostly go by the name of ponds but are deserted river channels but much smaller than Half Moon Pond. The last is atypical in all respects. It is well stocked with *Nuphur advena*, *Nymphae tuberosa* and possibly with more aquatics. I botanized it when it was dry. ^{then} It was a dense tangle of *Cyperus* 4 feet high with plenty of *Polygonum*. The bottom seemed to be a crumbly or friable black loam and not the hard blue clay (slick). Now nearby we have several ponds, these mostly about 50-75 feet wide. Mauck's pond is over a mile long. Some places it has some vegetation but I do not now recall it. Long pond has nearly naked banks, just slick, blue clay. No water plants, do not even recall *Nuphur*. Now south of Half Moon pond is a button bush swamp, formerly a *Taxodium* swamp, the last all cut. This area must occupy 40 acres. It is so dense it would take you an hour to cross it. You must just cut your way thru it. The ice and debris breaks down the shrubs and it is just a tangle. I had to cross this twice to hunt for our dog that was lost. Now there is no vegetation in this swamp, if so very little. Bottom mud. OVER

to the southwest we have a woods of 80 acres classified ^{and joining it} If I recall it correctly it is almost a pure stand of *Acer sachcharinum*, with a few *Ulmus americana*, and *Fraxinus lanceolata*. Bottom nearly herbless. Soil a hard clay. Now I think this woods is the forest stage of the buttonbush.

Now move up to the glaciated area. Little Cypress swamp ^{in 1890's} is a similar area but different. After the *Taxodium* came in more oak (*Q. Schneekii*), *Acer rubrum*, ^{var} *Drummonii*, *Fraxinus profunda*, etc. Then the higher ground has ^{an} oak hickory sweet gum forest. Now it has been so long I have forgotten except I get our ^{it} ^{indery} if we visited Pitcher Lake. Believe not. Well not necessary to dwell on these. They are the same except the species. Now let us go up to the Tipton till plain and here I am lost. ^{too} old. What I saw was wet woods, ^{when I was a boy} elm, maple, ash, etc. We did have some ponds and I recall several but they were small and so far as I now can recall similar to those in the south except there was more vegetation about them and the soil was a black loam.

Now somewhere in speaking of prairie I ^{ided} dived it into dry and wet prairie. I had in mind ^{the wet prairie} the low or wet places in the glaciated area that was covered with *Calamagrostis canadensis* (prairie grass, little bluestem) Now how did ^{do} these *Calamagrostis* areas differ from our swamps. I never saw a swamp go into *Calamagrostis* and all *Calamagrostis* areas were of that species when I first knew them. *Calamagrostis* areas as I know them are pot holes, margins of streams and lobes of lakes. As I say what I know about *Calamagrostis* areas is nothing because they were known as prairies and people when I was a boy used to go out about 4 miles from here to cut marsh hay, so if they had any plants ^{prairie} peculiar to them they would have been exterminated long ago. Too these areas were burned over, too much. Now was I in error about this wet prairie. ^m Is it really not a swap? I can not believe they are the same thing but I do not know how to separate them on any basis. ^{but the type of vegetation.} *Marsh?*

Now we have boggy banks of streams. These always have a distinctly flora Not like either of the other mentioned areas. These boggy areas may be only a rod square but the area is muddy the year around. A peculiar thing about them is their absence of grasses and sedges. Sometimes nearly bare and others with a thick coat of sedges

Now we still have another habitat. What I have called a high bog. There is one of about an ^{acre} ~~area~~ in the east side of Pokagon State Park. Now it is on the slope between a small lake, an acre, and a nearby woods. The total height of the slope possibly 15-20 feet. Now this is a marl bog. At the top on the border of the trees I have seen water oozing out with a bare place and near by *Acteae rubra*, down the slope are plenty of *Cypripedium candidum*, *Zizia aurea*, *Salix* (bog species) and a few other bog species I do not now recall. This habitat is rare but must be allied to river bank bogs. Now I guess I have said my piece. Now when you go out ^{West} (I have read this) you will find bogs in the mountains but what about swamps. Bogs in the Great Smokies. In Florida I found what they call wet pine land, pine on the ^{coral} ~~coral~~ limestone with a dept of soil almost nil and on this sphagnum, pitcher plants, etc. Other places nearby no sphagnum and other plants but no pitcher plant. Now I do not know but I dare say the pH here was over 7. One place I was told the drinking water was 8.8. No free circulation of ~~air~~ ^{water}. The everglades are a wide expanse of saw grass, with patches of ^{ax} ~~ax~~ *Tridax* sp. When we were there the everglades were practically dry. I believe I could have gone anywhere with boots on but later they are 2-3 feet dep, I was told. Then I presume a glorified swamp is an everglade. A diminutive a frog pond, etc. So as I see every time you try to draw a definition you get in bad. yes I forgot to discuss Lake. Well this is not so hard when you speak of the natural depressions in the lake area. But what these newly made lakes the Dept. of Conservation is making in Ind by stopping up a ^{Y. ravine} ~~run~~ or creek? Take for example our largest lake? Freeman Lake at Monticello. This is a dammed up river channel so high that its back waters reach 10 miles. You doubtless have heard of the St. Mary's Reservoir, in Ohio. This is a very large area of water. Is it a lake. In Ind. we are making or have made about 25 lakes. Hovey Lake in Posey County is an overflow lowland and last year it nearly went dry, yet is contains thousands of acres of land and is privately owned and they own all the fishing privileges. Now there are other angles to this question but I do not recall them. To recapitulate:-

A bog is an area whose water level is about the same the year round and it is ~~maintained~~ either by springs or streams and these must be springs to have an equal annual flow. A marsh is a bog area that is treeless and is clothed with sedges and grasses. A bog may be clothed with trees such as tamarack and pine but when clothed with *Acer saccharinum* and *ulmus* they have passed into the forest type. The Skunk Cabbage, *Caltha palustris* bogs are usually small and occur mostly along streams. Swamps are catch basins whose vegetation is mostly herbaceous, in the center and fringed with shrubs, and herbs. A pond is a swampy area with free water in the center. Free water, meaning with no vegetation or with aquatics. Ponds are usually surrounded with a swampy border. If you can leave out man made lakes, etc. ~~It~~ ^{it} would simplify the definition. Now we have several reservoirs in Ind. that are called lakes. The largest is Sylvan Lake on whose shore Mrs. Porter had her home. This is I believe 7 mi. long. A botanist who traverses the shore will tell you it is artificial. The same with Koontz Lake. The shore vegetation is not that of a lake but ^{what} 5,000 years will do we must conjecture. A Lake is a natural ^{open} body of water whose water level is approximately the same the year around, being maintained by springs and streams.

A bog is a natural area with a wet mucky or peaty soil with the water level at or near ~~near~~ the surface and maintained at a constant level by springs or streams. Sometimes these areas are temporarily inundated. The vegetation on them ~~XXXXX~~ is usually mostly arborescent.

A marsh is a boggy area covered mostly with sedges and grasses.

A swamp is a catch basin that fills with water ^{rain} to such a depth that vernal vegetation ⁺ can not exist and which dries up in the summer and may be covered more or less with autumnal plants. If a part of the swamp is so deep in water that it never goes dry it then becomes a pond.

Now ^Hermann this whole thing is as clear as mud to me. ^{est} way to clarify is to burn it. ^e Dam it give me definition for the above and oblige

P.S.

Chas. C. Deam.

I neglect to mention I plan to throw the term "meadow" out. A meadow is a hayfield. In my language it is a marsh. ^{Meadow} may be O.K. In Colorado but in Indiana Meadow means clover, timothy, etc. Deam

Show me letter-head

Bluffton, Ind. Mch. 19 1937

Dear Hermann:- Say it almost seems criminal for me to impose upon you longer to send you more Ms. to read. But we must all be more or less selfish. Your ability attracts bar flies like me. I promise there will be an end to it soon.

I will now take up your letter of Mch .13 and answer the few items in it

I see you turn my offer of Florida plants. An exceedingly wise thing to do. You have no practical use for them. You can not build up a world herbarium. You ask for Indiana plants. I wish you would keep a pad near you and every time you think of a species you want jot it down and I will try to get as many as I can. You know on a general trip you may not get many things but if I am looking for them I can get a few. There are special genera that need further study and in many cases the species must be placed under cultivation. Smilax (nexmexia) is one. I would like to see what a colony (grown from seed) of Smilax eoirrhata would do about sending out tendrils. Killup and Morton? have just published as a part of the flora of Yucatan the genus Smilax. I have ordered it with the hopes I can get a slant on some of the characters that separate the species. The genus Polygonatum needs further study. When you call a foot high and a 5 ft. high plant the same thing, it is time to suspect something is wrong. I do not recall ever showing you my Polygonatum. I have the best "show on earth" of them. I have been collecting them for 20 years.

Say it just occurred to me the other day and why so late I do not know, just too dumb to get things. Now in my Carex I doubtless have duplicates of the same species from the same county. Now I want you to take one sheet where there is a county duplicate. I will go thru the ones I have here and lay them out for you to get when the wagon goes either to or from Ann Arbor. Now do not forget to do this, if you would care for them. It will hump Ind. U. to want even one sheet. By the way Pres. Bryan, Pres. of Ind. U, about 77 yrs old just resigned. Now here is hoping ~~xxxx~~ that Mottier and Andrews will retire this year instead of next year. This year a fund was provided for the retirement of 70 year olds. Much depends upon the new President. I hope they get a real man. I fear the Trustees are not competent to select a good man, but they may show the wisdom of getting advice.

Your letter raises some questions too long to answer in a letter.-The limitation of the distribution of species. I recall that an author by name of Hutchison (I believe from Winnepeg?) say about 10 years ago wrote an article in the Bot. Gaz. on climate as a limiting factor. I must find it again and read it. When I do I will give you the reference. The study of range can possibly be best studied in the field by a group of students, one of whom should be a geologist. I do not recall I ever saw massed the factors that control plant growth. I mean the major ones. The common stock factors are soil(?), light, heat, and moisture. In forestry we use site for an edaphic factor which is of prime importance. On one side of a hill you find certain species and find them absent on the other side. A few of my "stock" examples of limits of range are pecan, bald cypress, papaw, sweet gum, Smilax glauca, persimmon, etc. All are perfectly hardy when plant north of their range. Note all but the papaw has a range south of the glacier while Papaw goes to the north of Indiana. It is to be noted that papaw propagates or rather spreads by root system. I am not going to take your time and mine by discussing this farther because I do not know a thing about it. As I use habitat factors in discussing range, such a bogs, marshes, sandy areas, etc. Plants that grow only in bogs or swamps must have them or they will be wanting. Likewise prairie plants (what in the heck is a prairie plant) any way) Say let this subject ride until we meet. May be you can give me some light on it. About all I could offer would be negative evidence to any any thing you might offer.

No the range of habitats are not much influence by latitude in Ind. It is a matter of glaciation and non glaciation. Both bogs and swamps are rare in the unglaciated area but when you find them you are likely to find northern plants in them.

OVER

Hermann-2 You know when some guy comes along and grows a half ton of tomatoes in a tank of water with the chemicals, etc. they need and then another can grow a row of bushes in a very thrifty condition and one beside it that will have "the hair growing" the wrong way and not able to resist disease, etc. and when we pass over to man and see what hormones and vitamins mean then we can understand that we have just begun in plant distribution. I admit that analogous reasoning is bad and usually used only by lawyers to get criminals out of trouble. Rather recent experiments in the need for rare metals like boron and copper have opened up some things. Soil science has advanced so fast that I do not try to keep up with and I must now be taught the results by "parables". The word "habitat" is as ambiguous to me as I use it and it might be well to have been taken from some political platform because every one can understand it according to his own ability. Now this seed scattering possibility is O.K. The finding of Eleocharis in sink holes in southern Ind. must be from seed recently dropped. While the sink holes are in the unglaciated area I would not think of believing they had been there since early geological times because sink holes come and go in a few hundreds of years. Seed not relicts. The seed of Juncus secundus in the swamp where you found it in the unglaciated area in Wash. Co. has been introduced or a relict? Can the geologist tell us after having visited the area how old the swamp is. No Carex lupulina may not be limited exclusively by swamp or bog conditions but one factor is absolutely necessary, and that is plenty of water, and this usually of the stagnant type. You will note that one Carex, I do not know them apart, probably C. hystericina needs circulating water and is never found about swampy places.

