



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

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

Usage guidelines

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

About the Institute

The Hunt Institute for Botanical Documentation, a research division of Carnegie Mellon University, specializes in the history of botany and all aspects of plant science and serves the international scientific community through research and documentation. To this end, the Institute acquires and maintains authoritative collections of books, plant images, manuscripts, portraits and data files, and provides publications and other modes of information service. The Institute meets the reference needs of botanists, biologists, historians, conservationists, librarians, bibliographers and the public at large, especially those concerned with any aspect of the North American flora.

Hunt Institute was dedicated in 1961 as the Rachel McMasters Miller Hunt Botanical Library, an international center for bibliographical research and service in the interests of botany and horticulture, as well as a center for the study of all aspects of the history of the plant sciences. By 1971 the Library's activities had so diversified that the name was changed to Hunt Institute for Botanical Documentation. Growth in collections and research projects led to the establishment of four programmatic departments: Archives, Art, Bibliography and the Library.

This space is also for correspondence.

ここにも通信文を記載することができます

Mr. Arthur M. Scott
2824 Dante St.,
New Orleans 18, La.,
U. S. A.

PAR AVION
航空



AEROGRAMME

この郵便物には何物も封入又は添附できません
Nothing may be contained in or attached to this letter.

Minoru Hirano
Biological Laboratory
of the Yoshida College,
Kyoto University,
Kyoto, Japan

折込線

折込線

ここにも通信文を記載することができます

This space is also for correspondence.

2824 Dante St.,
New Orleans 18, La.

Dear Mr. A. M. Scott

Nov. 9, 1959

I have already communicated to Dr. Y. Okada to send his publications to your address. His address is as follows: Yoshikazu Okada, Dr. Sci., Department of Fishery, Nagasaki University, Sakibe-cho, Saseho city, Nagasaki Pref., Japan.

Since some years ago I am occupying to investigate the various kind of natural waters concerning to the desmid-habitat and the results of these investigations have accumulated fairly so that I hope to publish them in my continuation of Flora Desmidiarum Japonicarum.

I should like to get the specimens of American species of Prasiola (*P. nevadense* and *P. mexicana*). I am now studying the South American species so that I am hope to comparison with the above two proper species of American Prasiola. Do you know anyone or museum to supply them.

I am now sending you my recent paper on Antarctic algae however this paper do not includ the desmids under a separate cover.

Please note my new address:
Biological Laboratory of the Yoshida College,
Kyoto University, Kyoto, Japan,

Yours very truly

Minoru Hirano
Minoru Hirano

Nov 30 1959

Farlow Herbarium,
Cambridge, Mass.

Attention Dr. I. Mackenzie Lamb.

Dear Dr. Lamb,

In a recent letter from Dr. Minoru Hirano, of Kyoto, Japan, he asked me if I could tell him of any person or museum from whom he could obtain specimens of two American species of *Prasiola*, *P. nevadense* and *P. mexicana*, which he wishes to compare with some South American material that he is studying. These are the only ones that he mentions, but I note from Smith's *FW Algae of the U.S.* that there are three others known from this country, *P. calophylla*, *P. crispa*, and *P. fluviatilis*.

I have never encountered *Prasiola* in my own collections, and know nothing about it. On Nov. 13 I wrote to Dr. Wm. Randolph Taylor, thinking that he might have some of the species in the Univ. of Michigan collections, but there is no reply from him, so I suppose he must be absent from Ann Arbor.

Do you have any of the species in the Farlow Herbarium, and if so could Hirano get some specimens, either as a gift if the material is plentiful, or as a loan? No doubt you know of him, at least by reputation. He has published many papers on Japanese desmids, including the important work *Flora Desmidiarum Japonicarum*, of which three or four installments have already appeared.

With my best regards,

Sincerely yours,

New Orleans, Dec 14 1959

Dr. Minoru Hirano,
Kyoto, Japan.

Dear Dr. Hirano,

Today I received another letter from the Farlow Herbarium, saying that in addition to the six species of *Prasiola* in their General Herbarium, they have also sent you the co-type of *P. nevadensis*, which is the only specimen they have of this species. They also suggest that perhaps the University of California may have additional specimens of *P. nevadensis*, so if you would like to see other specimens you should write to:

Dr. George F. Papenfuss,
Dept. of Botany, University of California,
Berkeley 4, Calif., U.S.A.

and tell him that the Farlow Herbarium referred you to him. You may also mention my name, but I only met him once, many years ago, and it is doubtful if he remembers me, and since his specialty is marine algae he may not know about my work on desmids.

The co-type mentioned above is a very valuable specimen, and I need hardly remind you that this as well as all the others must be returned to Farlow in good condition.

If there is anything else that I can do for you please do not hesitate to ask me. With my best wishes,

Sincerely yours,

Dec 7 1959

Farlow Herbarium,
20 Divinity Ave.,
Cambridge 38, Mass.

Attention Miss Maila E. Lamb.

Dear Miss Lamb,

Many thanks for your prompt reply to my letter. I shall be much obliged if you will send specimens of all the species of *Prasiola* that you list from your General Herbarium to:

Dr. Minoru Hirano,
Biological Laboratory, Yoshida College,
Kyoto University,
Kyoto, Japan.

Can you give me any suggestions as to where else he might be able to get specimens of *P. nevadensis*? I wrote to Dr. M. Randolph Turner at the Univ. of Michigan, but that is three weeks ago and he has not answered.

Sincerely,

HARVARD UNIVERSITY
FARLOW REFERENCE LIBRARY
AND
HERBARIUM OF CRYPTOGAMIC BOTANY

20 DIVINITY AVENUE
CAMBRIDGE, MASS., U.S.A.

9 th December -59

Dr. Arthur M. Scott,
2824 Dante Street,
New Orleans 18
La.

Dear Dr. Scott;

In answer to your letter of the 7 th inst., I like to inform you that I am sending off to-day the specimens of Prasiola to Dr. Hirano. I have also included the co-type of *P. nevadensis*, which is the only specimen we have of this species. It was sent by Univ. of California in their "California algae" and it is no 73.

I believe that Univ. of California may have some more specimens of this and perhaps Dr. Prescott in Michigan would be able to say who might have some more of *P. nevadensis*. It was described by Setchell. His coll. no.: 6507.

Yours truly,
Maria S. Lamb.
Loans & Exchanges.

HARVARD UNIVERSITY
FARLOW REFERENCE LIBRARY
AND
HERBARIUM OF CRYPTOGAMIC BOTANY



20 DIVINITY AVENUE
CAMBRIDGE, MASS., U.S.A.

3 rd December -59

Dr. Arthur M. Scott
2824 Dante Street
New Orleans 18
La.

Dear Dr. Scott;

Dr. Lamb has passed your letter of the 30 November on to me and I have found the following re- Prasiola:

In our General Herb. we have: crispa from the East Coast of New Foundland
" " Quebec, Canada.
fluviatilis from; Alaska and Brit. Columbia.
Gardneri Collins TYPE from; California
meridionalis Setchell & Gardner from; California
mexicana from; Montana, Utah, Wasington City, California, Colorado.
stipitata from : Mass.

Then we have in Phyc. Bor. Amer. Collins Holden & Setchell:

crispa
Johanseni (from Arctic)
stipitata (from Woods Hol
nevadensis Calif. Algae.
mexicana Tilden Amer. Algae.

The above are all the species we have from N. America and we will be glad to send some on loan to Dr. Hirano. The exicc. cannot be sent out but specimens in our general herbarium can be sent to him if you, Dr. Scott could give me his mailing address in full.

Yours truly,
Naile E. Lamb.
Loans & exchanges.

Nov 13 1959

Dr. Wm. Randolph Taylor,
Dept. of Botany, Univ. of Michigan,
Ann Arbor, Mich.

Dear Dr. Taylor,

I have a letter from Minoru Hirano, of Kyoto, Japan, asking if I can tell him of any museum or individual from whom he could obtain specimens of two American species of *Prasiola*, *P. nevadense* and *P. mexicana*, which he wishes to compare with some South American material that he is studying.

These are the only two species that he mentions, but I note from Smith's FW. Algae U.S. that there are three others known from this country, *P. calophylla*, *P. crispa*, and *P. fluviatilis*. I have never seen this alga in my own collections.

Can you help me with this request?

Many thanks for the batch of reprints received from you a few days ago. However, the only papers of interest to me are those on freshwater algae, so you might make a note to that effect on your mailing list.

With best regards,

Sincerely,

Oct 22 1959

Dr. Minoru Hirano,
Kyoto, Japan.

Dear Dr. Hirano,

Can you give me the address of Dr. Y. Okada, the author of the following papers?

"New classification of Desmids". (1953)

"Taxonomical studies on the genus Euastrum". (Date unknown).

I wish to obtain these papers, and also to add his name to my mailing list to receive my own publications.

Please accept my thanks for the many papers on desmids that you have sent me, and particularly for the series "Flora Desmidiarum Japonicarum". This is a very valuable work, and I have used it many times in determining desmids from Indonesia.

I have just completed a large paper on Indonesian desmids, in collaboration with Dr. Prescott. It describes and illustrates 529 desmid taxa, of which nearly 30% are new to science, and I will be published next year. I hope to be able to send you a copy as soon as it is available.

With my best regards,

Sincerely,

Oct 4 1955

Dr. Minoru Hirano,
Kyoto, Japan.

Dear Dr. Hirano,

My wife and I have been in Europe for the last five months, and only returned last week, when I found your letter of May 4th among the large accumulation of mail that was waiting for me.

I thank you very much for sending me the reprints of your three papers on Tsugaru, Nepal, and the first part of the Flora Desmidiarum Japonicarum. The latter, especially, promises to be of very great value for desmidiologists, and I hope that publication of the other parts will not be too long delayed. Unfortunately, all scientific institutions and journals are suffering from a lack of funds and greatly increased expenses.

Yes, it is quite true that Dr. Krieger died very suddenly on June 15 1954, and there seems to be little hope that his monograph will be completed in the near future. There are very few men with the necessary qualifications, and none of these few is willing to undertake the gigantic task. There has been some talk of dividing the work among several specialists, and this might be the only way of getting it done. Dr. Krieger wrote me early in 1954 that he had nearly completed the next part on *Gosmarium*, but after his death I learned that what he left is simply the notes and drawings, without any manuscript, so this alone would be a very big job for anyone else to undertake. I do not know how much work he had done, if any, on the other genera.

The Secretary of the Phycological Society of America is Dr. P. C. Silva, Dept. of Botany, Univ. of Illinois, Urbana, Ill., and if you will send him \$3.00 in Unesco coupons I am sure he will be glad to welcome you into membership. The only publication is the Bulletin, which at present is a very small affair of usually 12 or 16 pages. They have been trying to arrange for publication of phycological papers in some other botanical journal, but nothing definite has come of it so far. In the last issue of the Bulletin there was an obituary notice of Dr. Krieger written by Dr. Rolf Grönblad, but even he did not know much about Krieger's life. Grönblad has also published the same or a similar obituary notice in German in a European journal, but I have not seen it.

I have several desmids papers in collaboration with Prescott, and with Grönblad, which are now in press or in preparation. When I receive the reprints I shall of course send copies to you.

With my best regards,

Sincerely yours,

This space is also for correspondence.

ここにも通信文を記載することができます

Minoru Hirano
Botanical Institute,
Faculty of Science,
University of Kyoto,
Kyoto, Japan.



Mr. Arthur M. Scott
2824 Dante St.,
New Orleans 18, La.
U. S. A.

PAR AVION
航空

この郵便物には何物も封入又は添附できません

Nothing may be contained in or attached to this letter.

折込線

折込線

ここにも通信文を記載することができます

This space is also for correspondence.

