Membership Asked to Help
WORKBOOK PLANNED

Janet R. Stein, Editor of the forthcoming technique Workbook in phyiology, reports that several publishers are expressing an interest, and a contract is anticipated by September, 1968. She suggests that the membership can help by discussing the Workbook with colleagues (non-physiologists, too) and with various publisher’s representatives. The best contents, contributors, and publication arrangements will benefit the users of the Workbook as well as the Society. Members can be especially helpful by indicating to publishers that there is a need for the Workbook.


The tentative format will be four volumes with flexible binding (not paper back). Volumes and contents listed below are incomplete and tentative:

Volume I.—Field Techniques
Collection, observation, enumeration, preservation; Special techniques for specific organisms; productivity; Population dynamics; Herbicide procedures; Pollution; Algicides; Paleobotany.

Volume II.—Culture Techniques
Media, inoculation, purification; Apparatus Continuous Cultures; Mass culture; Synchronized cultures; Preservation (live).

Volume III.—Developmental Techniques
(INCLUDING CYTOLOGY AND GENETICS)
Fluorescent microscopes; Electron microscopy; Autoradiography; Histochernistry; Specific organisms; Reproduction; Sexual substances; Ge-

FROM THE PRESIDENT’S DESK

As pointed out at the AIBS meetings in Texas, we have a healthy and rapidly growing society. It might be appropriate now to reflect for a moment about the society. Can you suggest any ways in which our role and policies might be improved? Perhaps communication among members of the society, and the members and their officers could improve. It appears that we have not made much use of open discussion, such as letters to the Editor in our Newsletter.

Have you expressed an opinion regarding—
1. The value of the proposed awards of merit
2. The annual lecture in physiology by a distinguished physiologist?
3. The types of symposia to be organized by our society?
4. The “10-minute” paper at annual meetings?

I would like to make a special effort to keep lines of communication open and urge your cooperation in this matter.

F. R. Trainor
Research Topics Under Investigation

In our continued promotion of communication among those of us engaged in physiological research, the following topics under investigation in several laboratories are listed. Please feel free to write the investigator or laboratory directly, should a particular topic or area interest you, in response to requests for lists of research topics has been excellent. Please continue to submit such lists without special solicitation, and we will print them as space permits.


North Texas State University, Denton (B. Dwain Varner; G. Roland Vets): Biological concentration of pesticides by algae.

Effects of phytomorphs on the growth and cell division of algae.
Effects of herbicides on the growth and metabolism of selected algae.
Genetic studies of blue-green algae.
Biochemical interrelationships between algae and bacteria in mixed cultures.
Growth of some soil algae in harsh environments.
Control of bacterial populations by rapidly dividing algae.

The University of Texas, Austin (H.C. Bold; R.M. Brown, Jr.): Studies on soil algae from various habitats in Texas and elsewhere.
Airborne algae of Hawaii and Texas.
Sexual reproduction in Chlorella ocellata (Ultrasound).
Ultrastructure of microsporangia and vegetative cell division in Tetraselmis.

Ultrastructural studies of algal viruses.
SOMATIC methods applicable to the taxonomy of Chlorococcales and Chlorophyceae.
algae as a taxonomic aid in the identification of algae.
Linear growth in the algae of sand dunes and bogs with spatial reference to the genus Chlorococca (Patricia Archibald).
Taxonomic studies in Oscillatoriaceae based on field and laboratory study in aquatic culture (Allie Baker).

Studies of non-aqueous algae from rocks and tree bark (Linda Edwards).
Field and laboratory studies of the marine algal flora in the vicinity of Port Aransas, Texas (Peter Edwards).
Comparative taxonomic studies of chlorophycean algae (Robert D. Groover).
Nutritional and life history studies of Rhodomonas species in the vicinity of Port Aransas, Texas (Donald Kapraun).

Ultrastructure of pigment formation and distribution in Oocystostyla and Chlorococca (Dr. Robert McLen).
Field and laboratory studies of periodicity, nutrition, and sexual reproduction in certain species of Euglena and Spirogyra (George Passow).
Isolation, purification and characterization of algal viruses and their life cycles (James Stewart).

Morphological, ultrastructural and biochemical systems of Prototaxophyllum (Thomas Passow).
Nitrification, morphology and ultrastructure of Prototaxophyllum (Linda Vories).
Ultrastructure and physiology of development in Microthamniun and Aphanochete (Melvin Watons).
Ultrastructure of the intact leeh and its separated components (Ricky Wilson).