The age of the species is one factor doubtless in distribution but how important I have no idea. You can not open the mouth of a plant like you would a horse to ascertain its age and a poor devil like me who has been brought up on our present manuals to believe that the pondweeds, grasses and monocots are the lowest and when some phylogenist comes along and flops the book upside down and tells me that they are the highest forms and youngest, etc well where am I at.

In regards to the Evermann's & Clark's Lake "skinkuckee". I bought you a set and you should get them in a few days.

As to the discussion of bog and swamp it is up to you. If you wish to take it up with Gleason O.K. with me. Just drop me out of picture. The big difference is stagnant and circulating water. It may be oxygen content of habitat ~~is~~ what not. Just keep this in mind that certain plants live in habitats where the water circulates more or less such as spring feed places or those contiguous to larger bodies of water where there is a free circulation of water. Take that Carex I called attention to. You see it on the boggy shores of lakes and in boggy places in marshes (decadent lakes that are in the sedge stage or phase) and that you never find C. lupulina in them. The last statement may be only half true because you can find C. lupulina on the mucky borders of lake (at least that is my recollection but the habitat will be one that is little affected by the "tide water" of the lake.

I am sorry you have a barrier in the Herbarium. Better swallow your pride and forget your troubles

In regards to the Clap C. comosa will say Clapp was doubtless very careful. His collection fell into the Coulter hands. The sheets I have seen are mounted on recent kind of paper but the labels, some of them are in Clapp's handwrite

I believe you should let it in with some notes about it. The area east of New Albany was a cane brake in Rafinesque's time. Audubon mentions this and doubtless the whole area east of New Albany was at onetime a cane brake and swampy area for 8 miles northward along Silver Creek.

Say Spruce's two volumes are the most interesting things I ever read. Say he was a real fellow if he tells the truth. I see I bought our set in 1910

No I have never read "hite waters and black" by Rusby. I met Rusby once but had but a few minutes with him. Think he is an egotist but a very learned man. Say I must sign off. Wife accuses me of too much letter writing

Sincerely yours, Chas. C. Deam.

Note: In titles are names begin with l.c. except proper names. Thus German titles are shorn of caps.

Note in the Deam bibliography I have deleted the official reports on forestry. Two items on forestry I retain are general on forestry

Coulter, John M., Coulter, Stanley, and Barnes, Charles R. Flora of Indiana, supplement, l. 3p. April 1882.

All scientific names in titles are spelled as they appear in the printed title.

I note I have used the initials of so many authors. Don't you think we should where possible ascertain the first name. Example. D.T. MacDougal

|| Or always used the name as signed to the article.

Potsger's article on fossil records I admit because in the bog he cites are old stumps and buried logs of arbor vitae and tamarack? both of which are still found in Ind. This bog is our most southern record. I saw a stump that was still standing above ground at this place

Note I have on my card index file card. the number of species cited or reported for Ind. This would be of interest but it would take another line. In some cases no specific species is cited, only general discussion.

Journ. Tenn. Acad. Sci. (500 T25A)

Devis, J.H., jr.

Aquatic plant communities of Reelfoot Lake.
Journ. Tenn. Acad. Sci. 12: 96-103. illus.
Ja.1937. no.1.

Kakteenk. Vereinigt Kakteenfr. (Berlin) (451 D482)

Buxbaum, F.

Zur kenntnis der natürlichen standortsverhältnisse der kakteen. II. Cochemisea. Kakteenk.
Vereinigt Kakteenfr. 1937: 27-28. F.1937. no.2.

Werdermann, E.

Beiträge zur nomenklatur. 1-5. Kakteenk.
Vereinigt Kakteenfr. 1937: 17-24(incl.col.pl.)
F.1937. no.2.

1. Mammillaria Haworth, Synops. plant. succ.
1812, 177. 2. (Pereskia Miller, Gard. Dict. Abr.ed.
4,1754. 3. Huernia Robert Brown, Mem. Wern. Soc.
1(1809), 22. 4. Weingartia Ward. (Spegazzinia Bckbg.
non Saccardo 1886!). 5. Binghamia Br. et R. Haageo-
cereus Bbg. - Pseudoespostoa Bbg.

Kartoffel-Zeitung (Berlin) (75.8 K14)

Allemeyer,

Ergebnisse von kartoffelanbauversuchen der
Landesbauernschaft Hannover. Kartoffel-Zeit.
27(4): 2-5. Ja.27, 1937.

Kranke Pflanze (Dresden) (464.8 K86)

Helm, A.

Spritzschäden. Kranke Pflanze 14: 30-33.
F.1937. no.2.

Kotthoff, P.

Neue topfpflanzenkrankheiten. Kranke Pflanze
14: 28-30. illus., pl. F.1937. no.2.

Eine blattfleckenkrankheit an *Sansevieria*
zeylanica Willd.; Die Stammfäule der *Kalanchoe*
globulifera var. *coccinea*.

Landtm. Svenskt Land Tidkr. Landtm. (11 L234)

Åkerman, Å.

Värveteodling. Landtm. Svenskt Land Tidkr.
Landm. 21: 125-126. illus. F.6, 1937. no.6.

Djurle, O.

Sättpotatisens beskaffenhet. En Faktor av betydelse för skördeutbyttet vid potatisodling. Landtm.
Svenskt Land. Tidkr. Landm. 21: 151-153. F.13, 1937.
no.7.

In regards to Galinsoga will say the two species had entirely escaped me or I have forgotten it. Fortunately we have only *G. ciliata*. I have the same from Quebec, Mass. N. J., Ky, Mo. and from 10 Ind. cos. I have one specimen of *G. parviflora* and that is no 3475 of Wooten & Standley from New Mexico.

Prof. Fred Loew of Huntington College was here all P.M. He informs me he is planning to attend the Mich. Acad. Science. He is a nice fellow probably a good teacher but he does not know plants at all, that is he is not in your class. Wont take you long to find out your a drilling in a dry hole. I told him to give you my best regards if you met you. He is trying to start an "arboretum" at their college. They have a few natural ravines, etc. Do not waste any time on him. He has me cornered here. He comes and signs off when he is thru. He has had some back ground. He used to weed for Dr. Beal at Mich. Ag. College and was ~~was~~ the first ass st botanist at the Mich. Biol. Lab, when I think he said they had 16 students (first year)

Anent Farwell with *Krigia amplexicaulis*, *K. biflora*. See Amer. Mid. Nat 12:75-77. 1930. Here he describes vars. *acuminatum*, *integrifolium*, *elongatum*, *glandulosum*, and *hispidum* as new.

I have a good series of this plant and have observed it in the field where large colonies are found and you will find them exceedingly variable, about as variable as our Dandelion leaves. I will give you the references again if you wish to go over it again.

Standley: Contr. Nat. Herb. 13:356.

Blake: Rhodora 17:137. 1915

Holm: Discusses the morphology in Amer. Midl. Nat. 10:1-17. 1926

Farwell: Describes 5 vars. as new. Amer. Midl. Nat. 12:75-77. 1930

Fernald: Discusses it and describes *f. glandulifera*. Rhodora 37:337

When Fernald came out with his *glandulifera*, I called his attention to Farwell's Var. *glandulosum* but he never replied.

If I understand this mess I will not need to change my Ms. I mention that I have both forms, glabrous to densely glandular, 0,1,2,4,- many glands. I believe we have a species which is widely variable and I hesitate to name the forms. Of course I could give the glandular form a name. This naming of forms gets me. I do not know when it is veal and where the bull meat begins. If we plant the progeny of a glabrous form and get both forms?? We can take the *Quercus Muhlenbergii* and get wide dentate leaves on lower branches and on the upper branches leaves that are narrow and are "aquiline" serrate, very distinct leaves. Then how are you to handle botanical names. Between us kids we can distinguish em but beyond that I am not sure of the procedure. If not too much trouble give me a last stroke on the name of this plant. Probably O should add some synonyms. As I have it I give *Krigia xixixica amplexicaulis* and *Cynthia virginica*.

Farwell: His vars. refer to his *Adopogon virginicum* (L.) O.K. Of course Kuntze's transfer seems to be balled up since he seems to put all our species under one. But doubtless Farwell had in mind our old *K. amplexicaulis*

Formosan Agr. Rev. (J22.5 F76)

Jio, K.

The crop scientific study on the cotton cultivation in Taiwan. Formosan Agr. Rev. 360: 855-887. N.1936.

Japanese.

Forschungsdienst (Neudamm) (241 D48F)

Freckmann, W. & Baumann, H.

Feldberechnung und getreidebau. Forschungsdienst (Neudamm) 2: 581-587. D.1, 1936. no.11.

Hassebrauk, K.

Die ergebnisse der getreiderostforschung der letzten 10 jahre. 2. Forschungsdienst (Neudamm) 2: 568-581. D.1, 1936. no.11.

Ildecke, H.

Einfluss der düngung einschliesslich impfung und wirkung der spurenelemente auf ertrag und beschaffenheit der sojabohne. Forschungsdienst (Neudamm) 2: 558-568. D.1, 1936. no.11.

Gard. Chron. (London) (80 G162)

Balls, E. K.

Saxifraga demnatisensis, Coss. Gard. Chron. III, 100: 443. illus. D.19, 1936. no.2608.
Collected along northern slopes of the Great Atlas range, northern Africa.

Bancroft, H.

Elm notes for 1935 (concl.) Gard. Chron. III, 100: 445-446. illus. D.19, 1936. no.2608.

Kirkbride, R. E. G.

Trees and shrubs for autumn color. Gard. Chron. III, 100: 442. D.19, 1936. no.2608.

Stern, F. C.

Gardening on lime soils. Gard. Chron. III, 100: 446-448. D.19, 1936. no.2608.

Ward, F. K.

Mr. F. Kingdon Ward's thirteenth expedition in Asia. [XII]. Journey to Tibet. VI. Gard. Chron. III, 100: 444-445. illus. D.19, 1936. no.2608.

Gard. Chron. Amer. (80 G1632)

Frye, E. M.

Natives are treasures for the rock garden. Gard. Chron. Amer. 41: 11,26. illus. Ja.1937. no.1.

STATE OF INDIANA
CONSERVATION DEPARTMENT
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Bluffton, Ind.
March 15 1937

Dear Hermann: Well at last I have gone thru the Ms. and made the corrections you suggest. It sure as a job. Well what you went thru I do not know but you sure did take up a lot of your time. Doubtless you could have carved much deeper and oftener but you had a conscience and said well it will get by so I will not suggest a complete "rewrite". Well I shall bless you so long as I live for keeping me out of the ditch in so many places.

I am sending you a few rewrites you have not seen. Possible you will not even care to go over them. That will be O.K. but I send to show you I have made some changes. The last word has not been written on Smilax but possibly Digitaria, etc. Subcordaria is a title that needs further study. It is possible you may be here when the darn things are in flower. I could retain these few items until I send you Helianthus and Solidago but I would like to get everything up to date and know where I am at. This morning I received Rhodora and Hopkins Arabis is it. But no article yet by Hermann on Eupatorium, etc.

Well I guess it will be quit down here for awhile. I will again begin on Helianthus in about a week. I have a lot of things I need to do to clear the deck. I want to go over that Introduction again. Then I guess I will add a list of out of date localities in Ind. where older botanists reported plants and the place no longer exists. This will take about a half page and I guess I will place it right after the glossary. Then new var. forms, and comb, if I have any left after I go thru the Ms. again. I am not competent to clutter up the literature with such items any way. Then I must make maps to show botanical areas in Ind.

Well I hope you folks are all well and that you can get busy on Carex etc. Many thanks for your arduous and heroic task in reading the Ms.

Sincerely yours, Chas. C. Deam.

I have read your note on the use of forma and tried to read DuRoi but the later is too deep for me to follow. My idea of a forma was that the entity showed one differential character and I did not take into consideration the distribution. That variety had more than one differential character and the individuals had a geographic range.

I think in my case with so little knowledge of the subject and my inability to grasp the meaning of what it is all about, I had better follow authority and make notes in the text. Since I do not know the difference between var. and forma I had better go thru Ms. and change all back to the original. This way I will not gum up the works. I have no ambition to make new combinations. What I have made, I did to bring the name up to what is currently understood by a var. and forma and I now see I do not comprehend.

Revista Nac. Agr. Soc. Agr. Colombia (9.4 R32)

Ochoa R., H.