Mr. Arthur M. Scott
2824 Dante St.,
New Orleans 18, La.

May 4, 1955

Dear Mr. Arthur M. Scott

This letter is too much delay to answer for your sending of interesting paper on new genus of Desmid "Amscottia". This paper is showing the fact that the New Continent Desmid. flora is very peculiar in the world. I am very thankful for the sending of this variable paper.

I have recently received a information of death of Dr. W. Krieger by a letter from European algologist. Is this true? I had expected earnestly the continuation of publications of Desmidiaceae monograph in Rabenhorst's Krypt.-Flora. Do you know the publications of articles on his career or reminiscence in the European journal and his photograph.

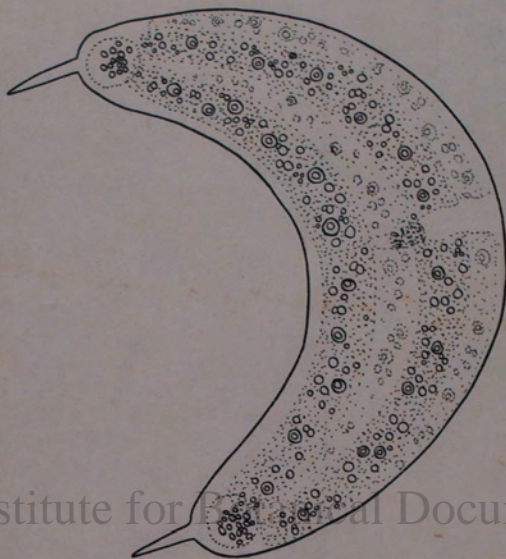
I am now sending you my two papers on algae under a separate cover, one is short and Japanese and other is a first part of my monograph on Japanese Desmids. I should like to publish the other parts of Desmids in the future but it will not realize promptly because in spite of completion of manuscript there is no promise for the great deal of expense. I do not know the recent "Phycological News Bulletin". Recently I can send the money to the American Phycological Society by Unesco-coupons so that I have possessed the hope of entrance into the Society. If it is possible for me please tell me the price of membership fee (subscription) in a year.

Yours very truly.

Minoru Hirano
Minoru Hirano

Botanical Institute,
Faculty of Science,
University of Kyoto,
Kyoto, Japan

x765



Digitized by Hunt Institute for Botanical Documentation

L. 133.3 μ
B. 43 μ
L. of ap. 17.2 μ

Drawn by Minoru Hirano
1951

May 15 1954

Dear Dr. Hirano,

I thought it was strange that I had not heard of a 623-page book on desmids by W. E. Wade, and here is the explanation. Mr. Wade writes me as follows:

"I must inform you that my paper "A study of the taxonomy and ecology of Michigan Desmids" has not been published. This work was a thesis for Ph. D. in Botany, completed under the supervision of Dr. Prescott. Only four copies exist, one of which you may be able to acquire on an inter-library loan from Michigan State College. As it exists today, I do not believe that it is sufficiently complete for publication. However, I have in preparation at the present time, a paper on the additions to the desmid flora of Michigan based in part on material from the thesis. It will be primarily a listing of about 175-200 new records for the State with descriptions of about 15 new species, varieties and forms. In addition at some time in the future, I hope also to publish a small paper on the ecology and distribution of desmids in the State."

Sincerely yours,

Digitized by Hunt Institute for Botanical Documentation

This space is also for correspondence.

こゝにも通信文を記載することができます

Minoru Hirano
Department of Botany,
Faculty of Science,
University of Kyoto,
Kyoto, Japan.

Mr. Arthur M. Scott
2824 Dante St.,
New Orleans 18, La.
U. S. A.

PAR AVION
航空

この郵便物には何物も封入又は添附できません

Nothing may be contained in or attached to this letter.

折込線

封込線

Digitized by Hunt Institute for Botanical Documentation

Mr. Arthur M. Scott
2824 Dante St.,
New Orleans 18, La.

Apr. 22, 1954

Dear Mr. A.M.Scott

Some times ago I received a recent your paper on Australian Desmids. Thank you very much for your sending. This letter is too much delay to answer you for your reprint and also for your last letter. I was very much busy for the last half a year since October of the last year because I have spent my time to study the collection made by Japan Himalayan Expedition however now I have achieved my duty for examination so that I may now return again to my researching work on Desmids.

I should like to hear you the recent information of your country concerning the algal publications. Last year I learned the issue of "Wade, W.E.: A study of the taxonomy and ecology of Michigan Desmids. 623 p.p. Mich. State Coll. 1952" but I do not know whether it is book or microfilm and also it will be get to me or not. Do you know the "The Algae of Illinois issued by L.H. Tiffany and E. Britton. Will this book comprise many illustrations or descriptions on each species.

Yours very truly,

Minoru Hirano
Minoru Hirano

Department of Botany,
Faculty of Science,
University of Kyoto,
Kyoto, Japan.

May 1 1954

Dr. Minoru Hirano,
Kyoto, Japan.

Dear Dr. Hirano,

I was glad to get your letter of April 22nd, and to learn what you have been doing. Thank you also for the reprints of your papers on Plankton Desmids from Lake Biwa, and on Alpine Desmids from the Japanese Alps.

About a year ago I saw the book "Algae of Illinois", by Tiffany and Britton. As far as desmids are concerned it is completely useless to anyone except perhaps a raw beginner. This part of the book was written by Britton, of whom I know very little. Only 60 or 70 desmids are listed for the entire State of Illinois, as compared with the 527 reported by Irence-Marie for the region of Montreal, and with 145 that I found in a single collection from southern Mississippi (Prescott & Scott 1942). Even though ecologic conditions in Illinois may not be very favorable for desmids, I find it inconceivable that 60 or 70 forms is anywhere near the total quantity in the State, and it seems to me that the report is very incomplete, and that no effort has been made to find favorable desmid habitats. There are very few original illustrations, and these few are not very good. The majority of the figures have been copied from authors like W. & G. S. West, Krieger and others. Three drawings were even copied from Wolle, and if you have seen any of Wolle's works you know that his drawings are so poor that sometimes they are unrecognizable. One of Wolle's illustrations that was thus copied was of Staurastrum crenatum Bail., which has been reported only twice in more than a century. If anyone really found this peculiar desmid in Illinois why did he not make a new drawing of it? No habitats are given, and no ecologic information whatever.

The remainder of the book is by Tiffany, and deals with F.W. algae other than desmids, principally the filamentous genera like Oedogonium, etc. In view of Tiffany's very high reputation as a specialist in this line, I expect that this part of the book is very good, though I don't know enough about these other algae to express an opinion. I think you have Prescott's work, "Algae of the Western Great Lakes Area", and I should think this contains practically everything that Tiffany has listed for Illinois.

The book (?) by Wade I have not seen, and in fact your enquiry was the first time I have heard of it. Wade studied under Prescott, and I believe he now holds an associate professorship at Michigan State College. I am going to write and ask him to have the publisher send me a copy of the book, and after I have seen it I shall be glad to let you know about it.

Late last year I received from Brazil a valuable series of collections made in the Amazon region, on which I have done some work. Part of them were made from running water, and consequently contain few or no desmids, but the others are good, and a few are extremely rich, with many of the highly elaborated species of Staurastrum described by Grönblad in his work "De Algis Brasiliensibus", 1945. The strangest thing I have found is a new genus of desmids, differing from anything heretofore known because the two semicells are not alike. The enclosed photo will give you an idea of it. Grönblad has written it up, under the name "Scottia mira", in a paper to be published in Botaniska Notiser.

With my best regards, sincerely yours,

Aug 3 1953

Dear Dr. Hirano,

Many thanks for the reprint of your latest paper, Plankton Desmids from Lake Biwa I, and for the copy of the Bulletin of the Japanese Society of Phycology. This is the first time I have heard of this Society, and I suppose that it is a comparatively new one. The Bulletin is very attractively arranged and printed, especially for the first number. I expect that there are very few phycologists, except those in your country, who know the Japanese language, so it would be very desirable if an English summary could be added to the various papers; perhaps the editor may be able to do this when the journal becomes better established. Some scientific journals that are printed in languages that are not widely known, give such summaries; recently I received a reprint from Brazil, written in Portuguese, had summaries in English, French and German. I suppose that the majority of scientists of all nationalities are able to read one or other of these major languages.

From the scientific names of the algae I judge that most of the papers in this first issue of the Bulletin deal with marine (salt-water) forms, perhaps because there are more specialists on marine than on fresh-water algae. Prescott tells me that this is going to be a problem with the Phycological Society of America, and that the Directors of the Society are trying to arrange for a joint publication of papers on F.W. algae in the journal of some other Society, perhaps the limnologists. I hope that something like this can be worked out, because at present in this country there is no satisfactory journal for publication of papers on desmids, for instance. The membership of the American Microscopical Society is preponderantly interested in zoology rather than botany, no doubt because for many years the Presidents and Editors of the Society have been specialists on various forms of the micro-fauna. The last issue of the Trans. Am. Microsc. Soc. was entirely devoted to animals, with not a single word about plants, and so it was completely useless to me.

Some time ago you asked me to send you sketches of the Euastrum diplostauron that I found in North Australian material. I don't remember if I did send them, but I happened to run across the drawings yesterday, and copied them for you. The typical form, as you will note, differs somewhat from your drawing and also from Skuja's, and is more like Borge's original illustration. Particularly the shape of the apical lobe in vertical view differs from Skuja's figure. Kinar Teiling tells me that Skuja's drawings are all made freehand, without a camera lucida, which seems quite amazing, and I should think it might lead, occasionally, to exaggeration of some features. Indeed, I suspect that this is the case in some instances.

My friend Sachlan wrote me that he did not receive my letter with your address until after he left Kyoto and returned to Tokyo, and that he was afraid that he would not be able to make another visit to your city. By this time I expect that he is back in Java, but I hope that he was able to find an opportunity of meeting you.