Washington University, St. Louis (H.W. Nishida; R.C. Parker): Comparative developmental studies of the Euglenophyta: Chlamydomonas, Porphyridium, Erythropsila, Haldophyllum, Astrocystis, Phyllophora, Banar, Erythrocladus. The studies include axenic and non-axenic studies of many species of the above genera, including physiology, morphology, cytology, and biochemistry.
Comparative developmental studies in the Nannochloris, in particular, species of Nannochloris and Butrachospermum.
Gas chromatographic analyses of Chlorophycean and Rhodophycean algae, in particular, pycolysis-gas-liquid chromatographic analyses of closely related Chlorococcales and Bangiophyceae genera, species, varieties and strains.
Mathematical analysis of variation in red algae. In particular, those characteristics of known taxonomic significance.
Comparative studies in the Ectocarpales and Phaeophyceae.
Comparative experimental studies of certain members of the Dictyostraceae, Ceramiales, Dasyaceae and Rhodophyceae.
Marine algal flora of Panama.
Cell Wall Chemistry—Systematics and Phylogeny: Chemistry and structure of fossil and extant species of Clavera.

(Continued on page 5)
**DEADLINE FOR MAY ISSUE SET AT APRIL 5**

Your Newsletter editor requests news items, notices of forthcoming symposia and meetings of a local, regional, or more widespread nature. Announcements concerning positions open or desired, re- cent or forthcoming graduations, current research projects, changes or new ap- pointments to personnel, anticipated field trips, cruises, and other travel will be welcomed. Black and white glossy prints of physiological or related activities, accom- panied by a story or explanation are requested. New printing procedure allows for the reproduction of photographs, so please flood this office with them and news of your activities. The editorial job is easier if your items are types or printed. The deadline for material to be included in the May Newsletter is April 8.

**Desmid Papers Wanted**

For the past several years, John H. Gleasy has been updating Nordstrom's INDEX DESMIDIARUM, as well as compiling a Latin description of all species of desmids. He would like to receive copies of past and current papers on desmids, and notice of those forthcoming. He would appreciate loose copies of those for which an extra copy is not available. Such copies will be returned as soon as possible. Send papers and information to Mr. John H. Gleasy, Department of Public Utilities, Box 11007, Tacoma, Washington 98411.

**DUES NOTICE**

Please pay your dues as soon as possible. Your 1968 dues cover all issues of volume 4 of the Journal of Phycology. Pay in U.S. dollars.

Dues Schedule:
- Full-time student: $1.50
- Individuals (not students): $2.00
- Libraries and organizations: $3.00
- Joint member: $3.50
- Retired 10 junior (at least 10 years tenure at member): $1.50

Send dues to:
- Dr. R. Wayne Nickels
- Department of Botany
- Washington University
- St. Louis, Missouri 63102

**NOMINATIONS FOR 1968 DARCKER PRIZE IN PHYCOLOGY SOUGHT**

The committee on the Dar- 
baker Prize of the Botanical Society of America encourages nominations for the award to be announced at the annual meeting of the Society at Colum- bus, Ohio, in 1968. Under the terms of the bequest, the award is to be made for meritorious work in the study of the algae. Persons not members of the Botanical Society are eligible for the award. The Committee will base its judgment primarily on the papers published by the nominee during the last two full calendar years previous to the closing date for nominations. At present, the award will be limited to residents of North America. Only papers pub- lished in the English language will be considered. The value of the Prize for 1968 will depend on the income from the trust fund but is expected to be about $250. Nominations for the 1968 award must be accom- panied by one or more letters of recommenda- tion and re-prints of the publications sup- porting the candidacy. The deadline is June 1, 1968. Chair- man of the Committee: Dr. Frank R. Traynor, Department of Botany, University of Con- necticut, Storrs, Connecticut 06268.

**CHANGING ADDRESSES?**

Please send any notification of change of address (and zip code) to the Secre- tary of the Society: Dr. Philip Cook, Department of Botany, University of Ver- mont, Burlington, VT 05401. Please do not request that the Journal and News- letter be sent to a temporary address (such as a hotel address) if you will be returning to the permanent address.
News of Members

Webber Receives Degree
E.R. Webber is now Assistant Professor of Biology at Keble College, Keble Park, New York. He has recently received the Ph.D. degree from the University of Massachussetts, where his dissertation on "Systematics and Ecology of Brachionc Na
dMarsh Algae at Ipswich, Massachusetts," was directed by Dr. R.T. Wilc.

Sweeney Appointed Acting Director
Robert A. Sweeney has been appointed Acting Director of the Great Lakes Labor
tory of the State University of New York. This research-teaching facility is
the only academically-affiliated limnologi
cal laboratory on Lake Erie. It would
appreciate requests concerning algae of
the Great Lakes, particularly Lake Erie, Lake Ontario and their tributaries. The
GLL will duplicate and return articles if
only a single copy is available.

Halkidi New Scientific Director
Philip J. Halkidi is Scientific Director

at Carl Zeiss, Inc., In New York City.

Chihara on Fellowship
Mitsuo Chihara from the National
Museum, Tokyo, Japan, is a postdoc
toral fellow at the University of British
Columbia.