Una enfermedad de la caña de azúcar.

Revista Nac. Agr. Soc. Agr. Colombia 32: 841-843. Ja.3, 1937. no.391.

Similar to mosaic disease.

Rincon, A.D.

Cultivo del trigo por el sistema integral,

de ternas o de ferraguiti. Revista Nac. Agr.

Soc. Agr. Colombia 32: 811-827. illus. Ja.3, 1937. no.391.

Revue Gén. Bot. (Paris) (450 R326)

Davy de Virville, A.

Recherches sur le parasitisme chez les muscinées.

Revue Gén. Bot. 49: 5-35. illus.,iii pl. Ja. 1937. no.577.

Observations of Lophocolea bidentata on Anomodon viticulosus. Comparisons with parasitism in other plants.

Ulrich, R.

Reactions des fruits aux blessures expérimentales.

(cont.) Revue Gén. Bot. 49: 36-65. illus. J1.1937. no.577.

Revue Path. Vég. & Entom. Agr. (Paris) (464.9 Sol)

Barthelet, J. & Gaudineau, M.

Les maladies des cyclamens. I-IV. Revue

Path. Vég. & Entom. Agr. 23: 101-122(incl.illus., iii pl.) Ap.1936. no.2.

I. Gloeosporiose des cyclamens (Gloeosporium cyclaminis Sibiria). II. Fusarioses (Fusarium sp. et Fusarium oxysporum var. aurentiacum. III. Maladies diverses du feuillage. IV. Pourriture des semis.

Delécluse, R.

Quelques champignons ennemis du chêne liège

au Maroc. Revue Path. Vég. & Entom. Agr. 23: 244-257. ii pl. J1.1936. no.3.

Fron, G.

La maladie de la fusariose des oeillets.

Revue Path. Vég. & Entom. Agr. 23: 131-144. illus. Ap.1936. no.2.

Gaudineau, M.

Le flétrissement des reines-Marguerites du au

Fusarium callistephi. Revue Path. Vég. & Entom. Agr. 23: 123-130. illus. Ap.1936. no.2.

Memos to Hermann

Did you save some seed of *Arex Deamii* to plant this year to study results ?

Forgot to answer your letter of March 11. May you have Clair Brown doped out right. He seems to have been out some although. He took me out to the woods about a mile out and he showed a fern new to science, I believe. While out there we found plenty of *Trillium ludoviciana* Small in flower. I brought a live clump home with me. It looks much like a glorified *Trillium sessile*. He has done practically nothing in the way of personal herbarium work.

Thanks for naming the two Florida Juncus

Glad to get the Field Museum list. Mrs. Winch now has it. When you get carrying charges on the Field Museum, send it in

You mention Acnida and that you overlooked it. Gosh man how do you keep track of so many things. Want to get your system. Seems to beat mine. I just use a card index and rely upon it but sometimes I neglect to catalogue an article. Rydberg took up Acnida of Standley in Flora of P. & P. Do not know why the other authors you mention did not use it. Seems as if all would not overlook it

Will send that Louis Wheeler some of my *Euphorbia* at once. He has asked for them.

sent

You doubtless received a separate of Mrs. Chase 's article in Amer. Jour Bot in which she changes the names of several grasses. *Festuca Shortii* to *Festuca paradoxa* Desv. You got this along rdse, at Erwin's. Please note on page 34, column 2, under species 3, Mrs. Chase spells hiemalis, not with a y

Tricholeena rosea now becomes *T. repens*. This is a very common grass in Fla.

P.s. If I understand Mrs. Chase I have to make but the one change in Ind. grasses

Found this old Memo. I want to get my desk clean.

How about poor Hermann.

Hermann

Physostegia speciosa (Sweet)???? I can not find this. Will write Weatherby
Every one has been using *Dracocephalum* and Weatherby says use *Physostegia*
Bentham both in his Monograph and In Prodrromus regarded it as a synonym
of *P. virginiana*.

I wrote Weatherby about Rydberg's *Dracocephalum formosior* from Ind. and
he write he did not know that plant. I have one of Lunell plants (*formosior*)
and we do not have it in Indiana. It is peculiar that so few authors
recognize it while it such a conspicuous plant both in the field and
on the flat. I do not find it in any recent flora (Missouri does not
quote it but I believe they have it)

Thanks for the *Cladium* dope. I had already changed back to *Cladium*

O just note in Science that Dr. J. J. Davis, Curator, Herbarium U. of Wis.
is dead. A gentle remind to me that I must get busy

Silphium integrifolium is not complete. Will finish it when Lilly Perry
publishes. He is calling the glandular involucre plant var. *Deamii*. She
sent me keys, etc.

Bidens vulgata var. *puberula* (Greene) Wieg. I think must be correct. I do
not find this comb. in 1931

In a "Additions to the Flora of Conn." pub. by Conn. Geol. Surv.
this variety is given as Wiegand as author and Greene's name does not
follow. Rarely did Greene ever ~~xxx~~ reduce a ~~xxx~~ species to a var. as Gray's
Man. has it. Guess I had better refer this to Weatherby. Might find it among
some of Sheriff's writing but that will take time.

Bidens polylepis var. *retrorsa* Sherrf you will in a footnote in Bot. Gaz.
80:386.1925. Probably I should use the name Sheriff uses, -*V. involucrata*
var. *retrorsa* Sherrf. We have had another Bot. Congress since Sherrf
wrote this and if I understand it the *polylepis* would be a homonym. So
I will change name to *involucrata* var. *retrorsa* Sheriff

I am sending under separate cover one of the Bull. of Duke U. This
will give you an idea. The mens college is separated only a street from
the womens college. The University is still in the making. The principal
roads have not yet been built, waiting until the heavy hauling is done.
Trees in campus are yet small, about 6 inches in diam. about as large as
could be easily moved. The inside is finished right up to date. So far as
could see it is the last work. Duke is already getting the reputation for
research work in medicine, forestry and other things. You can return the
circular when you are thru with it. They have a large bull on the
Chapel and its many stained windows. It is gratis. If interested doubtless
they will send you a lot of stuff. We got ours at the Duke Hotel.

Bot. Zhurn. SSSR (Journ. Bot. URSS) (cont.)

Aleksandrova, O. G.

Anatomicheskaja kharakteristika Pisum sativum L. sensu amplissimo Gov. (Anatomische charakteristik von Pisum sativum L. sensu ampissimo Gov.) Bot. Zhurn. SSSR (Journ. de Bot. URSS) 21: 35-47. 1936. no.1.

Russian with German summary. Subspecies arvensis, abyssinicum, asiaticum, sativum.

Didus, V. I.

Izuchenie spontannoi izmenchivosti chistykh linii Hordeum I (Beiträge zum studium der spontanen variabilität "reiner" linien von Hordeum. I. Eine neue varietät zweireihiger kulturgerste Hordeum distichum var. triaristatum mihi). Bot. Zhurn. SSSR (Journ. Bot. URSS) 21: 189-195. illus. 1936. no.2.

Russian with German summary.

Grozdev, B. V.

O beresklete evropejskom (Der gemeine spindelbaum (Evonymus europaea L.) Bot. Zhurn. SSSR (Journ. Bot. SSSR) 21: 93-95. 1936. no.1.

Russian with German summary.

Īakolev, M. S.

Anatomicheskaja kharakteristika nekotorykh tipov l'na v ikh ontogeneticheskom razvitii (Anatomical characteristic of some flax types in their ontogenetic development). Bot. Zhurn. SSSR (Journ. Bot. URSS) 21: 48-75. illus. 1936. no.1.

Russian with English summary.

Leskov, A. I.

Geobotanicheskii ocherk primorskikh lugov Malozemel'skogo poberezh'ia Barentsova moria (Geobotanische skizze der strandwiesen an der Malosemelskaja küste des Barenz-meeres). Bot. Zhurn. SSSR (Journ. Bot. URSS) 21: 96-116. 1936. no.1.

Russian with German summary.

Liubimenko, V. N., Buslova, E. D. & Efimova, N. I.

Okraska korniã morkovi kak rasovyi priznak (La couleur de la racine comme caractere diagnostique des variétés de la carotte). Bot. Zhurn. SSSR (Journ. Bot. URSS) 21: 5-17. 1936. no.1.

Russian with French summary.

Hermann

Satureja glabra (belong to the next species, etc. your note) This was made to refer to *Satureja glabella* before I saw Epling at St. Louis who says the last only an extreme of the first. I have just deleted the entire sentence.

Neglected to define "Slough" This is a basin filled with water that never or rarely goes dry. The origin of the basin is the basis of definition. A slough is the remnant of a drainage channel, such as ox-bows, etc. and are pits back of the beach of lakes, such as Lake Mich. which in its history threw up successive beaches lines, leaving a water space behind. These sloughs do not fit exactly into my scheme because doubtless they are fed by seep water. Sloughs might be divided into lake sloughs and stream sloughs. Well why worry, if my definition seems to fit, then you can go ahead and work it out. If I can help, send the S.O.S.

You worry about the synonyms of *erilla frutescens*, etc. I went up town this A.M. to see for the last time two old friends with whom I played, one 68 and the other about 65 and I am near 72. I am fast losing interest in controversial subjects. I recall that I used to enjoy an argument especially one on religion or politics. Never knew enough about plants to fight about em. You are still young and peppy and I will let you exhaust your surplus energy on plants. I am fast getting into the category, I do not give a dam what you call em.

Weatherwax was just here and says he would publish Ind. Flora in 8 pt type and maps in 6 pt. Bibliography in 6 pt type. He thinks the book will be too large and you can cut it down best by using small type. Ind. Acad. Sci. is published in 8 pt. It will make the book cheaper and reduce the size. What say ye???

Viburnum Rafinequianym Shultes was first taken up by Rydberh in Brittonia 1:96.1931. At that time I took the matter up with Weatherby and he says better stick to Blake. I will write him again. My opinion is that the whole darn thing must be junked and rewritten.

Liatris ^Bebbiana and *L. pycnostachys* is an aggregate. What we collected just west of Goodland is the *L. bebbiana*. *L. pycnostachys* has long acuminate bracts.

Berry Lake (Hill) for *Carex viridula chlorophila* is Lake County Higley & Raddin mention Berry Lake, Ind. several times in their Flora. but I do not know where it is but will write Mrs Chase. I thought I would include in my introduction a list of the obscure places, named by Hill, Umbach, et al. What do you say about it. Some guy will have trouble to locate some of the places when Mrs. Chase dies. I have all mentioned so I think I had better preserve them by publishing. Blatchley, Schneck, Clapp all mention one or more, now "off the record".
Lake Wahob I can not locate. But I am "morally" certain it is about 5 mi. north of Valparaiso, Porter County. Soil map names all the lakes but I feel certain I have seen that sign along that road.

- Bol. Agr. Zootecn. e Veterin. Minas-Geraes (9.2 M66)
Belleza, N.
Cultura da batatinha no sul de Minas. Bol.
Agr. Zootecn. e Veterin. Minas-Geraes 9(7): 41-
49. Jl.1936.
- Bol. Min. Agr. Chile (9.3 C433)
Opazo G., R.
El informe del Sr. Gustavo Oldenburg sobre el
cultivo de la batarraga azucarera en Chile. Bol.
Min. Agr. Chile 4: 31-45. Ap./Je. 1936. no.8.
- Botaniste (Paris) (450 B657)
Dangeard, P. A.
La biologie des Vampyrelles. Botaniste
28: 407-422. pl.xix. D.1936. no.3/6.
Vampyrella mirabilis n.sp.
- Dangeard, P. A.
Mémoire sur une diatomée filamenteuse: Himan-
tidium pectinale. Botaniste 28: 333-386. pl.
xv-xvii. D.1936. no.3/6.
- Dangeard, P. A.
L'utilisation des radiations lumineuses par
la plante verte. Botaniste 28: 389-404. pl.
sviii. D.1936. no.3/6.
Experiments with Chlorella, Scendesmus, Eu-
glena viridis, Oscillatoria formosa.
- Bot. Zhurn. SSSR (Journ. Bot. URSS) (Leningrad) (451 R923)
Agronomov, E.A., Bundel, A.A., Gorlachikh, A.N. &
Korenev, N.A.
Nekotorye dannye k voprosu o samosogrevanii zerna
(Beiträge zur frage von der selbsterhitzung des
korns). Bot. Zhurn. SSSR (Journ. Bot. URSS)
21: 196-205. 1936. no.2.
Russian with German summary. Chief factor
development of bacteria and Penicillium.
- Aksent'ev, B. N.
O roste nadzemnykh organov pshenitsy (Ueber das
wachstum der oberirdischen organe des weizens).
Bot. Zhurn. SSSR (Journ. Bot. URSS) 21: 153-168.
1936. no.2.
Russian with German summary.
- Aksent'ev, B.N.
Ob osobennost'akh rosta prorostkov otdel'nykh
sortov pshenitsy (Ueber die wachstumseigentümlich-
keiten der keime von gereinigten weizensorten).
Bot. Zhurn. SSSR (Journ. Bot. URSS) 21: 169-175.
1936. no.2.
Russian with German summary.