With my best regards,

Sincerely yours,

- Some* No.1 Onne-numa 19/VIII 1947. It lies near Nemuro, nemuro peninsula, eastern end of Hokkaido; marsh between Nemuro-moor. latitude 43 40' N.
- ✓ No.2-3 Kiritappu 17/VIII 1947 It lies at the middle between Nemuro and Kushiro, coastal sea plain; high and low moor; in sphagnum bog.
- Some* No.4 Moseushi 10/VIII 1947 It lies at the northern end of Ishikari-plain, at the distance of about 35 k.m. west of Asahigawa, central Hokkaido.
- None* No.5 Shiraoi 10/VIII 1947 It lies coastal plain of Iburi province, at the distance of 60 k.m. from Sapporo. Phragmites swamp at the coast of Pacific.
- Some* No.6 Ko-numa in Oh-numa Park 18/VIII 1944 It lies near Hakodate, southwestern part of Hokkaido. Lake shore of Ko-numa; in Utricularia. *C. obsoletum* ad var. *sibiricum*
- Few* No.7 Naga-numa 17/V 1945 Marshy lake. It lies near Sendai, at the distance of 53 k.m. north from Sendai, Miyagi prefecture. latitude 38 41' N.
- V. Few* No.8 Numanodai 25/VI 1947 Pond. It lies at the 38 35' N., 40 k.m. apart from Yamagata, Yamagata pref.
- V. Few* No.9 Nan-ko 21/V 1945 Moor like swamp. It lies near Shirakawa, Fukushima pref., latitude 37 8' N. *C. obscurum* var.
- Some* No.10 Nogiwa-no kannon-ike 9/X 1946 In marsh. It lies at the northern slope of Mt. Nasu; about 900 m. above the sea. Fukushima pref. *Cornutum* / *E. anathophorum* &
- ✓ No.11 Ozegahara-moor 13/VIII 1938. Sphagnum bog, about 1420 m. above the sea. It lies at the northern part of Nikko National Park; latitude 36 55' N. *Other side*
- Few* No.12 Oze-numa 21/VIII 1938 It is mountain lake. It lies at the southern foot of Mt. Hiuchi (2346 m); about 1665 m above sea level. It lies at the northern part of Nikko National Park.
- V. Few* No.13 Mt. Naeba 24/VIII 1938. It lies at the summit of Mt. Naeba (2145 m) Alpine moor. 36 50' N.
- V. Few* No.14 Kagami-ike in Matsunoyama 6/VI 1946. It lies at the 37 1' N., about 35 k.m. east of Takada, Niigata pref.
- Few* No.15 Mt Akagi 24/V 1948 It lies at the crater basin of Mt. Akagi and is moor, about 1330 m. above the sea. *E. arnottianum*
- No.16-21 Shiga-koen It lies about 35 k.m. apart from Nagano, about 1400-1900 m. above the sea. No.16-19 were collected at Shijuhachi-ike. It is mountain moor, about 1900 m above the sea. No.20 Shibu-ike. It is about 1800 m above the sea and is dystrophic small lake. No.21 Kido-ike It is mountain lake, about 1640 m. above the sea, collected at the sphagnum shore.
- V. F.* No.22-23 Kirigamine It is a mountain an Yashimagahara is situated at about 1570 m above the sea, apart from 8 k.m. Lake Suwa. High moor and in bog.
- Fair* No.24 Daimon-pass Sphagnum moor, about 1400 m above the sea, and collected in moor stream. It lies 4 k.m. west of Kirigamine, Nagano pref. *E. concatum*
- No.25 Happe-one It lies at a ridge of Mt. Karamatsu (2696 m), about 2000 m above the sea, collected at the sphagnum bog. It is a part of Japanese Alps. *E. obscurum*
- ✓ No.27. Kotsutsumi-nishi-ike Marsh in Aichi prefecture, near Nagaya, about 20 k.m. east of Nagaya. *E. spinulosum*, *C. magnificum*.
- No.28-32 Hira-mountain at the west side of Lake Biwa. No.28-31 were collected at Yakumogahara-moor, about 900 m. above the sea and situated near the summit. No.32 were collected in Kojoro-ike. It is a mountain pond and shore in sphagnum moor. *28 Few, 29 Fair, 30 Few, 31 Some, 32 Netrium.*
- V. F.* No.33 Jodo-ike It is a marsh in Ise-plain and about 40 k.m. south of Nagaya.
- ✓ No.34-36 Fuse-ike. ike is mean the pond or marsh. in Japanese. It lies at the east side of Lake Biwa, at the distance of about 40 k.m. from Kyoto.
- No.37-41 Mizoroga-ike Dystrophic pond and situated at the northern part of Kyoto city. There is a large floating island in centre of pond. No.37 were collected at the sphagnum bog in floating island. I found there *Spinoclosterium*
- No.38-41 were collected at the shore. *37 Good, 38 Few (obscurum), 39 V, 40 Good.*
- No.42-43 Ariga-ike It is a marshy pond and lies near Mizoroga-ike, north part of Kyoto. *42 None, 43 V. F.*
- Few* No.44 Ikenokawauchi Dystrophic pond, lies near the city of Tsuruga, north of Lake Biwa., Shiga pref.
- V. F. ditium* No.45 Bogatsuru. Sphagnum moor in Mt. Kujū, a highest mountain of Kiushiu, central Kiushiu.

47. Some *Cionotum*
48 missing
49. VF

No. 47-49 Yabakei It is a famous valley. No. 47-48 Hirabaru moor. Moor is rare in Kiushiu. It seem to be a relic of moor at the time of colder climate in the past. No. 49 Mt. Hibiru and at the sphagnum moor.

50 VF
51 Some

No. 50, 51. Imuta-ike It is a crater lake and dystrophic, lies at the distance of 30 k.m. north of Kagoshima. At the margin.

No. 52 Near the shore of Lake Ikeda, near the end of south Kiushiu. latitude 31 15' N.

52 ~~Some~~ VF

Mr. Arthur M. Scott

2824 Dante St.,

New Orleans 18, La. Sept. 5, 1952.

Dear Mr. A.M. Scott,

Many thanks for your three parcels of various publications and your letter. I am very interested to hear your hypothesis from the letter that in bygone age Japan islands had probably connected to the Indonesian islands by land-bridge or anything manner. Some remarkable instances are already known in plant world. Podostemonaceae is widely distributed at the southern hemisphere and tropical Asia while some species belongs to this family are only found at the southern Kiushiu but not yet found at the Riukiu island and Formosa. Mitrastemonaceae was first found in Japan and now is distributed at the southern part of Kiushiu and Shikoku while after this discovery this plant was found in Formosa and Sumatra.

Euastrum australiense is my mistake as you pointed out. I had overlooked Skuja's large literature of Burma. My plant should be placed to *E. diplostauron* but my plant is coincided with Borge's original figure and is somewhat different from Skuja's figure, particularly in shape of apices. My plant possesses straight apex, not tricrenate one. Do your Australian *E. diplostauron* possess what the manner of apex (Borge or Skuja). It seems to me that my plant is a variety of Skuja's species.

The detail explanation of your countries in industrial stand-point gives me a more special interest than when I am looking the map of Phillip's hand atlas of the world. I am expected the publication of Florida Desmid and should like to get one if it appeared so that when it appeared please tell me the adress of its publisher.

Many European literatures are quite important for me to determine the Japanese Desmids and other freshwater algae. And the reprint of Oesterr. Ztschr. Bot. and Hungarian one are quite lack in our University library. The Dr. Messinkommer's paper is particularly interested in order to determine our desmids because in high mountain regions our species are fairly same to that of European ones especially middle European ones while in our library the publications of Swiss, Hungary, Austria, Czechoslovakia, Roumania etc., are very scanty. I always think that the species of the mountaineous region is partly settled by the central European literature and partly by the Siberian literature.

The modern limnology especially related to biology attract me very much. The works on Japanese limnology have been chiefly carried out in side of zoology by zoologists especially on zooplankton, botton fauna and lake productivity. The study of phytoplankton has not been carried out by botanist.

The general botanists are not possessed the peculiar interest to limnology but are gradually increased in number of the student.

I am prepared a short paper on planktonic desmids in Japan lakes and it will probably be appeared till at the end of late this year and will send you one if it appeared.

Yours very truly,
Minoru Hirano
Dept. of Botany,
Faculty of Science,
University of Kyoto,
Kyoto, Japan.

Digitized by Hunt Institute for Botanical Documentation

Aug 18 1952

Dr. Minoru Hirano,
Kyoto, Japan.

Dear Dr. Hirano,

I am very glad to receive your photograph; it makes me feel that I know you better, even though you are far away. It is somewhat surprising to learn that the binocular microscope is not often used in Japan, especially as your country makes some excellent optical instruments. Of course it is more expensive, but it is far superior to the monocular type; it seems to give a much clearer view, especially of the tiny details that are so important in the Desmidiaceae. Before I bought this binocular a couple of years ago, I expected to have some trouble in drawing on a horizontal surface with the inclined ocular tubes, but I have worked out a method that is quite easy, and much more convenient than drawing on an inclined surface.

Thanks also for sending me the copy of Hattori's work on the microbiology of Japanese water supplies. This is not just what I expected it to be, however, as there is very little reference in it to desmids. I am glad also to receive the copy of your new paper on New or Noteworthy Desmids from Japan, III. It is quite remarkable that you are finding so many of the "tropical" desmids in Japan, which has I believe, a temperate or even rather cold climate. Perhaps it may be accounted for on the supposition that in bygone ages there existed a land-bridge, either complete or nearly so, between the Indonesian Islands and Japan, by way of the Philippines and Ryukyu Islands. It is fairly certain that during Pleistocene times the sea-level was considerably lower than it is today, and that all the larger islands of the East Indies were united between themselves, and with the mainland of southeastern Asia, by a Great plateau now named the Sunda Shelf. Also New Guinea was joined to Australia by the Sahul Shelf, and the water-gap between the northwestern shore of Australia and the Island of ~~NEVER~~ Timor was much smaller than it is today. I assume that this is the reason that the desmid-flora of Arnhem Land in North Australia is so closely similar to that of Borneo, Java and Sumatra, and it is possible that a similar reason may account for your discovery of so many Indonesian desmids in Japan.

I am sorry I have to tell you that your name Mastrum australiense is not valid, because this little desmid was named by Skuja in 1949, in his paper Zur Süswasseralgoflora Russas, Nova Acta Regiae Societatis Scientiarum Upsaliensis, Ser. IV, Vol. 14, No. 5, P. 112, Pl. 24, Fig. 1. He gave it the name M. diplostauron. This paper of Skuja's is a large and very valuable one, which you ought to try to get. Perhaps if your University wrote to the Königl. Societet der Wissenschaften, Uppsala, Sweden, you might be able to get a copy. Otherwise it is for sale by the A.-B. L. Norblads Bokhandel, in Uppsala, but I do not know the price. The author's address is: Prof. H. Skuja, Botaniska Institutet, Uppsala, Sweden.

I have found M. diplostauron in North Australian material, and also a distinct variety that I proposed to name var. australiense, but to avoid confusion with your name I am going to change the name of my variety to var. virgaliense, from the name of the locality where it was found.

The States of Florida, Mississippi, and Louisiana are practically flat, the highest elevation in any of them is not more than 100 to 150 metres above sea-level. About 50% of the area of Louisiana is under cultivation; sugar cane, sweet potatoes, and rice in the southern part; cotton and corn (maize) in the north. The remainder was originally largely covered with forests, cypress (*Taxodium*) and long-leaf pine [*Pinus palustris*] in the south, and hardwoods such as oak, etc., in the north.

But a large part of these forests has been cut down for timber, particularly during the two world wars. The soil in the regions devoted to sugar, sweet potatoes and rice is all alluvial, and not very well suited for desmids. My collections there have generally been very poor, but there are two localities where the soil is sandy and acid, and desmids are abundant. In the northern part of Louisiana and Mississippi the land surface is somewhat hilly, but there are no peat-bogs nor moors. The water in the small lakes and swamps is frequently eutrophic, and good desmid catches are a matter of chance and good luck.

In Mississippi the only really good desmid region is a narrow strip about 20 miles wide along the shore of the Gulf of Mexico, the coastal plain. Elsewhere in the State I have obtained occasional good collections, but again it is a matter of luck.

Florida is truly a desmid heaven, as many other workers have found. Large areas are covered by swamps, with highly acid water, and plenty of aquatic plants. Even the roadside ditches, only a few feet wide and with six inches to two or three feet of water, contain such a profusion of desmids and such a bewildering variety that I hardly know where to start making drawings of them. I expect that I have 25 or more new species, and a hundred or more new varieties of desmids from this State alone. Rolf Grönblad is now working up these desmids, and some of them are giving him plenty of trouble in deciding where to assign them. Just now I have about two hundred of his drawings of these Florida specimens, which he sent me in order that I may comment on them, and offer my opinion as to their identity. We hope to publish a paper on some of these new and rare species late this year or early in 1953.

In Florida the principal industry is the growing of citrus fruits, oranges, grapefruit, and limes. There is some sugar grown near Lake Okechobee, and in the extreme southern tip of the State, south of Miami, the climate is truly sub-tropical and they grow small quantities of coconuts, papayas, avocados, guavas, mangoes, and even mangosteens though I have never seen the latter. But in this sub-tropical region the soil is derived from limestone (coral rock) so desmids are scarce. But I have made some interesting finds there, such as the very rare Microsteris unbulboschwarzensis var. ampulleca, previously known only from Australia, New Zealand and Indonesia.