Stein Named Director and Editor
Jenet Betts, University of British Co
mbia, is a Director of the Canadian
Botanical Association and also Editor
of the Association Bulletin which begins
publication in January 1968.

Cooke on Leave
J.R. Cooke, National Research Coun
cil, Ottawa, Nova Scotia, is on leave at
St. George Institution of Oronography, La
Jolla, California.

Taylor in England
A.R.A. Taylor, University of New
Brunswick, is on a sabbatical leave at
the Marine Biological Association of
the United Kingdom, Plymouth, England.

Scagel Plans Trip to Chile
R.F. Scagel, University of British Co
mbia, expects to join P.S. Chuam and J.W.
Markham on their marine algae
collecting trip to Chile (using Chilean
Navy vessels). Chuam and Markham are
already in Chile, and R.F. Scagel plans
to be there for a February trip.

Scagel, Lee, and Druehl Named
R.F. Scagel is Chairman of the Phy
siology Section of the Canadian Botani
cal Association. Secretary is R.E.C. Lee,
National Museum of Canada, Ottawa, and
director is Louis Druehl, Simon
Fraser University, Burnaby, British Co
mbia. Past Chairman was A.R.A. Tay
lor, University of New Brunswick, and
guest Secretary was H.E. Birke, Univer
sity of Waterloo, Ontario.

THE UNIVERSITY OF MINNESOTA
ANNOUNCES STIPENDS FOR SUMMER RESEARCH IN BIOLOGY

ITASCA BIOLOGY SESSION/UNIVERSITY OF MINNESOTA/SUMMER SESSION
June 12 to July 22 and July 24 to August 26, 1968

The University of Minnesota is pleased to announce a National Science Founda
 tion sponsored program in support of biological research at the Lake Itasca Forest
ry and Biological Station during the coming summer. Stipends can be al
dicated for periods other than the two regular terms of the Biology Session as shown above.

Three categories of biological research workers will be enabled to share oppor
unities and experiences in research and instruction as indicated below:

PREDOCTORAL STUDENTS may register in one graduate course for
credit and carry out research under the supervision of regular Station staff
members.

POSTDOCTORAL SCHOLARS may participate in one graduate course and
and carry out research under guidance of a regular Station staff member.

INDEPENDENT RESEARCH SCHOLARS may carry out a research
project best suited to their objectives and the opportunities presented at the
Station.

Stipends not to exceed $150, $500, and $750 for each five-week term are
available under the respective categories and academic fees are provided for under
the terms of the grant. Grantees may be housed with other members of the student
body and eat at the Station Dining Hall or, if they wish to bring families, may
live off campus. Amounts of stipends for periods other than the regular terms of
the Biology Session will be prorated at the same level.

Persons interested in applying for these
stipends should write for further informa
tion and application materials to:

Director, Field Biology
112 Snyder Hall
University of Minnesota
St. Paul, Minnesota 55101

Dartmouth Hosts Photobiology Congress

The VIth International Congress on Photobiology will be held August 26-31, 1968, at Dartmouth College, Hanover, New Hampshire. The second announcement of the Congress is now available. It contains detailed information on the Congress and application forms for regi
stration and presentation of papers. This announcement and further information may be obtained by writing to the Secretar

POSITION AVAILABLE

Arizona State University, Tempe, Arizona, is interested in adding a young
physiologist to the faculty in September, 1968. The appointment would probably be made at the Assistant Professor level, with
salary $7800-9000, depending upon the
candidate's training and experience. The
candidate should be capable and
willing to teach a survey course in the
nonvascular plants (with emphasis on the
algae), to develop graduate courses or seminars in his specialty, and to carry
on an active research program. Interested
persons write Dr. James E. Carrington, Chairman, Department of Botany, Ari
zona State University, Tempe, Arizona 85281.
NEW PUBLICATIONS AVAILABLE


"Environmental Requirements of Blue-Green Algae" A printing of a 110-page volume on blue-green algae provides the full texts and the discussion of six research papers presented at a 2-day symposia sponsored by the Federal Water Pollution Control Administration and the University of Washington. Copies may be obtained by writing to Eutrophication Research, Pacific Northwest Water Laboratory, Federal Water Pollution Control Administration, 200 South 35th Street, Corvallis, Oregon 97330.

Research papers included in the new publication:

"Why Study Blue-Green Algae?" W.T. Edmondson, University of Washington.

"Problems in the Laboratory Cultures of planktonic Blue-Green Algae." W.R. Eberly, Manchester College, Indiana.


"Growth Requirements of Blue-Green Algae as Deduced From Their Natural Distribution." W.C. Vinyard, Humboldt State College, California.

"Recent Advances in the Physiology of Blue-Green Algae." O. Holm-Hansen, Scripps Institution of Oceanography, La Jolla, California.

