inoculum

Vol. 46(6)
December 1995
ISSN 0541-4938

Newsletter of the Mycological Society of America

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Important Dates

January 15 — Deadline for next *Inoculum.*
January 31 — Nominations due for MSA Officers/Councilors
March 15 — Abstracts due for 1996 APS/MSA Joint Annual Meeting
April 1 — Deadline for MSA Awards/Funds (see p. 6–8))
April 15 — Deadline for Martin-Baker and Smith Fund Applications (see p. 7)
July 27–31, 1996 — MSA Annual Meeting with American Phytopathological Society (Indianapolis)

About this Issue

You will probably be receiving this issue of *Inoculum* on or after the deadline for the next issue. Since *Inoculum* is mailed with *Mycologia* I have been estimating deadlines based on previous year's publication records. For next year, Allen Press and the new Editor-in Chief of *Mycologia*, David Griffin, have worked out a production schedule and based on that I am setting the deadline for *Inoculum* copy as the 15th of every odd-numbered month—January, March, etc. If you have last-minute, time-sensitive material that becomes available after the deadline, please phone or e-mail and I will let you know if the *Mycologia/Inoculum* deadline has slipped.

The remaining reports from the 1995 annual meeting are included in this issue. These include the reports of the Secretary and Treasurer and the report of the Endowment Committee. A copy of the Financial Summary for FY 94 is included as well. Guidelines and deadlines for the Society's many awards are listed in the "Official Business" section. Members with World Wide Web access should look under "Mycology Online" for a new way to search and update the MSA directory.

Ellen Farr

Preserving the Biodiversity of Fungi

by Pavel Lizon

"The stability and sustainability of all systems can be increased by maintaining species and landscape diversity." C. F. Jordan, *Conservation*, 1995.

Humans share the Earth with millions of species of other organisms, including fungi. Unfortunately not all fungi will ever be discovered since at least a fifth of them will be permanently lost within the next few decades, as is the case with other groups of biota. In Europe up to 5000 species of macrofungi have been recorded and it is assumed that 30–50% of them may be threatened. Currently, more than 600 species of macrofungi are reported as extinct or threatened with extinction in one or more European countries (Lizon, 1995b).

Fungi have been an integral component of ecosystems since Precambrian times, as suggested by molecular data and fossil records (Simon et al., 1993), and any shift in their populations could influence community composition and stability of ecosystems. Due to their taxonomic diversity and to their varied methods of exploiting nutrients, fungi have important roles not only in the natural environment but also in agriculture, as for example pathogens and mycorrhizal symbionts, and in industry, as for example producers of secondary metabolites and sources of commercial products (Rossman, 1995).

Decline of Fungi

Forest dieback and reports of decreased fruit-body production of some edible mushrooms in Europe have stimulated research on fungal species and populations associated with these plant communities. Preliminary studies have documented dramatic changes in fungal communities. The most visible decrease has been recorded in the mycorrhizal fungi (Arnolds, 1991) and among the fungi of wetlands and meadows (Arnolds, 1989). Truffles illustrate how drastic such a decrease can be (Lizon, 1993). At the turn of the 20th century 200–300 kg truffles were collected yearly in West Slovakia, primarily *Tuber aestivum* but also *Tuber brumale* and *T. melanosporum* (Hollós, 1911). Recently most of those species are regarded as no longer present.

Alteration and destruction of habitats, changes of management in forestry and agriculture, and air pollution are the most frequently discussed factors leading to the decrease of fungi (Arnolds, 1989; Høiland, 1993). Collecting seems to have had no direct impact on decline of species in Europe (Ebert, 1992) since edible mushrooms disappeared from areas closed to the public as well.

Recording Data

There is no doubt that data on the existing biodiversity must be recorded prior to the evaluation of any changes and/or decline in mycoflora. Without at least a preliminary inventory of the fungi in the region (country, state, county), it is nearly impossible to designate what needs protection.

An inventory or checklist is a primary source of data, but comprehensive treatments or monographs are lists in their own way. Most national checklists cover only part of the fungi, and only few list all groups of fungi. In North America several such checklists are available and a national checklist of Agaricales is being developed for Canada (Redhead and Fox, 1992).

In 1993 the Forest Ecosystem Management Assessment Team (FEMAT), a group of government experts including mycologists, met to provide documentation on species affected by loss of native habitats in the Pacific Northwest (nesting areas for Northern Spotted Owl) and to integrate scientific knowledge and responses to social impacts. The FEMAT report (Anon., 1993b) lists 527 fungal species associated with late-successional and old-growth forests, 21% of which are endemic. FEMAT data were analyzed in the Final Supplemental Environmental Impact Statement (Anon., 1994a) and later the recommended option for management of related late-successional and old-growth forests was adopted as the official US government response.