This year I have not made any collecting trips. Money is not so plentiful as it was last year, because of poor business conditions, and these trips to Florida are expensive; Miami is about 1200 miles from New Orleans. Furthermore, in spite of the richness of the Florida desmid-flora, I seem to have more or less exhausted the collecting possibilities. Last Christmas I went there, and brought back 30 or 40 jars of material, nearly all from places where I had not collected before, but in all the millions of desmids in these jars, I found only two or three that I had not seen before.

But I have plenty of material on hand to keep me busy for several years, from Indonesia, Australia, Peru and Panama.

With my best regards and good wishes,

Yours sincerely,

Mr. Arthur M. Scott
2824 Dante St.,
New Orleans 18, La.,
U.S.A. June 24, 1952.

Dear Mr. A. M. Scott

This is a little late to be answering your kind letter of Feb. 11, 1952 and also receipt of many interesting and valuable publications (including Dr. Bourrelly's ones) and Boletín Soc. Broteriana 1951 from you. I am interesting to your laboratorial sketches that pictured to myself by your photographs. The binocular microscope is not used in general in our country.

Your information that the waters in which Nymphaea and Brassenia grows are favourable condition for Desmids, is interesting for me because the fact is same in our country. Nymphaea and Brassenia are often growing together each other. Brassenia Schreberi is growing in pond or marshes of older formation and in other words, Brassenia is a indicator of the waters of old formation and this plant does not grow in artificial reservoirs or dams. It will be due to the fact that new ponds or reservoirs are destitute of humic-acid. The paddy-field is destitute of this humus and the water is eutrophic in nature and does not found this plant. In Japan the paddy-field is very scanty in Desmids and the habitat is destroyed and removed into crop-field in winter while the swamps in which Brassenia grows are keeping in natural condition however in Hokkaido the paddy-field is fairly rich in Desmids. This fact will probably be due to the richness of humus because the paddy-field was removed from moor. The water in which Brassenia and Nymphaea are growing, are in natural condition and fairly rich in Desmids. Utricularia-species are growing in the same condition and very rich in Desmids. I useally makes a collection to the waters in which Utricularia is growing. Probably Utricularia, Brassenia and Nymphaea will be fond of same condition of water. But the latter two species are not common in every places while Utricularia is prevailed in all places of our country. I think that Utricularia is a convenient indicator for researching to Desmids or in order to find the waters favourable to Desmids. Are your countries such as the plain of Florida, Mississippi and Louisiana in natural conditions or are in the cultivated fields. Lysichiton camtschatense grows in northern Japan and is confined in mountain places in middle ones and is seldom in western ones. The habitat in which this plant is growing seems for me to be favourable in Desmids.

I thank you very much for your sending of Dr. Bourrelly's recent reprints. It will certainly be served for me in the near future. I have been spent my time to research the freshwater algae of Kitayama-valley past half a year and green filamentous algae was difficult to identify for me for the lack of suitable literature. My hunting of Desmids is ceased since last year. though it is sorrowly, I cannot make a trip for the lack of money. The Government does not give me travelling expenses. I am hoping I may return to the Desmids as soon as possible. Up to that time I am extended my research to the wide field of algae.

Recently I obtained the old copy of Dr.Hattori's paper which has been requested from you and am sending you this copy in a ordinary mail and together with my short paper.

Yours very truly

Minoru Hirano

Department of Botany,
Faculty of Science,
University of Kyoto,
Kyoto, Japan.

Digitized by Hunt Institute for Botanical Documentation

Mr. Arthur M. Scott
2824 Dante St.,
New Orleans 18, La.,
U.S.A.

Feb. 13, 1952.

Dear Mr. A.M. Scott

This morning I was very pleased indeed to receive a parcel from you, that was so much looking forward to the publishing of the Transeau's 'The Zygnemataceae, a monograph'. The filamentous Conjugatae are not known as yet in spite of their most popular algae in our country and many figures and detail descriptions in this book are very useful for me to determine the specimens of our country. I thank you very much for your sending.

I have received another parcels three times from you, containing the back numbers of Transaction of the American Microscopical Society and some of these were the useful information however some ones, especially the last ones, could not understand for me why you sent it to me because they do not include any algal paper.

Last month (on the middle of January) I was surprised by a visit from Prof. G.M. Smith (Stanford University). He came to our country on the way of his Far East sightseeing tour and shortly observed the herbarium of our Botanical Department. The specimens of marine algae in the herbarium are very poor and scanty and this was a sorry for his anticipation. He was delighted himself on my possession of his Cryptogamic Botany in my room.

Very sincerely yours,

Minoru Hirano
Minoru Hirano

Department of Botany,
Faculty of Science,
University of Kyoto,
Kyoto, Japan.

Feb 11 1952

Dear Dr. Minoru Hirano,

Many thanks for send me the two books on The History of Kyoto, and the Landscape of the Oze-District. These took an unusual long time in transit, having arrived only a few days ago. I like particularly the one with the photos of the Oze-District. The pictures are excellent, and I think they must have been taken by a botanist, or under his direction, because they show such clear and easily identifiable reproductions of many plants and flowers. I think that I have told you that I am not a botanist, and know practically nothing of that science outside of desmids; nevertheless I can recognize many of the plants. The one of the cover, *Lysichiton camtschaticense*, occurs in Western United States, where it is known as the 'skunk cabbage'. A similar plant, probably a related species, occurs rather seldom in Louisiana, Mississippi, and Florida, and I find that the waters in which it grows contain very few desmids. Is that your experience in Japan? This is also the case, generally speaking, in waters in which *Nuphar advena* grows, though there seem to be exceptions in southern Florida. On the other hand, *Nymphaea alba* and *Brasenia Schreberi* are indicators of water favorable for desmids, and I seldom fail to obtain a good collection from habitats in which these two plants grow.

I sent a copy of your letter of Dec. 19th to Prof. Prescott, and quote below a part of his reply regarding *Closterium cuspidatum*:

"Inasmuch as the majority of students and specialists are in favor of retaining this *Closterium*-like plant in *Closterium*, it would be only sensible for the minority to fall in line, unless one were thoroughly convinced that the plant does stand for an evolved form of sufficient divergency to make a separating name justified. For the sake of naming, one is as good as another as long as we all know what is meant, of course. But one is entitled to their own philosophy and if that varies from another view, then one should be true to his convictions, and in this case express his philosophy as to the relationship of the desmid to others by using an appropriate name. I am inclined to agree with Hirano, that the presence of a spine in this plant means something more than does the presence or absence of a spine among *Staurastrum* species".

Dr. Gilbert M. Smith wrote me that his omission of Bailey's name for the plant, in the 2nd edition of his *Freshwater Algae of the U.S.*, was due to ignorance, but that he thinks Bernard's name is the correct one. Apparently he did not know of your new combination, *Spinoclosterium cuspidatum* (Baill.) Hirano.

On the other hand, Dr. Roy M. Whelden wrote me that he is inclined to agree with me, having been at least partially convinced by my arguments, that Bailey's name should stand.

Prescott further states that he understands that Dr. Elmer O. Hughes, University of Oklahoma, is going to publish a paper on Canadian desmids, in which he will describe the same plant under Bailey's name. I have had some correspondence with Dr. Hughes, but did not know that he had seen the plant.

It is one of the characteristics of my mentality that I can usually understand the other man's point of view, and in this case I can readily appreciate the fact that you and Prescott sincerely believe that the possession of spines is a character sufficient to justify placing the plant in a separate genus. That being the case, it is only right that you and he should uphold your beliefs by using the name that you think is correct. Also I can easily understand your arguments about

the various attempts that have been made to split up the large genera *Cosmarium* and *Staurostrum* into smaller groups. But these attempts have not been successful and are not recognized today. I was greatly surprised to see that Prescott used the names *Dysphinctium conatum* and *Dys. pseudoconatum*, in his 1951 paper on Panama; nobody else uses the name *Dysphinctium* any more.

I ought to tell you that the new genus *Spinocosmarium* was created by Prescott alone, not by me. I had written him previously that I thought the plant was wrongly assigned to *Arthrodesmus*, and that I thought it should be transferred to *Xanthidium*. Our 1942 paper was written mostly by Prescott; I only wrote the introductory paragraphs, and I did not see the finished paper until after it was printed, when I was greatly astonished to find that he had created a new genus for it. I did not like it, but there was nothing I could do about it. The discovery of the three new varieties described in the paper by Scott & Prescott 1949 confirms my opinion that the plant should be assigned to *Xanthidium*, and both Grénblad and Krieger agree with this.

So the matter of *Glosterium cuspidatum* or *Spinoclosterium* will have to remain in abeyance. You and Prescott will refer to the plant as *Sp. cuspidatum* (Baill.) Hirano, while others will use Bailey's name. Perhaps the question will be settled in another fifty years!

By this time I expect you will have received the new book on the *Oedogoniaceae* which was sent to you by the Ohio State University a few weeks ago. I hope that it will prove very useful to you.

With my best regards,

Sincerely yours,

Nov 11 1951

Dr. Minoru Hirano,
University of Kyoto, Japan.

Dear Dr. Hirano,

I hope you will accept my sincere apologies for not having answered sooner your highly interesting letter. It was extremely kind of you to make the special collections of Closterium cuspidatum for the purpose of ascertaining whether the median suture is visible. The fact that you were unable to find it in either living or preserved specimens confirms my own observations. I sent a photograph of your beautiful drawing to Grönblad, but have not heard from him since I sent it.

There is a difference of opinion as to the correct name of this desmid. Prof. Prescott thinks that it should be known as Spinoclosterium curvatum Bernard (1909), while Grönblad and Irénée-Marie are strongly of the opinion that Bailey's name as published by Ralfs (1848) should stand. It is, of course, more or less a matter of personal opinion whether the apical spines constitute a generic character of sufficient value to warrant the creation of a new genus. In an effort to get the matter cleared up I have written a short account of the history of the plant, and my arguments in favor of retaining Bailey's name. A copy of this paper is enclosed, and after you have read it and considered the matter, I should be greatly obliged if you will tell me which name you think is the correct one.

I sent copies of this paper to Gilbert M. Smith, who lists the desmid as Spinoclosterium curvatum in the 2nd. edition of his book "Freshwater Algae of the U.S.", giving Prescott's name "Closteroides spinosus" as synonym, but not mentioning either Bailey or Ralfs. I am just in receipt of his reply, saying that the omission of Bailey's name was due to his unawareness that the desmid had been published by Ralfs. He further says that Bailey's specific name must stand, and that the plant should be named Spinoclosterium cuspidatum (Baill.) comb. nov. This implies, though he does not say so, that he thinks the spines do justify a new genus. But for my part I cannot see much sense in creating a new genus to receive one plant, which has all the other characters of Closterium.

Also I sent a copy of the paper to Roy. M. Whelden, who has also collected this plant, and asked for his ideas on the subject, but have not yet heard from him.

Tiffany's book on the Oedogoniaceae has not yet been published; I do not know the reason for the long delay, but my order is on file and it will be sent to me as soon as it appears. I have sent you a few copies of microscopical and botanical journals; they do not contain anything of special interest on algae, but they may be of some interest to you or your colleagues.

With my best regards,

Sincerely yours,

Mr. Arthur M. Scott
2324 Dante St.,
New Orleans 18, La.

July 13, 1951

Dear Mr. A.M. Scott

I am glad to send you this letter in replying to your letter of June 9, 1951. Since receiving your letter I have attempted to settle your problems but it was impossible for me to ascertain the terminal vacuole and gypsum crystal in my preserved materials from some places of Kansai-district so that I wanted to settle the problem in a living material but at that time our country was under a rainy season and I could not go to those places so that I delayed the answer until up to the present. Fortunately I could obtain this rare species in a living condition from Fuse-pond, Ohmi-province (Shiga-prefecture).