Wemos to Hermann
Please collected me a fruiting specimen this year of *Bunias orientalis*

The item in ecology I called your attention to is Hutchison
Limiting factors in relation to specific ranges of tolerance of forest trees
Bot. Gaz. 66:485-492/ 1918

This is not very illuminating. He reviews the several factors reported
to be factors and discusses them and the wholeness of the whole thing
is that we know little as yet. But worth reading I think

Please note the publication of Annals of Mo. Bot Gardens no. 1, Feb. 1937
Contains a monograph of *Mertensia*.

- Flor. Rev. (cont.)
White, H.E.
Careful culture recommended to avoid canker
on gardenias. Flor. Rev. 79(2048): 9-10.
illus. F.25, 1937.
- Gard. Chron. (London) (80 G162)
Balls, E.K.
Plant hunting in Morocco. II. Gard. Chron.
III, 101: 104-105. illus. F.13, 1937. no.2616.
- Rohde, E.S.
Gardens in medieval Tudor and Stuart times.
Gard. Chron. III, 101: 106-107. F.13, 1937.
no.2616.
- Gartenfl. (Berlin) (80 G19)
Jelitto, L.
Eine neue Meconopsis-art. Gartenfl. 86: 37-
38. illus. F.1937. no.2.
M. dhwójjii G. Taylor et Hay.
- Schlieben, H.J.
Neue und schöne pflanzen aus Deutsch-Ostafrika.
VII. Orchideen. (II teil: Epiphyten). Gartenfl.
86: 41-44. illus. F.1937. no.2.
- The Gladiolus [Yearbk. New Engl. Gladiolus Soc.] (96.43 N44)
Barber, T.E.
New foreign introductions. The Gladiolus
[Yearbk. New Engl. Gladiolus Soc.] 1937: 87-90.
- McLean, F.T.
Gladiolus history. The Gladiolus [Yearbk.
New Engl. Gladiolus Soc.] 1937: 1-5.
- Palmer, E.F.
Gladiolus breeding. The Gladiolus [Yearbk.
New Engl. Gladiolus Soc.] 1937: 61-64.
- Heil u. Gewürz-Pflanzen (München) (71.8 H36)
Hecht, W., Himmelbaur, W. & München, H.
Bioklimatische versuche zur erforschung der
ursachen der gehaltsschwankungen bei arzneipflanzen.
IV. Die biologischen und biochemischen versuchsergeb-
nisse der jahre 1929-1932. Heil u. Gewürz-
Pflanzen 17: 57-96. F.6, 1937. no.2/3.
- Herbertia [Yearbk. Amer. Amaryllis Soc.] (81 Am394)
Dyer, R.A.
An introduction to the South African Amaryllida-
ceae. Herbertia [Yearbk. Amer. Amaryllis Soc.]
3: 37-40. 1936.

Dear Herman: Just received this letter from Weatherby and I thought
you might wish to see it. Return it and enclosure at you leisure
I guess I will use Amphicarpa as Elliott spelled it because
doubtless later Committees on nomenclature will recognize the error
and come back.

As to the Hie Sil or Hyemalis Sylvatica, etc. dam if I know what to
do. I feel like since both are grammatically correct that we should then
be directed in our choice by the original spelling. I note in my
Latin Dictionary (Andrews) he gives silvatica but says that it is
preferred to sylvatica. Since Father Time has me whipped I do about
as any child tells me to do. If you have any comments let us have em.
What will you do about it?

Now I do hope I can give you a complete rest for awhile. I know
every time you see a letter from you say: "Dam that man Deam. I will
have to give him a dog button.

Best wishes to you and family, I am sincerely yours,
Chas. C. Deam.

Up to date at this 3,30 P.M. March 24 1937

Recd. 3/27

Zeitschr. Untersuch. Lebensm. (cont.)

Mäckel, H.G.

Zur mikroskopie heimischer gewürzpflanzen.

I. Zeitschr. Untersuch. Lebensm. 72: 385-394. illus. N./D. 1936. no.5/6.

Der Züchter (Berlin) (442.8 Z8)

Rkerberg, E. & Hackbarth, J.

Züchterische beobachtungen an luzerneklonen.

II. Ueber die beziehungen des roheiweissgehaltes zur blattfarbe und zum grünertrag. Der Züchter 9: 15-17. Ja.1937. no.1.

Harder, R. & Denffer, D. von

Ueber das zusammenwirken von jarowisation und photoperiodismus. Der Züchter 9: 17-23. illus. Ja.1937. no.1.

Kattermann, G.

Ueber die ergebnisse der versuche mit doppelter befruchtung bei F_1 -weizen-roggenbastarden. Der

Züchter 9: 1-3. Ja.1937. no.1.

Köhler, E.

Die resistenzzüchtung gegen den kartoffelabbau im lichte der virusforschung. Der Züchter 9: 13-15. Ja.1937. no.1.

Riebesel, G.

Vegetative vermehrung von getreide-bastarden. Der Züchter 9: 24. Ja.1937. no.1.

Zimmermann, K.

Züchtung von lupinen mit nichtplatzenden hülсен. II. Die teileigenschaften der hülse, deren modifizierbarkeit, ihre verhältnisse zueinander und ihre vererbbarkeit. Der Züchter 9: 3-13. Ja.1937. no.1.

Exp. Stat. Publ.

Wilson, J.D. & Runnels, H. A.

Five years of tomato spraying. Ohio Agr.

Exp. Stat. Bi-month. Bull. 22: 13-18. Ja./F. 1937. no.184. (100 Oh3S)

Brooks, L.E.

Tree fruit varieties in north Texas. Texas Agr. Exp. Stat. Bull. 535. 26 p. illus. N.1936. (100 T31S)

Page 3/13

~~Desmodium bractosum Michx was changed to D. grandiflorum by Blake
Bot. Gaz. 78:277-278. 1924~~

~~Fassett: Says D. bractosum is O.K. See Rhodora 38:97. 1936. The homonym
rule killed see.~~

By gosh I get my English involved worse than a cross between a 2 year old and a foreigner. You smooth things off so nicely that I believe you could call a Kentucky Colonel a liar and get away with while I would be ready for the stretcher. I sure am glad there is a god in Israel.

You ask we do not have *Vicia dasycarpa* in Ind. I never heard of this species. Is it native or introduced. Tell me where to find it, literature

In regards to spelling of *Amphicarpa* will say I have the reference and the genus was described by Elliott and in the original description the name is spelled *Amphicarpa*. So I do not understand why the Int. Rules should change except it is an error on their part. I think this is needless to investigate since I can not think of any reason why the name should be changed to genitive or plural termination. *Not plural or gen.*
Kapita, Kapitas
Journ. Acad. Sci. Phila I 332 (1718)

I am just up to *Croton capitatus* and *C. glandulosus* var. *septentrionalis* I have left them as native and the specimens that have been found are in fallow fields, along railroads, and waste places. Now I do not believe either are native but have come in since the white man. Of course Gray's Man. carry them as native which doubtless they are in the west and south. The same thing with *Hordeum pusillum*. All our early reports are from cultivated lands or transportation lines. I probably should discuss this in a paragraph in the introduction. I did not wish to pad the introduction with long lists of plants such as most authors do, Flora of Mo., and almost all others. These lists have their place and I would gladly give them if I was not crowded for page space. I have all of the Ind. plants already divided on the basis of mass distribution, etc. Those from the se. those from the south, west, etc. The publication of these lists with discussion as a separate paper would be the thing but I will never do it. An amateur botanist could do it, witness how Lonsley did on the Trees of Ind. in Butler Bot. Studies vol. 2. We did not know but a few trees.

Lechea villosa or *mucronata*

Weatherby writes, June 4 1936 that Hodgdon had just finished a monograph on the genus and that *L. villosa* is O.K. So I change to agree with what Weatherby writes

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Journ. Austral. Inst. Agr. Sci. (cont.)

Bryan, W.W. & Marriott, S.

The determination of the amount of natural cross-pollination in crop plants. Journ. Austral. Inst. Agr. Sci. 2: 163-164. D.1936. no.4.

Noble, R.J.

Disease resistance in plants. Journ. Austral. Inst. Agr. Sci. 2: 152-153. D.1936. no.4.

Summary of address to Pathological Soc. of New South Wales, Medical School, Univ. Sydney, Oct.20, 1936.

Strickland, A. G.

The investigation of orchard fertilizer requirements. Journ. Austral. Inst. Agr. Sci. 2: 148-150. D.1936. no.4.

Journ. Biochem. Tokyo (385 J822)

Kobayashi, C.

Ueber die extraktion der phosphatase und der carboxylase der hefe. Journ. Biochem. Tokyo 24: 369-387. N.1936. no.3.

Journ. Biol. Chem. (Baltimore) (381 J824)

Berger, J., Johnson, M.J. & Peterson, W.H.

The proteolytic enzymes of some common molds. Journ. Biol. Chem. 117: 429-438. F.1937. no.2.

Loring, H.S. & Stanley, W.M.

Isolation of crystalline tobacco mosaic virus protein from tomato plants. Journ. Biol. Chem. 117: 733-754. illus. F.1937. no.2.

Pucher, G.W., Clark, H.E. & Vickery, H.B.

The organic acids of rhubarb (*Rheum hybridum*). I-II. Journ. Biol. Chem. 117: 599-604, 605-617. F.1937. no.2.

I. On the malic acid of rhubarb, with a note on the malic acid of tobacco leaves. II. The organic acid composition of the leaves.

Schlenker, F.S.

Non-sugar reducing substances in plant juices. Journ. Biol. Chem. 117: 727-731. F.1937. no.2.

Stanley, W.M.

Chemical studies on the virus of tobacco mosaic IX. Correlation of virus activity and protein on centrifugation of protein from solution under various conditions. Journ. Biol. Chem. 117: 755-770. F. 1937. no.2.

Memo to Hermann

Carex comosa, Floyd County, Clapp. Is this O.K. Mrs. Winch writes me to confirm report. In the event there is any doubt about it we had better omit the reference. I see Purdue does not have C. retrorsa or C. riparia, related species. Let me know about this and oblige. I do not know why she brings this up except the Stab is far out of range of the other stabs.

Be sure to fill in the enclosed Men of Science blank. They can no more than throw it out

Actaea alba-brachypoda.

I have taken this matter up with Weatherby 4 times. Last time in Dec. 1935 and I call his attention to Victorin, etc. He says Victorin's decision is based primarily on what Mackenzie wrote in the interpretation of Cornut's fig, etc. He says retain A. alba. So here goes.

Sorry you had my old copy of Ranunculus. New write up quite different

I note you change Agrostis hiemalis to hyemalis. It is spelled in Hitchcock's Man. as ~~hyemalis~~ hiemalis

Doubtless Hopkins did not tell you there is to be added a var. Deamii to Arabis pycnocarpa. I will rewrite this genus when his publication comes out

The Type of Crataegus Margaretta var. angustifolia is here but I will send it to the Arnold Arboretum

I wrote Weatherby about Potentilla norvegica, etc. Weatherby says see Manual see Rhodora 28:214, 1926 ^{potentilla norvegica} ^{see Rhodora 32:254, 1930} Here Weatherby says var. hirsuta equals P. monspeliensis.

So it seems as if P. monspeliensis L. is O.K. for Ind. plants

Agrimonia mollis or pubescens.

Think Weatherby Dec. 1935 says A. pubescens. A. mollis later.

~~Martianaxylum~~

Hortulan Plum. See Standardized Plant names. The name is coined and I guess such names need not to conform to anything. It is just like Kodak except the name is not copyrighted. In introduction I say I follow standardized plant names.