Several recently proposed large-scale projects will also contribute to the knowledge of fungal diversity. Systematics Agenda 2000 was initiated by three US based systematics societies with its basic mission "to discover, describe, and inventory the global species diversity" within 25 years (Anon., 1994b). Objectives of the Species 2000 initiative, launched by the International Union of Biological Sciences, are similar: to inventory all known biota and to create a world master species database (Anon., 1995). According to the present infrastructure, human resources, and available funding for taxonomy and field research, there are well-founded doubts whether a world-wide inventory project, even if technically feasible, will be finished in such a short time. The goals of the All-taxa Biodiversity Inventory (ATBI), another international project, are to identify and locate all organisms in a defined area. Rossman (1994) suggests, by using various sampling methods, that 10,000–50,000 species of fungi in an ATBI plot of 50,000–100,000 ha is a reasonable estimate, and that 50–80% of them may be undescribed.

Evaluation of the changes in mycoflora is based on the comparison of past and current records, such as foray lists of periodically visited areas, floristic investigations and distribution data. Such a comparison reveals trends in development of fungal communities and fluctuation in fruit-body production (Arnolds, 1991; Schaechter and Trial, 1995). Mapping permits the comparison of distribution of selected taxa over time and space. The first continent-wide mapping project was organized in Europe in the 1960s to study the distribution of one hundred species of macrofungi (Lange, 1974). Recently a project on mapping of macrofungi was finished in West Germany (Krieglsteiner, 1991, 1993), and several other programs are in progress.

Long-term field research and monitoring of fungi and observations on selected sensitive species could explain patterns of change in the mycoflora in both natural and disturbed environments. Due to fluctuation in fruitbody production and difficulties in sampling and identification one can only reach conclusions or analyses after many years of such research. A species missing for a long time must not be listed as extinct as it may be rediscovered after many years. For example, *Mycena gaultheri* was rediscovered after 50 years (Redhead and Norvell, 1993). Anthropogenic effects on the environment have been recorded and studied world-wide. Several species of organisms are used for bioindication of environmental stresses. Impact on lichenized fungi (Lichens) has been studied internationally (Hawksworth, 1990) and non-lichenized fungi, such as mycorrhizal macrofungi, could also indicate early stages of decline of biodiversity even if other symptoms are still rare (Gulden et al., 1992).

The Barlow Pass inventory project and the *Cantharellus* study project in the Pacific Northwest (Ammirati et al., 1994; Norvell et al., 1995), and the

macrofungi mapping project in Germany (Krieglsteiner, 1991, 1993), are just a few examples of how supportive and successful long-term field research with the co-operation of professionals, parataxonomists, and members of amateur mycological societies could be.

Protection of Fungi

Lists of endangered taxa, such as "red lists" or Red Data Lists, provide important information on species which are under environmental stress, and are helpful in management of the environment and in decision-making. Lists were published for several countries and regions (for lists of lists see Anon., 1993a; Lizon, 1993), and now are being compiled for other countries (e.g., Lizon, 1995a, for Slovakia). The most important direct criteria used for selection of species for inclusion in a red list are significant reduction of fruit-body production and/or extinction of the fungus in known localities, and species rarity. Some of the listed species of fungi could be used in addition for early bioindication of disturbed ecosystems.

The only "red data lists" for the US are those of the Endangered Species Act (ESA) and the endangered plant lists created by the Heritage Programs in American States and Canadian Provinces. Heritage programs listed 32 species of possibly endangered fungi (most were common species). In the United States the first fungus listed under the ESA was the lichenized species *Cladonia perforata*. A second member of the genus, *C. psoromica*, is now also federally listed as endangered. Another lichen, *Nephroma occultum*, is listed as endangered by the Oregon Natural Heritage Program. The first non-lichenized fungus to be proposed as a candidate for protection under the ESA is the polypore *Oxyporus nobilissimus*, already on the Oregon Natural Heritage Program's endangered list.

In situ conservation, preservation of the widest range of habitats, and management of specific sites are the most effective means of protecting fungi (Arnolds, 1991; Lizon, 1993). Legal protection of selected threatened species should be used as an argument for establishing nature preserves and sites of special scientific interest, and for educating the public on fungi. Ex situ conservation of fungi, preservation of fungi in herbarium collections and living culture collections and gene banks all provide basic data for taxonomy, ecology, and conservation. They are also repositories of numerous important species for industry (Pfister, 1982).