The terminal vacuoles and its gypsum crystals are well and distinctly visible as well as in many species of Closterium and I counted about 16-20 small crystals in a terminal vacuole and they are moving in a same manner as in Closterium species. In living specimens a number of minute or small oil-drops are visible and they are become large in size when they are stained by Sudan III and changed to yellow or orange in colour. Probably by shrinking of chloroplast such a appearance ~~was seen~~ had appeared. The pyrenoids are not seen in a fresh material but are visible about 25 in staining.

I could not see the median suture in any specimens (in living specimens and in preserved ones).

The measurements of this species (Spinoclosterium) are as follows:

From Fuse-pond, Shiga pref.	Length 126-133.3-140 μ Breadth 42-43-53.8 μ Length of spine 17.2 μ
From Mizoroga-ike, Kyoto. only one specimen seen	Length 126 μ Breadth 44.8 μ Length of spine 14 μ
From Ishigaki-ike, Mie pref.	Length 134.4 μ Breadth 44.8 μ Length of spine 12.6 μ
From Shizukari, Hokkaido only one specimen seen	Length 133.3 μ Breadth 47.3 μ Length of spine 17.2 μ

You informed me that you are not fully healthy. The microscopical work needs the vast energy and in healthy state it do not feel us but in bad state it feels us severely. I am wishing you that you take good care of yourself and return to the microscopical works quickly. I have received some papers from Dr. Rolf Gronblad, though it was very delayed to inform you. I thank you very much for your best regards and also for the Transeau's publications.

Very truly yours,

M. Hirano
Minoru Hirano

Mr. Arthur M Scott
2824 Dante St.,
New Orleans 18, La.

April 19, 1950.

Dear Dr. Arthur M. Scott

By ordinary mail of April 15 I sent directly to Dr. W.Krieger a separate parcel of my reprints with a feeling of unrest because I am not certain whether parcel will safely arrive him until he communicate me four months hence. The Post Office in our country does not receive the parcel to the eastern zone of Germany therefore I mailed him simply in address of Berlin, Germany. I thank you very much for your best regard of the letter of April 8. If the parcel did not arrived him I should like request you again.

I sent to Dr. Rolf Grönblad my reprint in January and at the beginning of April received ^{from} him the brief letter of air mail that it arrived him March 22 but do not yet received his copy. If he sent me the reprint it will probably arrive at the end of May or at the beginning of June because it takes two or three months to arrive by ordinary mail from the Europe.

From your letter of Dec. 15, 1950 I understood that you were sending me a Transeau's Monograph of the Zygnemataceae and since then I have been awaiting the arrival of the parcel from the Ohio State University Press but it has not come yet. I am sorry to tell you such a communication.

Recently I received from Prof. Jules Brunel some copy of his reprints and Bibliotheca Desmidiacearum and found there some photograph of famous American Phycologists for instance F.Wolle, W.H.Harvey, W.G.Farllow, W.A.Setchell, F.S.Collins, W.R.Taylor, G.M.Smith but I feel lonely absence of Tiffany, Transeau, Prescott, Allen (he contributed to the Japanese Characeae).

Yours very truly,

Minoru Hirano
Minoru Hirano

Department of Botany,
Faculty of Science,
University of Kyoto,
Kyoto, Japan.

Sincerely yours,

June 9 1951

Dear Dr. Hirano,

I received your letter of April 19th, and must apologize for not having answered it sooner. But I have been ill for the last couple of months, and though I have not pretty well recovered, the illness has left me in a run-down and tired condition, so that I do not seem to have enough energy or ambition to do any work, even on my beloved desmids.

I wrote to the Ohio University Press about the book of Transeau's, "Monograph of the Zygnemataceae", and they replied that it has not yet been published; however, my order is on file, and as soon as it appears a copy will be sent to you.

In one of your letters you mentioned that you had found Closterium spincum Bell. (Spinoclosterium Bern.) in Japan. Recently Dr. Grönbléd has asked me whether this plant has a suture across the center of the cell, such as is shown and described by Prescott. My drawings of this plant from Florida and also from North Australia do not show such a suture, and the plant is so rare that although I have spent several hours in searching my collections, I cannot find another specimen. If you can find examples in your collections, I should be very much obliged if you would send me a sketch with measurements, showing particularly whether your specimens have such a suture, and also, if possible, whether there is a terminal vacuole containing crystals of calcium sulphate, as is usually the case with other species of Closterium. Prescott says that there is no such vacuole. Of course, it may not be possible to determine this from preserved material, though sometimes the crystals are visible.

Recently I received a copy of Dr. C. M. Smith's new book, "Manual of Phycology", but was very much disappointed in it. In this comparatively small book he and a number of specialists have attempted to cover the whole field of algology, both fresh-water and marine, with the result that everything is so much compressed and condensed that it was of no value whatever to me, and I sent the book to a friend in Australia who has specialized on marine algae. Desmids are barely mentioned in the book, and there are only a few sketchy illustrations of them, of very small value. I do not think it would be of much use to you.

The second edition of Smith's "Freshwater Algae of the United States" is pretty much the same as the first edition, so far as desmids are concerned, with the same illustrations. There are a number of changes and additions in the other sections of the book, but these are of little value to me, since my only interest is in desmids. I am sorry that I paid \$10.00 for the book.

With my best regards and wishes,

Sincerely yours,

Minoru Hirano
Department of Botany,
Faculty of Science,
University of Kyoto,
Kyoto, Japan.

AIR LETTER



PAR AVION

航空

Mr. Arthur M. Scott
2824 Dante St.,
New Orleans 18, La.,
U. S. A.

この中には何物も封入できません

Digitized by Hunt Institute for Botanical Documentation

折込線

折込線

Mr. Arthur M. Scott
2824 Dante St.,
New Orleans 18, La.

Feb. 22, 1951

Dear Mr. A.M.Scott

Thank you very much for your sending of Sampaio's "Desmicias Portuguesas". I have just now received it. Though I am poor in French the beautiful and good drawing on this book is very much useful to me.

I am now occupying to prepare some of the papers on plankton-desmids. In lakes of Japan Desmid-plankton is very poor in number and there is only one or two species in each lake and the species found there are generally cosmopolitan.

Another paper on distribution of Desmids in Oze-district will probably be published till this summer since it was accepted by the Limnological Society of Japan and I will send you it if it appeared.

Yours very truly,

M. Hirano

M. Hirano

Department of Botany,
Faculty of Science,
University of Kyoto,
Kyoto, Japan.

April 8 1951

Dear Dr. Hirano,

From your letter of Jan 24th I understood that you were sending me a package of your reprints that you wished me to send to Dr. Krieger, and since then I have been awaiting the arrival of the package, but it has not come.

Perhaps I misunderstood your letter, and perhaps you were simply enquiring if I were willing to forward your reprints to Dr. Krieger. If this is the case, please be assured that I shall be very glad to do so.

I have received all six of the reprints which you sent me for my own use.

This winter I have done very little work on my desmids, because of illness, and also because of the very cold weather. Even though New Orleans is supposed to have a subtropical climate, occasionally we get some very cold weather, and this winter was the coldest we have experienced since 1924. It is only now beginning to get warm again.

Two weeks ago my wife and I made an automobile trip to Florida, which is a desmid paradise. But though I obtained some very rich collections, so far I have found only one new desmid, so it appears that I have collected practically all the desmids that grow in the southeastern part of this country.

Some months ago I asked Dr. Grunblad to send you reprints of his smaller papers. Did you receive them?

Sincerely yours,

Mr. A.M.Scott
2824 Dante St.,
New Orleans 18, La.

Jan. 24, 1951

Dear Mr. A.M.Scott

I have received your letter with sincere thanks and great pleasure that one is the information on your sending of Sampaio's *Desmicias Portuguesas* and one is the information on Smith's freshwater algae of the United States.

The Sampaio's *Desmicias Portuguesas* is the best present for me since I have not possessed this publication. Since I have not possessed the West's monograph his publication will be of use and will relieve the inconvenience for the identification. I am looking forward to the pleasure of receiving of your sending.

I have already possessed the Smith's *Freshwater Algae of the United States*. This book is a good work and I am setting a high value upon this book together with the West and Fritsch's *Treatise on the British Freshwater Algae* but I am hoping to you the discontinual of sending this book for duplication. I am glad that my files are gradually becoming completeness.

The sending of my reprints to Dr. W.Krieger is not yet succeed since the Post Office in our countries is not yet treated the letter and parcel to the eastern zone of Germany and the possibility of sending will not realize near future. Do you forward the letter and parcel of reprint to the Dr. W.Krieger. My reprints to Dr. W.Krieger are the following:

1. The *Desmids-florula of the Oze-district I-III*.
2. On some so-called southern elements of *Desmids* in Kansai, middle Japan.
3. Some new or noteworthy *Desmids* from Japan I-II.
4. Further note on some so-called southern *Desmids* from Kansai, middle Japan. (in Japanese)
5. *Desmidiaceae novae Japonicae I*.
6. *Desmids* collected in moor of Kyushu, Japan.

Do you have my all reprints and I have not remained on my memory whether all the reprints have been sent you or not and if you have not any of my reprints please inform me, I will send you them.

Yours very truly,

Minoru Hirano
Minoru Hirano

Department of Botany,
Faculty of Science,
University of Kyoto,
Kyoto, Japan.

Jan 6 1951

Dr. Minoru Hirano,
Dept. of Botany, Faculty of Science,
University of Kyoto,
Kyoto, Japan.

Dear Dr. Hirano,

The volume of the Bull. Bio-Geographical Society of Japan, containing Okada's paper on the Fresh-water Algae of Botel Tobago, has just arrived. Many thanks for sending me this valuable book.

By this mail I am sending you a copy of Sampaio's "Desmidiées Portugaises", of which I happen to possess two copies. This is a large and ambitious work, but unfortunately not of very great value, since almost all of the desmids are well-known European and cosmopolitan forms. Though I never learned the Portuguese language, I found that I could read the book without too much trouble, with the help of a dictionary, through my knowledge of French, and a smattering of Spanish. Portuguese seems to me to be more like French than Spanish.

Do you have G. M. Smith's "Freshwater Algae of the United States"? This is a good book, the only one that attempts to treat all the algae of this country. A second edition has just been published which I intend to buy, and if you do not own the first edition I shall gladly send it to you.

Lately I have done no collecting, nor much examination of material, since I have been working on three papers for publication. One of them has just been accepted by Trans. Am. Micros. Soc., and I hope will be printed this year. The other two are nearly complete, and soon I can get back to my microscope and drawing table.

With my kind regards,

Yours sincerely,

Dec 15 1950

Dear Dr. Hirano,

Many thanks for your airmail letter of Dec 4th, and for the photo-reprints of Ushiyama's paper on Rotifers in Lake Suwa and Desmids in Yashimagi-ike.

Also I received some time ago the bound volume of the Journal of the Imperial Fishery Institute containing Okada's Preliminary Notes on the Desmid-flora of the Kurile Islands, and his later paper containing the complete list and plates of the same. My best thanks for them.

I have ordered Transeau's Monograph of the Zygnemataceae, and you will receive it direct from the Ohio State University Press.

For the last year I have been corresponding with Dr. W. Krieger, and have sent him copies of my papers, and have received reprints from him. His latest one was published this year, and deals with desmids from the mountains of southeastern Brazil (Sao Paulo). I am sure he would be glad to have copies of your papers, and would exchange with you. His address is:

Dr. W. Krieger,
Hubertusstr. 19a
Hohen Neuendorf b. Berlin.
Germany. Eastern Zone.