New books (cont.)

Noxious weed research conference

Report of Noxious weed conference, Moscow,
Idaho. April.30-May 1,1936. 9 p. [1936]
(Pem.col.79 N)

Mimeographed.

Shlykov, G.N.

Plant introduction. 502 p. Moscow, Selkhoz-
giz, 1936. (452.8 Sh6)
Russian.

Non-current indexing.

Ann. Rep. Nebraska Crop Growers' Assoc. (59.9' N27A)

Aicher, L.C.

Production and utilization of grain and forage
sorghums. Ann. Rep. Nebraska Crop Growers' Assoc.
25(1934): 80-90. illus.

Anderson, A.

What is new in the spring grains? Ann. Rep.
Nebraska Crop Growers' Assoc. 25(1934): 69-72.

Reim, F.D.

Our weed problem - control measures. Ann.
Rep. Nebraska Crop Growers' Assoc. 25(1934): 28-
35. illus.

Kiesselbach, T.A.

The latest in hybrid corn. Ann. Rep. Nebraska
Crop Growers' Assoc. 25(1934): 50-65.

Suneson, C.A.

Cheyenne winter wheat. Ann. Rep. Nebraska
Crop Growers' Assoc. 25(1934): 65-68.

Bol. Agr. y Trab. Nicaragua (8 N51)

Narciano Rodriguez, J.

Observaciones sobre el cultivo de la caña de
azúcar. Bol. Agr. y Trab. Nicaragua 7(59/60):
33-37. Jl./Ag.1935.

Bol. Agr. Zootecn. e Veterin. Minas-Geraes. (9.2 M66)

Werner, F.P.

Culturas debatatinhas do districto de Ouro
Branco, municipio de Ouro Preto. (concl.) Bol.
Agr. Zootecn. e Veterin. Minas-Geraes 8: 101-112.
163-169. illus. F.,Mr. 1935. no.2,3.

Memos to Hermann

Proc. Wash Biol Soc. 50:17-22, 1937 (just received. Tidestrom lists the species of Astragalus that grow in the U.S. as I understand his paper and he does not include A. canadensis or A. carlinianus in the list. What is he going to do with em. Too I note he abbreviates Tournefort to (Tournef.) When did this abbreviation come into use. In Flora of Ind we uses Tourn. only

Do you have Lake Maxinkuckee by Evermann & Clark. I can now get it for 1.00 plus postage. I if you do not have it I will get you a copy

Compt. Rend. Soc. Biol. Paris (cont.)

Gonçalves da Cunha, A.

Quelques observations sur la cicatrisation des plaies dans les végétaux. Compt. Rend. Soc. Biol. Paris 123: 631-633. 1936. no.30.

Hormones of leaves & of cultures of *Bacillus coli* exercise a similar action on the healing of the wound.

Gratia, A.

Dissociation du bactériophage du *Bacillus megatherium* lysogène 899 en deux variétés distinctes. Compt. Rend. Soc. Biol. Paris 123: 1018-1020. 1936. no.34.

Mazé, P. & Mazé, P. J.

Recherches sur la fonction d'absorption des racines. Compt. Rend. Soc. Biol. Paris 123: 939-941. 1936. no.34.

Experiments with maize.

Mazé, P. & Mazé, P. J.

Sur l'influence du maïs par le charbon (*Ustilago maydis*). Compt. Rend. Soc. Biol. Paris 123: 936-939. 1936. no.34.

Deut. Landw. Presse (Berlin) (18 1482)

Schuberth, H.

Zur kartoffeldüngung. Deut. Landw. Presse 63: 631-632. D.12, 1936. no.50.

Ernähr. Pflanze (Berlin) (57.8 Er6)

Némeč, A.

Ueber den einfluss des krebsbefalles auf den magnesiastoffwechsel der kartoffelknollen (On the influence of wart disease on the metabolic processes involving magnesium in the potato tuber). Ernähr. Pflanze 32: 413-416. D.15, 1936. no.24.

Pietsch, A.

Photographische darstellung von unkrautsamen. (The photographic reproduction of weed seeds) (cont.) Ernähr. Pflanze 32: 422-424. illus. D.15, 1936. no.24.

Flor. Exch. (N.Y.) (80 F666)

The Moline elm. Flor. Exch. 88(1): 19. illus. Ja.2, 1937.

Ulmus americana columnaris.

Biographical Directory of American Men of Science

SIXTH EDITION

Those who have published research work in the natural and exact sciences and are not included in the fifth edition of the directory or have not already sent the information are requested to fill in this blank and forward it to the Editorial Office, American Men of Science, Lancaster, Pa. The entries should be typewritten or very clearly written.

*Full name with title and mail address,
the part of the name ordinarily omitted
in correspondence being in parentheses—*

*e.g. Prof. J(ohn) W(ilson) Smith,
1234 Lincoln St., Washington, D. C.*

*Department of
investigation*

*Place and date
of birth*

*Education and degrees,
including honorary
degrees, with institutions
and dates*

*Positions with
dates at which
they were held*

*Temporary or minor positions and honors,
such as lectureships, trusteeships,
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*Membership in scientific societies
and offices with dates
at which they were held*

*Chief subjects (not titles of books
or papers) in which work has been
published or is now in progress*

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**Williams, R. R. and Cline, Joseph K.,
J. A. C. S. 58, 1504 August, 1936*

MERCK & CO. Inc. *Manufacturing Chemists* RAHWAY, N. J.

Glad you called my attention to *Vitis aestivalis* var. *argentifolia*. When I read what Fernald said I was sore on the whole mess since I have been horsed about on this several times. Fernald says neither LeConte, Britton or others described *V. bicolor*. All seem to have overlooked LeConte's description and I think figure of this in the Patent Office Rept. for 1857. I do not have this but I consulted it when I wrote the Shrubs. Too Planchon fully describes *V. bicolor* in his Monograph but this was in 1887. But since Rafinesque, LeConte, and Planchon all have had a finger in the pie (even House) I guess some other name but be sought and I guess Fernald has it. So ^{it} will follow Fernald.

Vitis palmata Vahl. It was O.K. on original.

Tilia glabra versus *T. americana*. I have no dope on this. Rehder uses *glabra*, and says *T. americana* in part. Linnaeus described only one species from America, saying *Hab. Canada* which would possibly be *T. glabra*. But in his description he quotes Gronovius's description which complicates it because *Va.* has several forms of *Tilia* and it was Ventenat who discovered we had more than one form of *Tilia*. Now until the type of what Linnaeus had at hand comes to the surface it is best to treat *T. americana* as a complex I do not have at hand a list of the Linnaean types and list of botanists who have passed upon them. Doubtless Sargent smelt around for *Tilia* when he was after *Quercus rubra*, et al. I believe Wiegand and the other *T. americana* people are following the fact that Linnaeus says *Hab. Canada* which probably was one of Kalm's specimens.

Opuntia humifusa Raf. In Britt. & Rose Vol. 1, Cactaceae, they said Linnaeus had two species of *Opuntia*, one a low one and one a high one.

Bauhin fig. the high one and later Miller described it, calling it *O. vulgaris*. So Fernald says *O. vulgaris* of Grays' Man. not Mill.

So doubtless Fernald is taking up *O. humifusa* for the low *Opuntia* and leaving the name *O. Rafinesqui* for the tall one. So I will delete the synonym (*O. Rafinesqui*) and use *O. humifusa* Raf. (*O. vulgaris* of Gray's Man. as Fernald uses it. Is this O.K. or I could say *O. vulgaris* L.

Continued* I have just read the Gray Man descriptions of *O. vulgaris* and *Rafinesqui*. Read every thing I have and I conclude no one knows our species. I have two specimens from Wis. Both labeled *O. Rafinesqui*. One by Fassett, Green Lake Co, Granite Knobs which seems to match our plant. One by A.M. Fuller from Sauk County. He says abundant here and in adjoining counties. His plant is doubtless *O. tortispina*. The spines are grouped, 2- in each cluster, shorter, and many of them. Whole plant looks different. I have gone over Small's Flora and his description of *O. Opuntia* seems to fit our plant but he gives dist. as coastal. Our plant is not the Gray Man. plant they call *O. vulgaris*. Our plant is the Gray Man. *O. Rafinesqui* which I will call it.

- Farming So. Africa (Pretoria) (24 So842)
Du Plessis, S.J.
Control of Botrytis rot of grapes. Farming
So. Africa 12: 36-37. Ja.1937. no.130.
- Esselen, D.J.
Does cultivation conserve soil moisture?
Farming So. Africa 12: 6-12. Ja.1937. no.130.
- Marais, J.S. & Sim, J.T.R.
Wheat production in the Union. Farming So.
Africa 12: 25-29,34. Ja.1937. no.130.
- Fert. Rev. (Washington, D.C.) (57.8 F414)
Blake, M.A.
Recent trends in orchard fertilization show a
tendency toward use of complete fertilizers in con-
trast to former dependence on nitrogen alone.
Fert. Rev. 12(1): 6-7. illus. Ja./F.1937.
- Forestry (Gt. Brit.) (London) (99.8 F787)
Burt Davy, J.
Two suggested Nomina ambigua. Forestry
(Gt. Brit.) 10: 166-168. 1936. no.2.
- Clarke, S.H.
The influence of cell-wall composition on the
physical properties of beech wood (*Fagus sylvatica*
L.) Forestry (Gt. Brit.) 10: 143-148. pl.xix.
1936. no.2.
- Day, W.R. & Peace, T.R.
The influence of certain accessory factors on
frost injury to forest trees. Forestry (Gt. Brit.)
10: 124-132. 1936. no.2.
- Flor. Exch. (N.Y.) (80 F666)
Fremd, C.
Is the Am. elm doomed? Flor. Exch. 88(7):
34B. F.13, 1937.
Author advocates inoculation method of treat-
ment of internal fungus disease instead of cut-
ting down and destroying infected trees.
- Forschungsdienst (Neudamm) (241 D48F)
Schlösser, L.A.
Grenzen und möglichkeiten der ausnutzung von
polyploidie in der pflanzenzucht. Forschungs-
dienst (Neudamm) 3: 69-82. illus. Ja.15, 1937.
no.2.

I had *Ludwigia* spelled O.K. in Original Ms.

Sium suave Walt. See *Rhodora* 17: 131. 1915 There Blake thrashes this out. Since Shrank and Gmelin both described or used the name *ciqutiaefolium*, may be the Walter name will stick. According to Blake the Walter name is the older. Guess I will let it go *S. suave* Walt.

No. I have not forgotten to send you the *Carex* label, *C. laxiflora* var *gerrulata* Hermann. My accession book in hands of a farmer binder here. e is O.K. but has had hard luck in getting materials but when I get the book back I will send it on. If in a hurry I can go out and get data (3 miles out)

I had overlooked the reduction of *Cornus Baileyi* to a var. Although I have a separate of Drescher's paper. *C. Baileyi* should be a form. You will note in the text I say it should be regarded as a var. or form. Here is the exact location. *Trans. Wis. Acad. Sciences* 28: 190. 1933.

I will take the matter of nomen up with Weatherby
Vaccinium pennsylvanicum v. *angustifolium*. ~~xi~~ Weatherby uses *V. pennsylvan* in *Rhodora* 29:237. 1927

Epilobium molle also. Fernald uses *E. molle*. *Rhodora* 20:31. Well Fernald has grown much since that time, so now we do not know what is what.

As to accent in *Oscuta*. Mrs. Winch used her copy of Gray's Man. when she should have used mine which has all the emendations marked in. If she had used my Gray it would have saved her a number of errors. You doubtless have the Gray Man emendations and these marked

Gilia rubra (L.) Heller has recently been change by Wherry to *Ipomopsis rubra* (L.) Wherry. This was on original and not on duplicate (*Bartonia* 18: 56. 1936.) If you do not think much of Wherry's name may be I had better take it up with Weatherby. Wherry is all right but I do not think many people "love him" and it may be Weatherby may want to wait for developments on this name.