"Discussion." George F. Fitzgerald, University of Wisconsin.

Dick Wood, University of Rhode Island, reports that he has finished what he has been working toward for years—a simple, inexpensive guide to CHAROYPHYES OF NORTH AMERICA. The general ideas and plates are taken from "A Revision of the Characeae," but distribution maps have been added. Each species is illustrated, and each species and variety is described briefly. 65 p., plastic spiral. Available from: Booksellers, University of Rhode Island, Kingston, R.I. 02881 (USA) at $2.00 plus shipping charges (about 25¢ in USA).

RESEARCH TOPICS

Chemistry and structure of Scenedesmus quadricauda
Chemistry and structure of other algae: Anabaena cylindrica (heterocyst and sheaths), Desmodesmos, monoraphidiales, Lyngbya spiralis-linal wall

Aquatic Ecological Studies
Comparative studies of a new method of biomass and routine methods for the sampling and separation of dissolved organic matter from the natural environment
Studies of thermocline geometry, chemistry, and biology

Studies of the influence of extra-cellular organic products from lakes upon the phytoplankton

Developmental Studies
Cell wall development in the zoospores of Vaucheria resultata (includes biosynthesis of cellulose)

COMMITTEE SOLICITS NOMINATIONS FOR 1969 OFFICERS

The following 3-member Nominating Committee has been appointed to solicit nominations for 1969 officers in the Society:

Dr. Clifford Barnes (Chairman), Department of Botany, University of South Florida, Tampa, Florida

Dr. H.T. Andrews, Department of Botany, Colorado State University, Fort Collins, Colorado

Dr. William Daily, Department of Biology, Butler University, Indianapolis, Indiana

Officers to be nominated for 1969 include President, Vice-President, Secretary, and Treasurer. Also, three members of the Editorial Board must be nominated and elected by the membership to replace the 3 retiring members. Send your nominations to Clinton Dawes before April 15.

WORKBOOK PLANNED

Soft mutants: Genetic analysis; Growth measurements.

Volume IV. — Biochemical Processes and Products

Cell fractionation; Storage products; Pigments; Phenolic compounds; Tiotam, Nucleic acids; Carbohydrates; Proteins; Lipids; Photosynthesis; Nutrient uptake; Nitrogen fixation; Osmostic pressure; Blooming; Bioassay; Heterotrophic growth; Rhythmic migrations; Bio-luminescence; Serology.

Contributors will be contacted in the spring as soon as the contents are finalized. Comments and suggestions concerning contents and contributors are requested and should be sent to Dr. Janet R. Stain, Department of Botany, University of British Columbia, Vancouver 8, B.C., Canada.
INTRODUCING PSA'S OFFICERS FOR 1968

Frank Trainer Heads Society
FRANCIS N. TRAINER, Professor of Biology, University of Connecticut, Storrs, is the new president of the Physiological Society in 1968. He was the recipient of the Dohrman Award in 1965 for his discovery of sexual reproduction in nematodes, and in 1962, he received the Distinguished Faculty Award for teaching excellence at the University of Connecticut. He received the B.S. degree from Providence College, and the M.A. and Ph.D. degrees from Vanderbilt University. He has been a special lecturer at the Marine Biological Laboratory, Woods Hole, Massachusetts, and has served on the faculty of the University of Virginia Biological Station, Mountains Lake, Va.

Oceanographic Expedition and Awards

Stanford Oceanographic Expedition 19 will commence 20 June, 1968, in Monterey, California, and terminate on 11 September, 1968, in Guaymas, Mexico. The cruise is the second half of a seasonal study of the biological oceanography of the Galapagos and surrounding waters, and will include a productivity/nutrient survey of the equatorial current system to the west of the Galapagos. Applications will be accepted until 1 March, 1968, and advance inquiries are encouraged. Applicants must be research-oriented graduate students in biology, in good academic standing and excellent physical and emotional health. The expedition represents an intensive 15-unit course given at sea by a faculty of three (Dr. Malvern Gilman, Stanford University; W. Jan Newhouse, University of Hawaii; Margaret Bradbury, San Francisco State). Ten NSF Awards covering room and board, transportation to and from the vessel, and full tuition are available. Contact Prof. M. Gilman, Hopkins Marine Station, Pacific Grove, California 93950, for further information.

Letter to the Editor:
In the organization of paper sessions at future meetings, might we establish two categories:
1. Papers by those whose prime interest is in the demonstration of a power or a phenomenon by figures and data.
2. Papers by those who believe that a thorough discussion of a topic is in proportion. MINIMUM TIME MAXIMUM DISCUSSION

Phycological Newsletter
February, 1968, Vol. 4, No. 1

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Printed by Graphic Arts Service, Knoxville, Tennessee, 37916