At present he is working on the next installment of his monograph on desmids, which will treat the genus *Cosmarium*. I have sent him a number of my collections containing *Cosmaria* that are found only in the United States, so that he may be able to draw original illustrations for his work, instead of having to rely on those by other authors. As soon as I get time I shall prepare another box for him, and shall include some of your samples.

Sorry to hear that Dr. Rolf Grönblad has not yet sent you his papers; I am writing him again tomorrow, and shall remind him. He is a rather poor correspondent, and frequently forgets or omits to answer questions. He is the one who first called my attention to the fact that *Spinoclosterium* is shown and described in Ralfs, and that it was named *Closterium cuspidatum* by Prof. Bailey. It occurs in three of my collections from southern U.S., and also has been found by Whelden and Prescott in northeastern U.S., and by Irene-Marie in Canada. Also I have seen a few specimens from North Australia. Since these modern specimens do not differ appreciably from Bailey's, his 100-year old name must stand.

I have just received a paper on Fresh-water Algae of the Maritime Provinces, by Dr. Elwyn O. Hughes, Dept. of Plant Sciences, University of Oklahoma, Norman, Okla. Probably he would exchange with you.

Another new paper is "O Wateznicach Kopalnich z Roztok kolo Jesla. I". (De Desmidiaceis fossilibus quae in Roztoki ad Jesla inventae sunt), by Prof. Jadwiga Woloszyńska, Krupnicza 16, parterre, Institut Botanique, Krakow, Poland. This is written in Polish which I cannot understand at all, but there is a very short resume in English. However, it contains nearly 300 photomicrographs of fossil desmids, mostly *Cosmaria*, that are excellent, and many drawings.

Sincerely yours,

Mr. Arthur M. Scott
2824 Dante St.,
New Orleans 18, La.

Dec. 4, 1950

Dear Mr. A.M. Scott

I have received your air-letter of Nov. 25 yesterday and am glad to hear the arrival of literature and samples except some ones. Thank you very much for the letter and for your recent paper "New varieties of *St. ophiura*". I may again send you same samples which were lost, so please tell me the number of tubes.

I wish to hear that if you have received Okada's "*Desmidiflora* of the northern Kurile Islands in Journal of the Imperial Fishery Institute", I sent in Sept. 18 and if it does not get to you please inform me. I will send again.

I approve of your plan that you distribute my samples to the foreign desmidiologists. Please send freely samples to such gentlemen. I am interesting to hear that you pointed out the name of Dr. Krieger. I am preparing to send him some of my reprints but until now I have hesitated to send him for the reason that he is in russian zone. Are you communicating with him at present and would it be possible for me to communicate him. I have not succeed to communicate or exchange reprints for Dr. R. Grönblad but am earnest to hear his opinion of *Spinoclosterium* and also to exchange reprints. I have again found this species for once in material of the collection at Hokkaido this summer (in Shizukari moor).

Do you know the issue of the Monograph of the Zygnemataceae by Prof. Transeau in Ohio University and the price of this book.

I have the pleasure to send you Okada's Freshwater Algae of Botel Tobago Island or Kotosho, Formosa, which I have found at Tokyo in staying for the annual meeting of Japanese Botanical Society some time ago.

The enclosed is the reprints of Ushiyama's Rotifer in Lake Suwa and Desmids in Yashimaga-ike. Some species figured in plate are not decided but I think as follows: Fig.1 Pl. Kayei, Fig.2 Pl. nodosum, Fig.20 *C. quadrifarium* (probably), Fig. 21 *C. globosum* (probably), Fig.5 *St. vestitum*, Fig.13 *Desm. coarctatum*, Fig.14 *G. moniliformis*, Fig.15 *Hyal. dissiliens v.tatrica*

With kind regards and hoping to receive your further information on algae, I remain

Truely yours

M. Hirano
M. Hirano

Department of Botany,
Faculty of Science,
University of Kyoto,
Kyoto, Japan.

Mr. Arthur M. Scott
2824 Dante St.
New Orleans 18, La

Sept. 11, 1950

Dear Mr. A.M.Scott

It was a great pleasure for me to receive the European and American papers such as Grönblad (Two papers), Jörgesen, Olsen, and Tilden, you kindly sent to me and after a month of my trip I have also the same pleasure of receiving the following papers.

Kol: The snow and ice algae of Alaska
Blumea Suppl. II. including Frémy: Cyanophycées de l'Inde meridionale.

I have at present received your second box of bottles containing the samples of freshwater algae. All the bottles came quite safe. For all of these I thank you very much.

I have now no time to look in full through a microscope because I have to write the report in regard to the result of last trip but it will soon become possible to seeing them and will bring me a good profit.

I wrote you in last letter the possibility of obtainment on Hattori's paper and Higashi's List of Japanese Freshwater Algae in Nippon Sorui Meiri but these had already sold when I ordered. These books are now rare book. Rare book as these are, these appear at times in a second-hand book seller's. I will take them and send you if it appeared. I am now sending you under separate covers the following.

Fujisawa: Desmid in Ina District in Journ. Jap. Bot. X:7.

Okada, Y: Preliminary Notes on Desmids in the Northern Kurile Islands in Bull. Biogeogr. Soc. Jap. IV.

and will soon send you the "Okada's Notes on Japanese Desmids with special reference to the newly found I-IV in Bot. Mag. 50" that are now ordering from the Botanical Society of Japan. The Okada's paper of 1932 (Botel Tobago) was published from the Biogeographical Society of Japan but the society was heavy affected by the war and the stock of back number was lost by the fire. I am now ordering from the second-book seller's of Tokyo to obtain me. The book of Kawamura's Freshwater Biology vol.I (vol.II is ecology and limnology) is very rare and quite introductory for the student of Freshwater Biology and its contents consist of systematic outline of all the aquatic plants and animals and its standard is almost equal in comparison with the book of Ward and Whipple's Freshwater Biology. Some figures of Desmids are given but its name are only partly given. The book is good as a classical literature for the Japanese limnologist and aquatic biologist but not good for the actual workers of the world and moreover is in Japanese language.

I returned from Hokkaido at the beginning of September and now am arranging my collection. Some of them will soon send you but I have no time to select the collections which samples are suitable you to send. My chief purpose for this trip is to clear up the general distribution of Desmid in plain coast of the Sea of Okhotsk and the plain of Ishikari province. These areas are remained in state of uncultivated moor especially in northern part of Okhotsk sea side. There is a number of bogs full with water, coloured in chocolate. The samples to you are collected in these water.

List of samples.

- No.51, 53 Shizukari-moor: at the moor swamps. It lies at the coastal plain of the Pacific side, prov. Iburi.
No.52 Horomui-moor: It lies near Sapporo, Ishikari-plain, prov. Ishikari.
No.54 Noppolo: It lies at the eastern direction of Sapporo, apart from Sapporo about 40 kilometres.
No.55 Sarufutsu: It lies at the plain of sea coast of Okhotsk, northern part of Hokkaido, prov. Kitami. at the moor swamp.
No.56 Tohcasa-numa: Marsh, lying at the northern part of Tomakomai, south-western part of Hokkaido, prov. Iburi.
No.57 Ponto, the auxiliary pond of Lake Tonbetsu: Plankton-sample. It lies at the plain of sea coast of the Okhotsk, prov. Kitami, northern Hokkaido.
No.58 Koetoi-konuma (or Shupun konuma) : Pond near Watsukanai, northern end of Hokkaido, prov. Kitami. Plankton sample.
No.59 Moseushi: Marsh at the Moseushi, Ishikari-plain.
No.60 Minenobu: Marsh near Iwamidzawa, Ishikari-plain, prov. Ishikari.
No.61 Ufutsu: Marsh at the plain of sea coast of the Pacific, east of Tomakomai, prov. Iburi.

No.25 Happone : A part of Japanese Alps.

Yours very truly,

Minoru Hirano
Minoru Hirano

Nov 25 1950

Dr. Minoru Hirano,
Kyoto, Japan.

Dear Dr. Hirano,

I have received all of the desmid literature that you have sent me, including your own papers, and those by Fujisawa, and Okada's Preliminary Notes, and the four papers by Okada in the Botanical Magazine. Please accept my best thanks for them. However, please do not go to the trouble and expense of obtaining Kewmure's Freshwater Biology, because that would not be of much use to me since you say that it does not give complete identifications of the desmids, and further because it is in the Japanese language of which I know nothing at all. Your comparison of this book with Ward & Whipple's work is interesting. I suppose you have noticed that the section of this work which deals with desmids is very poor, and not up to the standard of the other portions. The illustrations of desmids are very bad and in some instances misleading; the descriptions are poor, and some of the genera mentioned are no longer recognized. When I was in New York last winter I spoke to the publishers of Ward & Whipple and told them that when they issued a new edition (which they are contemplating) they should have the section on freshwater algae re-written and brought up to date, and they promised to give consideration to this.

Also I have received the new lot of samples from Hokkaido, but am sorry to say that some of the tubes were broken. In each case, strange to say, the circular bottom of the glass tube was broken out. I think this was due to the fact that the tin can in which they were packed was not strong enough; in fact one side of the can was dented in. However, I was able to save a small quantity of material from some of the broken tubes.

The material in these collections is very interesting, even though a majority of the desmids are well-known and cosmopolitan species. In fact I have noticed that this is the case in all of the Japanese literature that you have sent. But some of your gatherings are so much like some of my own from southern U.S.A. that in one case the thought occurred to me that perhaps I had picked up one of my own bottles by mistake instead of one of yours. In your No. 51 from Shizukeri I wrote down the following easily recognized species, all of which are common in my own samples: *Staurastrum Cerastes*, *inspicuum*, *brachistum*, *longibrachistum* var., *Arthrodesmus incus*, *Cosmarium quadrifarium*, *contractum*, *Gymnozyga moniliformis*, etc. But then I came to *Euastrum praemorsum*, which does not occur in this country, and is, so far as I know, a strictly tropical species that I have found in abundance in collections from North Australia and the East Indies (Java and Borneo).

Some time ago I asked if you would permit me to distribute some of your material to other desmidologists, for instance, Prescott, Teft, Irene-Marie, Telling, Cronblad and Krieger. In many cases there is enough material to make up samples for all of these people, and I am sure they would be glad to get them, but I do not wish to do so without your permission. Naturally, I should tell them that they could not publish anything without consulting you.

With my best regards and thanks,

Sincerely yours,

Minoru Hirano
Department of Botany,
Faculty of Science,
University of Kyoto,
Kyoto, Japan.

AIR LETTER

Mr. Arthur M. Scott
2824 Dante St.,
New Orleans 18, La.,
U.S.A.

航空

この中には何物も封入できません

折込線

Digitized by Hunt Institute for Botanical Documentation

Mr. Arthur M. Scott
2824 Dante St.,
New Orleans 18, La.

July 27th, 1950

Dear Mr. A.M.Scott

Your airmail letter of the July 10 and two parcels (Tilden's Minnesota Algae; Philson: Freshw. algae of North and South Carolina) had already arrived when I returned from the Seto Marine Biological Station to the University. And I have just now received from Ejnar Munksgaard in Denmark the parcel containing three large papers, you wrote in the letter. It is a high and wonderful paper for me. I am delight to r after return from the journey. It was very ha for me to receive these parcels and letter.

The Japanese papers on Desmids, you lis letter are all the old publication and some present but I will strive to get for these ps shall soon start on a journey to Hokkaido and Tokyo on the way. In that case I will look for the a second-hand bookseller's in Tokyo. I shall probably be possible to send you the following because they are seen in the catalogue of bookseller's.

Higashi: List of the Japanese Freshwater Algae in Okamura's Nippon Sorui Meiji 1916.
Hattori Mikrobiologische Studie in den Wasserleitung.