Verbena urticaefolia and var. *leiocarpa* Perry & Fernald. Sorry the var. was not on the duplicate. The variety is about as common as the species in Ind. and there is no geographic range with us.
Rhodora 38:441-

Say which is the best. We enclose synonyms as follows
(Synonym and synonym.) (Synonym; synonym.) Which is the best way to express them with and or with : or ; and

Which

- Bull. Union Agr. Egypt (Le Caire) (24 Un32)
Diamantis, A.
Experience sur les blés égyptiens et étrangers.
Bull. Union Agr. Egypt 34: 596-620. D.1936. no.278.
- Bult. Sci. Fak. Terkult. Kjušu Imp. Univ. (Jl07.6 K995B)
Enomoto, N. & Nabesima, N.
The influence of soil moisture upon the growth
of cotton plants. Bult. Sci. Fak. Terkult. Kjušu
Imp. Univ. 7:150-164. D.1936. no.2.
Japanese with English summary.
- Kanehira, R.
A list of plants collected at Davao, P.I.
Bult. Sci. Fak. Terkult. Kjušu Imp. Univ. 7: 228-
238. D.1936. no.2.
Japanese with Latin names of species.
- Kitagawa, M.
A di-amino acid, canavanin, and a mono-amino
acid, canalin. Bult. Sci. Fak. Terkult. Kjušu
Imp. Univ. 7: 165-184. D.1936. no.2.
Japanese with English summary.
Found in Jack bean.
- Kôketsu, R. & Nagasawa, K.
On the use of the "powder method" in studying
water requirements. Bult. Sci. Fak. Terkult.
Kjušu Imp. Univ. 7: 211-227. D.1936. no.2.
Japanese with English summary.
- C N A Revista Agr. (Costa Rica) (8 C62)
Chavarria F., R.A.
El calcio, su importancia agronómica C N A
Revista Agr. 1: 281-295. N./D. 1936. no.11/12.
- Orozco, C., J.M.
Ajonjolí o sésamo. C N A Revista Agr. 1: 296-
303. illus. N./D. 1936. no.11/12.
- Canad. Hort. (Peterboro, Ont.) (80 C16)
Berkeley, G.H.
Mosaic and ring spot, two dahlia diseases.
Canad. Hort. Floral ed. 60: 25-26. illus. F.1937.
no.2.

Thursday 10,00 A.M.

Repl. 3/13

Dear Hermann: I am sending you all the dope I have so you can mill it over at your leisure. Always swer so you can not be heard then there is no swearing, nict_vahr

I am going over your corrections. I am now up to Leonurus Say man how could I have got along without you. Weatherwax will be here tonight and I am going to show him what you have done to the Ms.

Now you take time to answer my letter. I will send the remainder of quflies when I finish the Ms. Got two bundles from Kriebel this A.M. *specimen*

I need general distribution on *Physostegia virginiana* and *P. speciosa*. If you have any state records, would be glad to have them. Modern writings have not recognized the two species, so it is up to us to visit herbaria and get data. I do not have the nerve to write Weatherwax.

Well I must beat it up town. Friend of mine died and his funeral is this P.M. but I will go up and say goodbye to him and skip the funeral. Just got infuriated. You know my hook up with the State of Ind. for whom I have worked for 25 years and drew salary and now Federal People tell me my salary is not exempt. They may be they call on me for back taxes, since I was always told State salaries are exempt but they have ruled that Dept. of Conservations are not a part of State Government. Can you beat it except, by being too hard up to ~~tax~~ draw a salary of 2500,00. My salary is about 1800,00 but putting this to the little I get outside makes me over 2500,00. Remember the devil and the tax men are after you. Sincerely yours,

Chas. C. Deam.

STATE OF INDIANA
CONSERVATION DEPARTMENT
DEPARTMENT OF PUBLIC WORKS

Repl. 3/11/36
and 3/13/36

INDIANAPOLIS

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Bluffton, Ind.
Mch. 5 . 1937

Dear Hermann:-Well I went thru my Florida junk and I find only two Junci. One superficially seems to be mine run Ind. stuff. the other is new to me. The shapp leaves and bract stuck me until the blood came. I was not looking for such a reception. If you do not take all, just put what you allot me in with my plants and in due time I will get them. Now I will have some duplicates of the junk I got. Do you care for them as part payment on what I owe you. Specimens only fair quality.

Now I could say a lot about our trip but I dare not take the time to go into details. As you know I am interested in a few genera such as Smilax (Nemexia), Pilea, Sagittaria, etc. I thought a good idea to stop off and visit the herbaria enroute and get acquainted with the curators, etc. and see how they keep house, etc. Going to tell you. You need not peddle it except in a general way. First stop at University of Ky. Saw McFarlane, fine fellow, but herbarium nix. A few old things of the Short & ~~XXXXX~~ Peter plants. They have probably 6,000, probably 3,000. I was raining hard so I did not look up the herbarium of the Agr. Exp. Station which I think is larger. Then to Knoxville. Here I saw Jennison, Cain, Underwood, and Drew (Harvardite) They treated me fine. Was on Sunday. "all they are doing things. Have fine steel cases and probably have 15,000 plants already. You know all burned two years ago. Then to Chapel Hill N. Car. to U. of North Carolina. Prof. Cocker was out of city but lady assistant was very obliging. They have probably 15,000 beside the Ashe and Harbison collections which are not yet incorporated. Only in fair condition. Then to Duke University. They have probably 10,000, steel cases. OVER

Say this is a wonderful University. The buildings are finest I have ever seen. In fact it is the finest in the U.^o. so far as I have seen. They have several young botanists there. I know none of them, all amateurs the head man was out of city. They told me that Raleigh had no herbarium so I did not stop although we drove past the college but it was raining so I did not not to get in. Then to Charleston Museum. I saw their small herbarium, 3,000?. I did not ask to see the Elliott collection which is kept in a large safe (vault). Then to Gainesville. Here the high up was in New York preparing to issue a monograph on some bulbous genera, I do not recall. His name is H.H. Hume. He has written a small book on Azaleas and Camellias. He may be a very high grade fellow but I can not understand how a man of his position can get by without being a member of the Bot. Soc. Amer. A.A.A.S., or the taxonomic section of the bot. soc. He has a lady assistant a Miss Arnold. She is the livest wire I found on the trip. She seems to know Florida plants pretty well. They have steel cases and probably 15,000 sheets. Their herbarium is divided into 5, the several botanical departments having its own. They have little north of Florida. Then to Tulane U, at New Orleans. Met Penfound who I knew and they have about 5,000 in these old tin cases that fasten with a wire loop. Specimens all old, the old collectors, etc. Then to Baton Rouge to see Claire Brown. They have about 5,000 as I now remember in steel cases. Too bad I did not make a record of just how many specimens they told me they had and just the kinds of cases, etc. In short the dam outfit I saw netted me nothing All of the Smilax was of the woody kind. and all the Pilea was tops in flower and only 2 I believe I saw had seed well enough developed to the color of seed. Sagittaria all in flower and not a single well fruited specimen. Could not tell any thing about the achene, the beak or the sides. I majored on Sagittaria on this trip but did not much good because they were too hard to dry. Too most of the stuff I saw was only in flower. Think I have duplicates of all for you if interested.

Now if every thing goes well and I can get away I plan to go back to Florida this winter after the A.A.A.S. meeting

Hermann-3

Now I did not see the botanical libraries back of these herbaria but Claire Brown does not take even Rhodora. That poor fellow does not know what it is all about. Nice fellow. How can he be helped. U. of La. is now a fine place and if they can keep the pace that Huey Long set, they sure will be O.K.

I am glad I did not get away from home until now for fear I would not have taken the keen interest in doing Ind. so thoroughly. The world is so big but to have a small section (Ind) well worked ^a ~~my~~ in the long run be helpful. I have not thought of any trips this year in Ind. but I must hatch up some trips later on. I know I have a thousand places I need to check up on.

Now to your letters. Do not forget to turn in expense on the Field Museum plants.

At Charleston in second store saw a copy of Shecut's Flora of S. Carolina

I have no idea what it is worth but they asked \$65.00 for it.

You refer to the overlapping of species in Ind. (northern and southern) I mean in Fla.

On our trip ^{last} I did not see a single plant that I knew (occurs in Ind)

It is too bad you do not have our maps at hand on all the flora for making comparisons. The glacial boundary seems to stop some plants and others it does not. Of course to map the limits of distribution we would have to have a real survey for the plants. In some instances the glacial line seems to hold well and in others it fails. The same with other plants. Our boreal plants will snipe way down into the Great Smokies but they have a continuous line of similar habitat. Your common Carex lupulina will always be found in wet places, preferably in the sun. Never found in dry soil. Apparently the limit of a species is the limit of its habitat but probably not so at all. The fauna of the country is determined by its ^{range of} food supply. All I desist this subject.

Well I presume you have crossed the Rubicon as to Luzula ere this. I can not help you any. This case is a good deal like when St. Peter takes hold of your arm, then it is all up to you.

Hermann-4

Well I am glad you went over the Field Museum stuff, although you did not get any positive results. I am glad you can now definitely rule out *C.*

pauciflora. As to ^Fassett I would surely give him a chance to vindicate himself. *Be sure to keep his replies as evidence to vindicate what you write* I believe you understand in your paper you will be expected

to rule out all reports for which you do not find specimens. Now since you have seen all the specimens ^Fassett is supposed to have access to you can say in the Excluded species, specimen reported by ^Fassett but we have no verifying specimen. I would not tramp him too hard but in your introduction to excluded species you ^{can} make a statement to suit yourself somelike like this that you have seen all the specimens in such herbaria and the following have been reported but you find no specimen. I do not believe it is necessary to bulk all these excluded but you can if you like but it would make it more definite if you would write that species so and so was reported by ^Fassett or others where reported, etc.

You ask for reference to *Acnida altissima*, *subnuda*, etc. I got my dope from North Amer. Flora 21: part 2. This is Standley's write up and I used it. Do you think it is O.K. or should I investigate this. Standley when he wrote this was a student of the *Chenopodiaceae*. He wrote this for the N. Amer. Flora. You mention other references when I come across em, I will report. By the way do you think I should insert in my text the references in *Acnida*?

Well I guess I have exhausted the news, etc.

We are both O.K. now except my left eye which must favor with a little work. I do hope you and family will come out of this trouble O.K. Sickness is sure a cross to bear. Fortunately wife and I have never had but little of it.

Always to glad to hear from you. Tomorrow I plan to start on the boxes you return. I surely appreciate the work you went to go thru all this stuff. I know it will add much to the flora to have errors eliminated and the helpful suggestions you make.

I am sincerely yours, Chaq.C.Deam.

P.S. I have no labels as yet for the Florida plants. Will send you some in due time.

Wells Co.

- Sagittaria latifolia var. obtusa (Muhl.) Wieg. 8409
8410 S. brevirostra Mack. & Bush

Cass Co.

- 8411 Sporobolus asper (Michx.) Kunth
8412 Eragrostis Frankii (F., M., L.) Steud.
8413 Hemicarpha micrantha (Vahl) Pax
8414 Cyperus inflexus Muhl.
8415 Juncus canadensis J. Gay
8416 J. brachycephalus (Engelm.) Buch.
8417 Fimbristylis autumnalis (L.) R. & S., var. mucronulata (Michx.) Fernald
8418 Cyperus flavescens L.
8419 C. ferruginescens Boeckl
8420 C. strigosus var. multiflorus Geise (All sterile.)
8421 Eragrostis hypnoides (Lam.) BSP.
8422 Sagittaria graminea Michx.
8423 Scirpus Smithii var. setosus Fernald
8424 Bidens bipinnata L.
8425 Eclipta alba (L.) Hassk.
8426 Dianthera americana L.
8427 Leptoloma cognatum (Schultes) Chase
8428 Physostegia denticulata (Ait.) Britton (But leaves sharply serrate)

Carroll Co.

- 8429 Sporobolus asper (Michx.) Kunth
8430 Muhlenbergia tenuiflora (Willd.) Britton
8431 M. sobolifera (Muhl.) Trin.

Thiobacoe Co.

- 8432 Isanthus brachiatus (L.) BSP.
8433 Aster longifolius var. rigidulus Gray
8434 Muhlenbergia cuspidata (Nutt.) Rydb. — oblongifolia

Vermillion Co.

- 8435 Actinomeris alternifolia (L.) DC.
8436 Polymnia canadensis L.
8437 Rudbeckia triloba L.
8438 Pilea pumila (L.) Gray
8439 Ruellia strepens L.
8440 Muhlenbergia tenuiflora (Willd.) Britton
8441 Linum virginianum L.
8442 Anychia polygonoides Raf.
8443 Lespedeza striata (Thunb.) H. & A. stipulacea Maxim.
8444 Gerardia tenuifolia Vahl
8445 Silene stellata (L.) Ait. f., var. scabrella Nieuwl.
8446 Diarrhena americana Beauv.
8447 Muhlenbergia tenuiflora (Willd.) Britton
8448 Hydrangea arborescens L.