I am sending you some of the papers under separate cover, that are not appeared in your list and are duplicated for me.

Higashi, M.: Micrasterias from Japan in Jap. Journ. Limnol. 8 1938.

Hirano, M.: Desmids in Hira Mountain in Acta Phytotax. Geobot. 12:3 1943. (I have no reprint so send you number of that journal)

Thanking you for your best regards,
Yours very truly,

Minoru Hirano
Minoru Hirano

Mr. Arthur M. Scott
2824 Dante St.,
New Orleans 18, La.

July 6th, 1950

Dear Mr. Arthur M. Scott

I have just now received safely your parcel containing 28 bottles. It was a great pleasure to me indeed and I take delight in studying and comparing with the forms of Japanese Desmids but soon I have to start on a journey for Seto Marine Biological Station of the Kyoto University to guide the students and shall return to the University at 25th, July. I have a new journey in contemplation for the summer vacation. I shall probably start on a journey for Hokkaido at the end of July and stay three weeks in Hokkaido in August and in this journey I shall visit many swamps lying at the Okhotsk sea side and return to the University at the end of August. I shall send some samples of this journey to you and also send to you three bottles which could not send before for full of capacity in my previous three parcels.

Your air-letter of June 4 was a great pleasure to learn that you are preparing for me to getting the publications of Dr. Rolf Grönblad and Dr. G. Nygaard. I have recently received from Prof. H. Skuja a copy of his "Süßwasser Algenflora Burmas" instead of his "Taxonomie des Phytoplanktons einiger Seen in Uppland Schweden" in Symb. Bot. Upsalienses with his great kindness. Do you know the content of his latter paper. I am very interesting your adress list of foreign algologists and I will try to correspond with the European and American algologists. Some American papers are already obtained by the exchanging with my reprints. (Dr. R.M.Whelden, Dr. C.E.Taft, Prof. G.M.Smith, Prof.W.R.Taylor, Prof. G.W.Prescott, Dr. H.T. Croasdale and Dr. F.Irenée-Marie in Canada) Dr.F.Irenée-Marie gave me a letter in recent day and tell me that my *Spinoclosterium cuspidatum* is a synonym of *Cl. cuspidatum*. I hope to hear the R.Grönblad's opinion to your letter

With my best wishes
Yours faithfully

Minoru Hirano
Minoru Hirano

Department of Botany,
Faculty of Science,
University of Kyoto,
Kyoto, Japan.

July 10 1950

Dear Dr. Hirano,

Your airmail letter of the 6th arrived this morning, taking only four days in transit. I have also received your two papers from *Acta Phytotaxonomica* Vol. 14, No. 2, and the three parcels of samples. Your method of packing them was new to me; the bamboo sections afford a very good protection and all of the tubes were intact. A few of the tubes had leaked somewhat, and in one case the liquid had disappeared entirely, leaving only the dried sediment, which however dissolved fairly easily after I had added some 4% formalin solution. In future shipments I think it would be advisable to dip the upper end of the tubes, including the corks, in melted paraffin wax to seal them.

For all of these I thank you sincerely. So far I have had time only to take a quick look at one mount from each tube, but already I have seen some highly interesting desmids, some of which are quite unknown to me; when I have a little more time I am going to make sketches of some of them, and will ask you to identify them for me, since some of them do not appear in the literature in my small library. I must confess, however, that I am somewhat surprised that many of the collections contain so few desmids. From the leaves of mosses and bladders of *Utricularia* which are present in some of the tubes, I should judge that the habitat contained soft and acid water; but the algal flora is of the diatomaceous type, with comparatively few Chlorophyceae and still fewer Myxophyceae. I have not encountered this type of habitat in the territory that I have explored. Perhaps this is due to the fact that there are no peat-bogs around here to my knowledge, and only a few that I could call Sphagnum bogs.

So far, the samples that are of the most interest to me are those from Kiritappu and Fuse-ike. In the letter I have seen several of the tropical desmids described in your papers, as well as others that are new to me.

Last week I sent you another box containing 35 more vials. When you receive it please let me know if it arrives in good condition, or if there is any breakage or leakage. I have sent similar boxes to several countries, Canada, Sweden, Finland, England, France, Portugal, Czechoslovakia, Australia, etc., and I have not heard of any damage.

I am glad to be able to tell you that I have succeeded in getting several of the papers that you wanted. I have sent you the following:

- Kol, The snow and ice algae of Alaska.
- Philson, Freshwater algae of North and South Carolina.

Ahlstrom is away from home at present, but writes me that he will send you a copy of his *Studies on variability in the Genus Dinobryon*, when he returns home sometime this month.

Tilden, Minnesota Algae, has been sent to you direct by a bookseller in New York City, Henry George Fiedler.

- Ejnar Munksgaard, Copenhagen, has sent you direct the following:
 - Jørgesen, Diatom communities in some Danish Lakes and ponds.
 - Olsen, Danish Chroophyta.
 - Nygaard, Hydrobiological Studies on some Danish lakes and ponds.

I have not yet heard from the publisher in Helsinki, Finland, about the two books of Grönblad which I ordered him to send direct to you.

The paper by Woodhead & Tweed, Some algal flores of high altitude in Snowdonia, in Northwestern Nat. 22 1947, is apparently not an American publication, since I cannot find the Northwestern Naturalist listed. Perhaps it is English; there is a well-known mountain named Mount Snowdon in Wales. I do not think I can help you with this one.

Likewise I have no way of getting for you the papers by Huber-Pestalozzi, Frey, and Deflandre. If you have any correspondents in France, Belgium or Switzerland I should think they would be able to help. Frey was killed during the last war, and Blumea seems to be published in Leiden, Holland; I have never seen it.

Perhaps in return for these papers you may be able to get for me some of the Japanese literature on desmids, of which I possess only those that you have sent. For instance, the following:

- Fujisawa, R. 1934. Desmidiaceae in Ima District. Journ. Japan. Bot. X.
Hattori, H. 1917. Mikrobiologische Untersuchungen über einige japanische Wasserleitungen. Journ. Coll. Sci. Imp. Univ. Tokyo.
Higashi, M. 1916. List of Japanese freshwater algae, in Okamura's "Nippon Sorai Meii."
Kawamura, T. 1918. Japanese freshwater biology I. (Desmids?)
Okada, Y. 1932. The freshwater algae of Botel Tobago Island or Kotosho, Formosa. Bull. Biogeogr. Soc. Japan. III
1934a. Preliminary notes on desmids in the northern Kurile Islands. Ibid IV
1934b. The desmid-flora of the northern Kurile Islands. Journ. Imp. Fish. Inst. Tokyo.
1936. Notes on Japanese desmids, with special reference to the newly found species. I-IV. Bot. Mag. Tokyo.
Takeda, H. 1917. Kirigame, Kama-ike, and Yashimaga-ike. Journ. Japan. Alp. Club LXIV
Ushiyama, D. 1923. Rotifers in Lake Suwa and desmids in Yashimaga-ike. Hakubutsugaku-kaishi. XXI.

This list is from Hattori's Monograph, and only goes up to 1927. There may be many other papers published since then. Also if you have any correspondents in China perhaps you might be able to obtain some of the papers by Chinese desmidiologists. I should be very grateful for anything that you can send.

Your proposed trip to Hokkaido ought to be a very interesting one, and I shall look forward to hearing again from you when you return home.

Sincerely yours,

P.S. You have sent me such a generous quantity of material that I should like to ask your permission to distribute some of it to my friends, Prescott, Irene-Marie, Telling and Grubler. I am sure they would be very glad to see it, and I would tell them that they could not publish anything from it without your consent.

June 4 1950

Dr. Minoru Hirano,
Dept. of Botany, Faculty of Science,
University of Kyoto,
Kyoto, Japan.

Dear Dr. Hirano,

Your airmail letter of May 22nd was a very pleasant surprise, and I am greatly pleased to know that you have sent me a large number of desmid samples from your collections. In return I am sending you by this same mail a box containing 23 vials from my own collections, and later I shall make another box and send it to you. The list of samples in the present box is as follows:

Louisiana	32, 38, 96, 117.
Mississippi	13, 36, 38, 37, 64, 73, 102.
Florida	18, 27, 40, 52, 59, 74, 76, 77, 78, 90, 110, 132, 175, 208, 209, 214, 239.

The locations where the collections were made is given on the label on each vial, and I cannot add much more ~~explanation~~ information. I might explain the abbreviations used, thus "Ditch 6 m. S. of Punta Gorda, Charlotte Co." means "Roadside ditch 6 miles South of the town of Punta Gorda, Charlotte County". In the State of Louisiana the counties are known as "Parishes", (Par.) which I presume correspond pretty much with your term "Prefecture". Many of the towns mentioned can be found only on a large-scale map, but the counties may enable you to find the approximate region of the locations.

Practically all of my gatherings consist of squeezings from aquatic plants such as *Myriophyllum*, *Ceratophyllum*, *Utricularia*, etc., and occasionally from *Chara* and *Nitella*. I find that this method of collecting gives much larger quantities and greater variety of species than plankton collections. Also the roadside ditches, ponds and swamps from which most of my material comes, are frequently too small and shallow, and too crowded with vegetation to permit the use of a plankton net, even a hand net.

The region in which I have been collecting for the last 12 years is the southern parts of Louisiana and Mississippi, and the whole state of Florida. This region is practically flat. There are no mountains and very few hills. The highest elevation in this whole region is not over 100 meters above sea level, and most of my collections were made at not more than 20 meters elevation. Also there are very few rock exposures; some phosphate rock in central Florida, and coral rock in the southern tip of Florida, both of which are unfavorable for desmids. Most of the localities where I collect have sandy, acid soil, and the water has a pH of 5.2 to 7.0. A few of the gatherings are from hard water, with pH going up as high as 8.5.

I believe that you will be very much interested in this material. It contains many new species and varieties of desmids, many of which still await identification. I should explain that I am not a "Dr.", just plain "Mr."; also I am not a botanist but a structural engineer (building design in steel and reinforced concrete). The collection and study of desmids has been my hobby since about 1938, and I have acquired a pretty good knowledge of the local desmid-flora, but owing to my lack of training and even more to the lack of literature, I am finding many specimens that I cannot identify, since this region had previously been almost entirely unworked. I have been working entirely alone, with only such help as I could obtain from books and from 10 years correspondence with Prof. Prescott, who has been extremely helpful, and has graciously permitted by name to appear as collaborator in our papers which have been written mostly by him. At the present

time I have about 3000 camera-lucida drawings of desmids from southern United States, representing (I estimate) something like 600 species and varieties, of which only about one-half have been identified. The remainder are waiting for Prescott's help, but he is so very busy with his own teaching duties, his research work, the secretaryship of the Phycological Society, and other things, that it is very seldom that he can devote much time to my affairs. So I don't know when my stuff will be published. However, he now has my finished drawings for plates of a new paper on *Microsterias*, another on *Baetrum*, and another on desmids from South Australia. Some of these ought to appear within the next year or two.

I wish to call your special attention to the viel marked Fla. 209, which contains no less than thirteen species and varieties of *Microsterias*, as follows:

Microsterias fimbriata var. *spinosa*
radiosa
laticeps
abrupta
depuperata var. *Kitchellii*
truncata var. *quadrata*
Torreyi
pinnatifida
radiata var. *simplex* Wollg.
radiata var. "inflata" Presc. & Scott (unpublished)
radiata var. "parallela" Presc. & Scott (unpublished)
muricata
mahabuleshworensis var. *ringens*, f. *mediolaeve*, f. nov.