8449 Sporobolus asper — Champaign Co., Illinois

Warren Co.

- 8450 Euphorbia dentata Michx.
8451 Sporobolus asper (Michx.) Kunth
8452 Isanthus brachiatus (L.) BSP.
8453 Euphorbia dentata Michx. (Narrow-leaved form.)
8454 Cyperus mesochorus Geise
8455 Cirsium altissimum (L.) Spreng.

Warren Co. (Continued)

- 8456 Muhlenbergia mexicana f. commutata (Scribn.) Wieg.
8457 Lycopus rubellus Moench
8458 Muhlenbergia sylvatica Torr.
8459 Lactuca villosa Jacq.
8460 Silphium perfoliatum L.
8461 Cirsium altissimum (L.) Spreng.
8462 Lactuca villosa Jacq.
8463 Muhlenbergia sobolifera (Muhl.) Trin.
8464 Lactuca villosa Jacq.
8465 Napaea dioica L. *Fountain Co*
8466 Sagittaria latifolia var. obtusa (Muhl.) Wieg. = *Fountain Co*
8467 Lycopus rubellus Moench *Fountain Co*
8468 Gnaphalium obtusifolium L. " "

Newton Co.

- 8469 Aster linariifolius L.
8470 Aster sericeus Vent.
8471 Lespedeza capitata Michx. ? Capsule little shorter than sepals.
8472 Commelina angustifolia Michx.
8473 Monarda punctata var. villicaulis Pennell
8474 Aristida tuberculata Nutt.
8475 Triplasis purpurea (Walt.) Chapm.
8476 Sporobolus clandestinus (Spreng.) Hitchc.
8477 Verbena stricta Vent.
8478 Sporobolus cryptandrus (Torr.) A. Gray
8479 Aristida oligantha Michx.
8480 Cycloloma atriplicifolium (Spreng.) Coult.
8481 Aristida intermedia Scrib. & Ball.
8482 Arisrida oligantha Michx.
8483 xCyperus mesochorus Geise

Jasper Co.

- 8484 Panicum spretum Schultes
8485 Lycopus sessilifolius Gray
8486 Scleria reticularis Michx.
8487 Panicum agrostoides Spreng.
8488 Hypericum adpressum Bart.
8489 Juncus pelocarpus E. Mey.
8490 Heleocharis megarcarpa Torr.
8491 Heleocharis obtusa (Willd.) Scultes
8492 Rotala ramosior var. typica Fernald
8493 Panicum spretum Schultes
8494 Lechea Leggettii Britton & Hollick
8495 L. minor L.
8496 L. Leggettii Britton & Hollick
8497 Panicum verrucosum Muhl.
8498 Digitalis filiformis (L.) Koeler

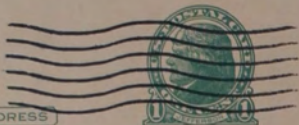
Fulton Co.

- 8499 Lippia lanceolata Michx. (~~Typical~~) *vel. recognita*
8500 Echinochloa Walteri (Pursh) Nash
8501 Leucospora multifida (Michx.) Nutt.

Wells Co.

- 8502 Cydon Dactylon (L.) Pers.

-
- 8503 Solidago Buckleyi T. & G. Deam Garden, from Posey Co.
8504 Sporobolus heterolepis Gray Deam Garden, from Jasper Co.



THIS SIDE OF CARD IS FOR ADDRESS

Digitized by Hunt Institute for Botanical Documentation

Frederick J. Hermann, Senior

U. of Mich. Botanical Garden

Ann Arbor,

Mich.

Wednesday Morning, Mch. 3 1937

Dear Hermann: Exp. pkg just arrived O.K. This is to inform you of its arrival. My left eye has gone bad but I hope it is only temporary. I can not work at all. Hope it is only result of cold in my head. Will write you as soon as I am able.

I have one or two *Juncus* from Fla. and I will send my material on at once and you keep all for a specimen. When I collected I had 50/50 in mind but you are young and can use the lion's share. I now feel like a cadaver and what is the difference.

Now I do hope you and family will recover in orthodox fashion. The "bills" must be regarded as a luxury, since you did not bargain for them, and come after household, botanical, and book buying expenses are paid. Best wishes, sincerely yours, Ch s.C. Deam.

Northern

(*J. articul.*)
J. alp. ✓
C. Bellii ✓
retroscia ✓
paniculata ✓
viridula ✓
Barberi ✓ Mc
- *limosa*
cryptolepis ✓
revera ✓

~~_____~~

Southern

J. brachycarp.
Psilocarya
C. cus-cosvi (Mim)
Scleria setii
C. digitifolia

J. canad.

Deam

Deam 21, 723

Sept. 11, 1916

Moist low border on the south
side of Blue River Lake. Whitley Co.
Ind.

Digitized by Hunt Institute for Botanical Documentation

J. canad.

Deam

Deam 46, 346

Sept. 21, 1928

In the sedge border of the N. side
of Bruce Lake, about 2 1/2 mi. N.W.
of Bruce Lake Station, Fulton Co.,
Ind.

STATE OF INDIANA
CONSERVATION DEPARTMENT
DEPARTMENT OF PUBLIC WORKS

INDIANAPOLIS

*Repl. 1/20/37
to Becksville*
Administrative Officer
V. M. Simmons

Board

Governor Paul V. McNutt
Lieut.-Gov. Clifford Townsend
Virgil M. Simmons
Paul Fry
James D. Adams

Bluffton, Ind.
Jan. 18 1937

Dear Hermann:- I have your letter of Jan. 16 and I am glad you have the Deam Carex all named up. Yes get the Field Museum Carex some way. If you do not feel like going over there. It would be a great saving of time to have them sent to you. Tell Standley you will pay all expenses of assembling and redistributing the Carex you borrow, and the Juncus, etc. If you like and can afford to go over them hit him for the Ind. material they have. Tell him it is for the Indiana Flora and each plant will have a stab on the map. Now any expense you have send it to me and I will either pay you or if you prefer I will pay Standley. When sending items of expense into me please send them on a separate piece of paper and thus no one need know anything about it.

I sure do appreciate your laborious help in the General Key to families. I have already sent key to Mrs. Finch but will have it returned so I can take it up later.

Last eve wife and I or rather she decided we are leaving Thursday for a few weeks rest. We will be gone ?? 2-4 weeks. I tell her I will come back in a box. I fear the P-neumonia and then my asthma may be worse. I have no idea what effect it will have on me to drive. I know it is a nervous strain but we plan to go and take our time to it. I have asked to be taken off the pay roll Jan. 20 until I tell them to put me on. If every thing goes O.K. we will be out about 4 weeks. Hermann my head is solidifying or something I can not think. I have been all week on the Introduction and it reads like an 8th grade author. Think I will send it to you. Be frank and tell me if it can go in. I worked my head off on the flora areas of Indiana. The dunes area is a distinct once. The lake area is fairly distinct but the
OVER

remainder are nebulous. They all talk of the "transitional region" etc. This is bunk. We have plants from all directions stopping in Ind. The boreal things seem pretty well in a zone but the southern plants (some of them are erratic. *Phlox ovata*, Allen and *Hitley* Cos. For example *Carex picta*. I hope you have a copy of Ind. Handbook of Geology By the way if you do not have I will buy you a copy. You should have it. We have *Carex picta* from some "knobs" in Brown, Monroe, Jackson, and Lawrence counties then the darn things retreats to nw. Ala. It doubtless is found between these stations but not recognized. But I know it in all stages of growth and I never found it in Ind. elsewhere and Kriebel says he and ⁿfried searched the knobs in Wash. Co for it and failed to find it, also the knobs n. of Medora I have been over the Medora knobs time and again and I never saw it but was not looking for it especially. This is our most ^ostanding disjunct. Then there is *Leptochloa panicoides* (*floribunda*) Found in Posey Co, then n. Miss La. and e. Tex. Of course when you try to make a study of distribution you at once bump up against terra incognita in Ky. The Mo. Flora by Palmer and Steyermark has been a God send in many ways. If it was not for this we would not know which way out and in fact their Flora is not complete as the Ind. one will be. ^{thought} Unthoughtedly all thru the Ms. I have used the terms the Knobs in a popular sense and after I try to write the Introduction I find I am all wrong. Our old geologies use that term but Malott now divides the area into three geologic areas. I had once thought to call the Knobby area of the unglaciated area, "Chestnut oak Ridge area." This defines and limits it best of any term I can think of. If you use the term Uplands of the unglaciated area it is ambiguous (How high must an area be to be an "upland" etc. But a "chestnut oak ridge" is an area where the ridges are capped with that species But within this area we have that *Pinus virginiana* area, very restricted, see Deam's Trees. Our old maps showed outcrops of sand stone in the area but it belongs to different series because the dip is if I recall correctly about 20 ft. to the mile. But chestnut oak grows only on sand stone or residual soils of sandstone. The same of the *Pinus virginiana* but the queer thing about the later is that it is an "old field" type and will just take

an old field on the knobs. Likewise it will take a field in the flats. On the State Forest I recall a 20 acre field that a man about 25 years ago had in strawberries /on the rest of the knobs. Well it soon all washed away and was abandoned. That area is now so thing with pine you can scarce get thru it. Within a half mile and about 250 feet lower elevation and in a creek bottom we had 2 fields. When bought by the state, cultivation ceased and now the fields are a fine stand of pine, 5-8 inches in diameter. I recall how thick it was when they started. This pine was native only on the crests of the knobs as given in Deam's Trees but it has now spread possibly 50 miles. Now of course in a discussion of this kind the major premise is that the distribution is limited by the plants at hand which is erroneous to start with. Now take *Carex nigro-marginata* which as I now recall I found only once in Ind, and that was on the brink of the Ohio River about 350 feet above the water. (Crawford County) may be I did get it elsewhere (Here I consulted Mackenzie on *Carex* and I find he does not list this species for Ind I suppose he changed his mind on it. You will find it so named in the bot and I found it just north of Fredonia, can take you to the spot. Any way we find plants that get across the Ohio River and some scarcely get over the bluff and some get in a mile or ~~two~~ others 5 miles, 10 miles, etc. and every little distance some species drops out but *Carex picta* keep s it up the northern limit of the unglaciated area. I can not now just recall the exact line but I believe it goes to the limit. Geologists do not agree on the limit, but *Carex picta* might help em out. Now in this knobby unglaciate area we have not less than 39 species that are peculiar to it. Then we have quite a few to the west that occur also in the area. The migration of a species into an area is an interesting conjecture and it is amazing how tenaciously it holds its own when once established. I do not ~~xxx~~ care to soliloquize, theorize, philosophize on distribution. ^{in introduction} What I am aiming at is to give the reader some facts and make them sure so that other authors when data accumulate can use it without hesitancy. Again somewhat optimistic if I were to draw

a conclusion from the commercial world. In it we must look a thing all over on all sides, ^{de} above and below and cut into quarters and then subject to chemical analysis to make sure it is what it ~~is~~ claimed to be. We used to think of aguy who could fool the ~~xx~~ eye by going tricks was a "slight of hand performer", a class. Now there is no such a class because the commercial man has the game beat and is now in the same class.

I am not able to find that Bradner ever preserved a specimen. I talked to his wife who is now old and she said he did not have any specimens. However, someone told me that his plants went to some Ohio College. She is a very nice woman and if you like you can stop off and talk to her on your way down here. She lives off the road 2 miles at Fremont, Ind. She is the wife of a Saw Mill man of prominence there, I do not now recall her name but can get it but every one in that village will know who you mean.. They live on south side of street in the se. $\frac{1}{4}$ of the village. Evidently she was a young woman and as I now recall it she was wife No. 2. Although she is now white-headed.

I do not know where the Evermann & Clark plants are. Some turn up in the Field Museum and some in the National Herb.

Thanks for the Carex list. I miss one Carex louisianica from Jackson Co I recall where I got it, etc. but doubtless you are calling it something else now. Well this will all come out in the general wash.