Another good one is Miss. 73, with the following *Microsterias*:

M. laticeps
arcuata var. *gracilis*) These two are frequently found in
arcuata var. *expansa*) association.
truncata
Johnsonii
radiata var. *gracillima*

Digitized by [Humboldt Institute for Botanical Documentation](http://www.humboldt.org)

The list of tropical desmids that you have found in Japan is quite interesting. I have found most of these in the North Australian material, but only a few occur in this country, namely: *M. mahabuleshworensis*, *Pl. verrucosum*, *St. unguiferum*, and "*Spinoclosterium cuspidatum*". By the way, the last one is correctly *Closterium cuspidatum* Bailey, as described and figured by Balfe, Brit. Desm. 1848, p.219, Pl. XXXV, fig. 11. About 2 years ago Grönblad pointed this out in a letter to me, and lately Irénée-Marie published a short article on it in Bull. Phycol. Soc. I have found it in 2 or 3 of my collections. *Pl. verrucosum* is quite common in U.S.A., and I have seen probably thousands of specimens, but I have never seen *Pl. trochiscum*, which seems to differ only in the absence of the apical granules.

I am enclosing a list of names and addresses of algologists to whom I sent copies of my last paper, and have marked thereon the special interests of the various authors, as far as I know them, and have also marked in red those who have sent me reprints and who apparently are willing to exchange their papers. This gives you the addresses of the first list of authors which you requested.

I shall see what I can do about getting you copies of the papers in your second list, but at present I do not know the addresses of any of them except Huber-Pestalozzi. The paper by Helen Jean Brown, Desmids of the S.E. Coastal Plain, is of very little use. It is a graduating thesis of a girl student in one of the universities, and shows only a superficial knowledge of the subject. The illustrations are very poor, even grotesque, and the identifications are not always correct. She has never written anything else on algae.

Dr. Rolf Grönblad and I have been corresponding for several years, and when I write to him again I shall ask him to send you copies of his shorter papers. In the meantime I am ordering from the publisher in Helsingfors (Helsinki), to be sent directly to you, his two large works, 1942 Algen, Hauptsächlich Desmidiaceen,

and 1945 De Algis Brasiliensibus. Also I am ordering from the publisher in Copenhagen, to be sent to you, a copy of Nygaard's 1949 paper, Hydrobiological Studies. These are three large and important works that you will find very valuable.

I am eagerly awaiting the arrival of your samples, though I suppose it will be a month or so before they get here. I am also expecting some collections from Peru, and some others from Java, all of which ought to arrive within the next few weeks. When all of them get here I shall really have plenty to work on.

With my best regards and thanks,

Sincerely yours,

Dr. Arthur M. Scott
2824 Dante St.,
New Orleans 18, La.

May 22th, 1950

Dear Dr. Arthur M. Scott

Thank you very much for your air letter of 7th April. It is a great pleasure for me to correspond with you and I am very glad to exchange the publications and algae-samples with you. In reply to your letter I am posting to you some of my own collections on Desmids-samples during the past twelve years, hoping that they will reach you safely and available to you. At the same time I am enclosing a note of my own collections in the letter. I regret the delay in sending the letter and samples, but I left the country in April 4th to study the algae in the Kanto-plain and have only recently returned to the University.

I am very glad to see your list on freshwater algae, some of them which you listed, I have already received from the authors in response to my request but some of them I have not yet received. These are the following.

Lhotsky, O.: 3 papers, you described.

Fott, Bohoslav : Two papers.

Margalef, R.: Three papers.

Bourrelly, P.: Two papers.

Nygaard, G. : One paper.

Heimans, J. : Three papers.

Grönblad, R.: Many papers.

I am especially anxious to getting the Rolf Grönblad's papers. I have already sent him (or shi) to his adress of Karis, Finland my some papers and hoped him to get his reprints in exchange with my reprints but my request were not answered.

I am also very interesting to get the Dr. Nygaard's paper: Hydrobiological Studies on some Danish Ponds and Lakes. I hope to know the name of Journal, its editor or director and its price.

I am hoping the exchange of publications all the world, because I cannot get the publications or books under our permitted circumstances. We are not permitted to send the money privately to buy the books or periodicals and its possibility will not be realized in near future. We may at present get only the American and French books and journals in about a half a year after the order. I am hoping to know the adress of above mentioned authors and price of their Journals, adress of their editor or publishers.

And also the adress of following authors and their publishers.
Woodhead, N. and R.D.Tweed: Some algal floras of high altitude in Snowdonia. in Northwestern Nat. 22 1947.
Jürgesen, E.G.: Diatom community in some Danish lakes and ponds. in K. Dansk Vidensk. Selsk. Biol. Skrift 5 (2) 1948.
Olsen, S.: Danish Charophyta. in Ibid. 3(1) 1944.
Åhlstrom, E.H.: Studies on variability in the genus Dinobryon. in Trans. Amer. Micr. Soc. 56 1937.

Huber-Pestalozzi, G.: Der Walensee und seine Plankton. in Ztschr. Hydrol.
Frémy, P.: Cyanophycées de l'Inde Meridionale. in Blumea Suppl. 2 1942.
Kol, P. J.: The snow and ice algae of Alaska. in Smiths. Misc. Coll. 101(16)
1942.
Deflandre, M. G.: Monographie du genre Trachelomonas Ehr. in Rev. Gen. Bot.
38/39 1926-27.
Brown, H. J.: The Desmids of the Southeastern Coastal Plain Region of United
States. in Trans. Amer. Micr. Soc. 49 1930.
Philson, P. J.: Freshwater algae of North and South Carolina, Part 1.
Cyanophyceae. in Journ. Elisha Mitchell Sci. Soc. 55 1939.
Boyer, C. S.: Synopsis of North American Diatomaceae. in Proc. Acad. Nat.
Sci. Philadelphia 78, 79 1927.
Tilden, J.: Minnesota Algae. in Minneapolis, Minn IV. 1910.

I have already received your following three papers from Dr. G. E.
Prescott by his very kindness in response to my request.

The Desmid genus *Micrasterias* Ag. in southeastern U.S. 1943.
The freshwater algae of southern U.S. I-III. 1942-45.

I have been studied on Desmids of Japan since 1937. In recent years
I am especially interested in tropical and subtropical Desmids which
were found previously in only India, Ceylon, Burma, Sunda-islands. These
species are also found in Japan especially in central Japan, for instance
Kansai-district (it is including Kobe, Osaka, Kyoto, and its neighbourhood),
Lake Biwa and its adjacent region, Miye and Aichi prefecture. Some of
them are distributed as far as Tohoku for instance Fukushima and Miyagi
prefecture. I have found following interesting species in central Japan:
Cl. nematodes, *Spinoclosterium cuspidatum*, *E. exile*, *E. flammeum*, *E. indicum*
v. capitatum, *E. turgidum*, *Pl. verrucosum*, *Pl. trochiscum*, *Pl. Kayei*, *M. lux*,
M. foliacea, *M. mahabuleshwariensis* and *v. Walligii*, *Cosm. bengalicum*, *S.*
St. ensiferum, *St. unguiferum*, *St. ceylanicum*, *St. gyratum*, *St. triforcipatum*
etc. and curious enough some of these species are found in bog of sphagnum
moor.

Micrasterias rotata var. *japonicum* is found in pond of Ina-district,
Nagano prefecture. This variety is rare in Japan and I have not yet found
in anywhere of other district. Your sketch is well correspond to the
figure of Fujisawa

I am sending you my short papers under separate cover.

I am looking forward to the pleasure of receiving your samples of
America in exchange for my collections.

Please note my accurate address as follows.

Yours very truly,

Minoru Hirano
Minoru Hirano

Department of Botany,
Faculty of Science,
University of Kyoto,
Kyoto, Japan.

April 7th 1950

Dr. Minoru Hirano,
Faculty of Science,
University of Kyoto,
Kyoto, Japan.

Dear Dr. Hirano,

It was very kind of you to send me the reprints of your papers on desmids, and to write me the nice letter of acknowledgement. You are one of the few who have responded to my request. I sent out about 70 reprints of my paper on *Spinocosmarium*, and received only about a dozen acknowledgements, and six authors sent me reprints of their recent works. This has taught me to be more scrupulous in the future in acknowledging receipt of papers that are sent to me.

Your papers are the first I have seen on Japanese desmids, and if there are any others by different authors which I might be able to obtain, I wish you would be kind enough to give me their addresses, so that I can write for them. I am enclosing a list of papers on fresh-water algae which I have received recently, some of them from my regular correspondents, some which were sent in response to my request, and others that I have written for specially. Some of these may be unknown to you, and if you do not know the addresses of the authors, let me know, and I will tell you where to write. For your convenience I have added some comments on the interest and importance of the papers. Do you have the three previous papers by Prescott and myself, namely *Desmids* from Mississippi 1942, *Microsteries* 1943, and *Euastrum* 1945? If not I shall be glad to send them.

I am more interested in tropical and sub-tropical desmids than in those from colder climates, because of their generally larger size, and more elaborate and beautiful forms; also because the areas in which I have been collecting for the last 12 years in Louisiana, Mississippi, Alabama and Florida, is distinctly sub-tropical, and I have found many species that were formerly known to occur only in the Indo-Malayan-Australasian region, such as *Microsteries mshabulashwerensis* var. *surculifera* and var. *ampulleacea*, *M. foliaceae* var. *ornata*, *M. alata*, *Euastrum longicollae* var. *capitatum*, etc. I also have specimens of a variety of *M. rotata* which correspond very well with var. *japanica* Fujisawa. I am enclosing some sketches of the Florida plant, and if you are familiar with the Japanese variety I should be glad if you would give me your opinion on mine.

It is quite interesting to learn of your finding some of the tropical desmids in central Japan. Kensei is not shown on my small map, but I suppose it is somewhere near Kyoto, or in Latitude 35 N. approximately. Those which I have mentioned above were found in Lat. 27 to 30 N.

At the present time I am working up a small lot of algal gatherings from Arnhem Land in North Australia, Lat. 12 to 13 S., which contain many very rare and unusual forms, but most of them have been found before by some of the old authors, Joshua, Wellich, Nordstedt, Borge and Playfair. This material will eventually be published in an official report by the Australian Government, but since this will also contain papers on botany, zoology, ichthyology, anthropology, etc., it will probably be some years before it is published.

I have acquired a pretty good knowledge of the desmids of southern United States, but have not much acquaintance with those of other countries. I have work on material from South and North Australia, a few collections from Cuba and Mexico that are rather poor in desmids, and a few from AGsk in the Aleutian Islands, all of which will (I hope) be published at some indefinite time in the future. I am anxious to extend my knowledge of desmids from other parts of the world, particularly the tropics, and if it is agreeable to you I should be glad to exchange some of my material from southern United States for some of yours from Japan. I have several hundred collections, many of which are very rich in desmids which I think you would find very interesting.

Your name has been placed on my mailing list, and I shall be sure to send you reprints of my future papers. There is one small paper describing three new varieties of *Staurostrum Ophiura* which ought to appear this year, and Prescott and I have another longer paper on *Microsterias* which should be published either this year or next. He also has my original camera lucida drawings and the finished plates for another paper on *Euastrum*, with many new varieties and one new species.

Sincerely yours,

Dr. Arthur M. Scott
2824 Dante St
New Orleans 18 La.

Feb. 23th, 1950

Dear Dr. A.M. Scott

I have the pleasure to acknowledge the receipt of your reprint and express to you my best thanks for this valuable addition to my files.

In exchange I am sending you some of my reprints under separate cover.

I have now put your name on my permanent mailing list and shall appreciate to receive further issues of your publications.

Yours very truly,

Minoru Hirano
Minoru Hirano

Department of Botany,
Faculty of Science,
University of Kyoto,
Kyoto, Japan.