Say now on my trip south, is there any thing I can observe for you? I have no idea just where we will go. ^{we} have no objective only to get a change of air. My first address will be Gen Del. Jacksonville Fla. We leave Thursday after mail so you will have time to write me again if you have any thing you wish to write about. We go to Madison, Ind. first day, Lexington Ky, second day, call on McFarlan. Knoxville, next day, call on J.K. Underwood, next day to Raleigh and call on B. Wells, then to Duke University to call on Korstian and Blomquist, then to Columbia, Charleston, Savannah, Jacksonville. Will root thru all second hand bookstores and pick up a few germs at least Thence south along East Coast and back along west Coast of Fla and if I am going strong to New Orleans and home. Best wishes, sincerely yours, Chas C. Deam

Memos for Hermann

Say according to Latin trees are feminine?

Nieuwland described *Sassafras albida* var. *glauca* (Amer. Mid. Nat. 3; 347- and ^{Er}erald lists it under *Sassafras albidum* var. *glauca* Rhodora 38:179. The *glauca* is given in *adaenda*. Nuttall in his original description used the feminine *albida*. Now such juggling of names is beyond me.

Have you made a decision yet on *Juncus monistichus*?

Is there

such an animal. I saw the type, etc. at Gray Herbarium and it looks quite different but since we have that *Cyperus strigosus* var. *multiflorus* (Cass County) you saw an inkling of it, I have a hunch this *Juncus* may have been struck with the same club. The queer thing is that if a good species it has not been picked up elsewhere. Seems to me now that at Gray Herb. they do have another collection.

You may have told me how you had disposed of it but I have forgotten.

My head is now an instrument with which I forget.

O'Connor, P.

A contribution to knowledge of the Irish fungi.
Scient. Proc. Roy. Dublin Soc. n.s., 21: 381-417.
S.1936. no.35/41.

Spillane, P.A., Keane, J. & Nolan, T.J.

The chemical constituents of lichens found
in Ireland. Scient. Proc. Roy. Dublin Soc.
n.s., 21: 333-343. illus. S.1936. no.35/41.
Buellia canescens (pt.2).

Seed World (Chicago) (61.8Se52)

Simpson, S.C.

Crotalaria and its various uses. Seed World
40(11): 14-15. N.20, 1936.

Soil Sci. (Baltimore) (56.8So3)

Arrington, L.B. & Shive, J.W.

Oxygen and carbon dioxide content of culture
solutions in relation to cation and anion nitrogen
absorption by tomato plants. Soil Sci. 42: 341-
356. pl. N.1936. no.5.

Blair, A. W. & Prince, A. L.

Manganese in New Jersey soils. Soil Sci.
42: 327-333. N.1936. no.5.

Hester, J.B. & Shelton, F.A.

The influence of certain replaceable bases in
the soil upon the elemental composition of vege-
table crops. Soil Sci. 42: 335-340. N.1936.
no.5.

Oberholzer, P.C.J.

The decomposition of organic matter in rela-
tion to soil fertility in arid and semi-arid
regions. Soil Sci. 42: 359-379. N.1936.
no.5.

Sovetsk. Botanika (450So8)

Budkevich, E. V.

O nekotorykh osobennostiakh skul'ptury stenok
trakheid u roda *Callitris* (Quelques particulari-
tes dans la sculpture des parois des tracheides
chez le genre *Callitris*). Sovetsk. Botanika
1936(4): 130-135. illus.
Russian.

Borisova, A. G.

O yidakh roda *Oxytropis* v predelakh Urala (Sur
les espèces du genre *Oxytropis* à l'Oural). Sovetsk.
Botanika 1936(4): 118-124.
Russian with Latin diagnosis of new species
(*O. hippolyti*).

Recd. 1/16/37

STATE OF INDIANA
CONSERVATION DEPARTMENT
DEPARTMENT OF PUBLIC WORKS

Board

Governor Paul V. McNutt
Lieut.-Gov. Clifford Townsend
Virgil M. Simmons
Paul Fry
James D. Adams

INDIANAPOLIS

Bluffton, Ind.
Jan. 8 1937

Administrative Officer
V. M. Simmons

Dear Prof. Hermann: Your letter of Jan. 6 just received. "Many, many thanks for the photos. They sure do flatter me. "ife wonders if you could so well with her.

say what is the matter with you? You did not take any plants from my list. Of course I can easily see why, the offering ^{is} so darn poor, and too you select those of which I have a poor specimen. "ell this is your holler. If the "Great Sea" does not close over me this summer I hope to get out and get a few good things.

Again on the Longitude and Latitude of plants, I now recall that I sent all my violents to Ezra Merrill for determination. "e was very meticulous and when he returned my list of determinations he always give the ~~longi~~ latitude and I think also the longitude. I know he gave the latitude. This possibly not so much for locations as to show range of adaptation. I feel certain "errill will gladly send you his lables. "errill so far has treated me royally and I think he is a real fellow. "A man was here this week who was with him as an educator for years while he was in the Phillipines. He thinks lots of him.

Now as to the Gray Man. Key. I am sure glad to get your O.K. on it. You say you noted some errors in it. "ill you be so good as to give them to me so I can avoid them. I do not now recall that I found any. In fact hermann my head does not function any more. I may be able to pull weeds next summer but my day of writing is past. I am slipping into senility so darn fast, I fear " will need an attendant ere long.

I shunted my activity from Helianthus to the Introduction. I have been on it this week and as yet " am nowhere. My distribution maps are at "Lafayette. I do not wish and I am not mentally able to enter into any OVER

discussion of our flora, I have tried to correlate physiographic areas with botanical ones and they do not jibe, etc. Trouble is we do not have enough data on the distribution of our plants and then too I am wholly ignorant of geology and soils. Then too I am inclined to believe many of our plants are not so particular as to habitat as we think. You may say yes with our oldest species such as *Liquiambar* but on the other hand what about *sassafras*. Well when I get this introduction worked over I wish you would read before it goes to Mrs. Winch. I have so darn many things I need advice on. I do not covet the honor and glory of writing a Flora of Indiana. "hat I wish is to give the "Good "eople" a Flora and darn the honor. In so doing I have engaged experts who can do the work better than I and I wish to give them credit for their part. Of course yours is the exception in that it is about half of the book. But I have a lot of small favors, such as Munz wrote my key to Onograceae, Epling wrote the key to Stachys, I did not ask these but they did it gratis. Then Palmer in addition to writing *Crataegus* has checked *arya*, etc. for me. Bailey has gone over all my *Vitis* and *Rubus*. Wiegand went over my *Oxalidaceae*, Standley over my *Houstonia ciliolata*; Conard my *Nymphaeaceae*, C.A. Ball my *Salix*, Watson my *Helianthus*, Yuncker my *Cuscuta*, Pennell all my *Scrophs*, Wherry my *Polemoniaceae*, Rosendahl, Eucheria and *Sullivantii*, Fernald over my *Comandra*, most of my *Potamogetons*, Hopkins over species of *Arabis*, Chas & Hitchcock over all my grasses, mostly. Friesner went over all my goldenrods although I may not use his determinations, etc. Waetherby has been checking my ferns for 20 years. and doubtless other small items. "ife says for God sake what have you written. I want to give em all credit I think it adds value to the Flora to say all these items have been checked by authorities.

Then wife and I do not agree on me putting in Introduction that I have been collecting 40 years, have been in very township, etc. Now when she reads an article she never cares who the author is, etc. and I on the other hand do not only wish his name but I want to know all I can learn about his background.

8
We have so many upstarts in all fields and if they can get by O.K. but not so easy with me. Just last night I raved and swore. If you had observed a thermograph you would have noted the change in temperature. This lady Dorothy Parker, Lucy Braun, and E.N. Transeau. Transeau shows on a map two locations for Post Oak in the dunes. May be O.K. but there is no specimen that I know of and no habitat as I know of. Look at his map in Ecology 35:434. 1935 and you will see that they disjuncts. However, I did find post oak on the gravel hill at Big Wea Creek. ^{are} Possibly I called your attention to it. Now I have spent many an hour trying to eliminate these wild cat reports. I know no one but those with whom I have come in contact as you will appreciate the effort I have made to eliminate such reports. If you write a Flora of Mich. you will have probably an equally bad mess. but few authors more careless than D.T. MacDougal. ^{were} and some others here in Ind. I would like to put Guy M. Wilson on the spot but do not know how to do so. Ben Douglass also. You know I am making a list of collectors who have collected specimens. These are the ones who have made the Indiana Flora. But we have no card for such as F.M. Andrews who wrote a Long Flora of Monroe County. We did not find a specimen as I now recall. ^{He kept no specimens} Ben Douglass wrote a Flora of Marion County and no specimens and G.M. Wilson's Flora of Hamilton County. No specimens Clark & Evermann write a Flora of Lake Maxinkuckee but their specimens are scattered, mostly in Field Museum and National Museum. I think in the introduction I should write a short paragraph on these birds that left no specimens, etc. Like Andrews report a plant and then report the same plant under its synonym. My faith on "future punishment" is so weak. I hate to take a chance on em and I think I should touch em up a little in the introduction.

Now I would not take the Grassl's paper too seriously. I believe that the data I record now on my labels will take care of all the location that is necessary. I admit some apparently unimportant plant may become important and then I find I neglected to give complete data on it.

If the re-collecting of a species becomes so important a little time can afford to be spent on it. Too it would take a lot of time to get the exact location. If one can get the section and township, range etc. that is all that is necessary. Now in Ind. with my rural route maps I can usually get all this but up in the Kewanee area no. I should be glad to get to the Kewanee area but I will never get there and probably never have a trailer. I am not expecting to so I will never be disappointed. My wife wishes to become nomadic but I would much prefer to stick to Indiana. I feel certain there are some odd plants like *Ostrya* floating around that I have not yet seen. When I recall the number of plants in the unglaciated area that I have seen but once I am reminded that there may yet be many I have not seen. The collecting of *Cladrastis lutea* is a shining example, found almost half way up the State. *Bumelia lycicoides*, One station, *Oxydendrum* two places, and others.

I note your catch of the rare *Juncus*. Well doubtless in these old Geolog. areas you will for a long time be picking of strange things. I have a large stretch of this Pleistocene in Ind. and I see no reason why I should not find a lot of things. For example C.W. Short, I believe in 1842 was over in Harrison County and found 2 specimens of *Aconitum uncinatum*. There are two perfect specimens of his in the Herb. Phil Acad. Science. I have never run across it. It doubtless is still with us. I have only touched a few places in Ind. and scarcely a year goes by that I do not find something new. For example this *Aconitum* is found also in Wisc. Doubtless in the unglaciated area which shows the wide range of the species before the glaciation.

Best wishes, keep the Marx business going and I sign off.
Sincerely yours,
Chas. C. Deam.

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STATE OF INDIANA
CONSERVATION DEPARTMENT
DEPARTMENT OF PUBLIC WORKS

Repl. 1/6/37

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INDIANAPOLIS

Bluffton, Ind.
Jan. 1 1937

Administrative Officer
V. M. Simmons

Dear Hermann: This is my first letter in 1937. Could do no better than start in on you. All I have to write about is that your pkg here O.K. Many thanks for the most valuable parcel I have received in this re incarnation (mundane existence) Then too the specimens all 100% in quality. You have me beat a mile on making good specimens. All I can say now is many thanks. I set at once to list my plants and to my great disappointment I have only about half as many as I thought I had. I am enclosing a list and you mark from it what you can use. If you will gamble on me and take the chance, may be you had better take only those you prefer and let me finish this year (1937) Too if I get this book off hands and I am physically able I should be able to get around some and take my time. Probably a little early but I might mention it. Would you care to take a trip this summer (year) sometime with me at my expense in Ind. Now as you know I carry county lists in the field with me and I collect the items I do not have but when I consult my office list I find I already them which accounts for me having in the list such trashy items as Galium Aparine, G. triflorum, Smilicina racemosa etc. If you are interested in Lactuca my specimens are O.K. so are the Sagittaria but you have from Wells Co. You mark what you can use and I will lay away for a few weeks. Monday I start again on Helianthus. I want to add some duplicates to them. I have good Helianthus altissimus you should have and some other darn things which I have not yet named. By the way, do not forget in sending packages like the one you just sent to always put the long way of the box in and the short ends out. This greatly increases strength of box. Did Mrs. Chase send you a copy of Grasses of the West Indies, Priced at \$1.25.. I enclose a memo/ With very best wishes for the 1937, I am sincerely yours, Chas. C. Deam.