Some countries have passed legal restrictions for harvesting edible mushrooms to protect the mycoflora and environment. For example, particular Swiss Kantons have regulations permitting collection of no more than 2 kg per person per day (Egli et al., 1995). There are very few scientific data about effect of intensive harvesting on subsequent fruitbody production and most of such restrictive regulations and laws are based only on judgment: "what would happen if." Long-term research on *Cantharellus cibarius* (Norvell, 1994; Norvell et al., 1995), *Tricholoma magnivellare*, and morels (D. Pilz, 1995, pers. comm.), all in Oregon, and on edible mushrooms in Switzerland (Egli et al., 1990; Egli, 1995, pers. comm.) have shown no measurable influence on mycelia or fruitbody production. Intense commercial harvesting, such as is occurring in the Pacific Northwest where mushroom processors purchased 1,784 tons of wild mushrooms in 1992 (Schlosser and Blatner, 1995), may influence both fungal populations and affected ecosystems but no data supporting this hypothesis are available.

The European Council for Conservation of Fungi was established in the 1980's and national representatives of the Council meet every year and discuss the situation in particular countries. Currently the Council is compiling a European Red Data List with ten species considered a priority: *Armillaria ectypa*, *Aurantioporus croceus*, *Boletus regius*, *Entoloma madidum*, *Hericium clathroides*, *Laricifomes officinalis*, *Myriostoma coliforme*, *Poronia punctata*, *Sarcosoma globosum*, and *Torrendia pulchella* (Anon., 1993c). Four species, *Buglossoporus quercinus*, *Lactarius mairei*, *Ramariopsis crocea*, and *Sarcodon martioflavus*, were proposed to be included in the Berne Convention on the Conservation of European Wildlife (Anon., 1991). The Species Survival Commission for Fungi is associated with the International Union for Conservation of Nature and Natural Resources. The Commission publishes the Fungi and Conservation Newsletter which provides information on activities and problems all over the globe. Decline of fungi and need for their conservation are on the agenda of most national mycological societies.

Acknowledgments

I would like to thank Scott Redhead (Agriculture Canada), David Pilz (USDA Forest Service), Lorelei Norvell (Washington State University), Simon Egli (Swiss Federal Institute for Forest, Snow and Landscape Research), Amy Rossman (USDA Agricultural Research Service), and Anathea Brooks (Columbia University) for valuable comments and data.

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Summary Report: CELS IV Conference

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I served as the APS representative at the CELS IV conference held June 1–3, 1995, at the University of Wisconsin-Madison. The conference, sponsored by the Coalition for Education in the Life Sciences, was entitled "Strategies for Teaching and Learning in Undergraduate Life Sciences." Representatives from 64 other national professional societies were represented at the conference. Fifteen societies, including APS, are currently CELS members.

The presentations and workshops at the conference addressed a wide range of issues of interest to college life science teachers. Several sessions dealt with technology in the classroom and laboratory. Some of these topics included effective use of multimedia, computer simulations, teaching with the World Wide Web, etc. Several workshops and presentations stressed active learning activities such as inquiry-based laboratories, use of case studies in biology teaching, and development of effective collaborative learning experiences. A few of the sessions dealt with purely pedagogical topics like classroom assessment techniques. Overall, I felt that the sessions were very well done and of great value to me. I came away with many ideas that I am anxious to incorporate into my teaching.

Clearly, the aspect of the conference which was of greatest value to APS was the chance to meet with representatives of the other professional societies and discuss topics of mutual concern. One evening the professional society representatives met for over three hours to discuss the question

"What is the role of scientific societies in education?" Participants indicated that it is currently a time of significant change for K–12 science education. New national science education standards are likely to be adopted soon. The scientific community has an opportunity and a responsibility to help shape these standards. CELS is now addressing the question "How can we work together with national educational groups (National Science Teachers Association, National Association of Biology Teachers, etc.) to help influence what will happen?"

Outreach to the public, particularly K–12 teachers and students, was another topic discussed at length by the professional society representatives. It was interesting to hear what the other societies have been doing. For example, FASEB has organized a program in which individual high school teachers spend the summer with a research scientist. The research experience includes development of a classroom science activity that the teacher can share with colleagues. The American Society of Plant Physiologists have developed a model partnership with the Frederick, Maryland, school system. They also have developed and distributed lots of K–12 lab materials and they hold teachers workshops around the country. The American Society of Parasitologists have a lecture program for both the college and K–12 level in which ***good*** speakers go out and share the excitement of their discipline with others. The lab materials the parasitologists have developed for high school and college biology classes stress active learning and inquiry. They have also created a WWW home page through which many of these materials are available. Finally, it is clear that they value good teaching. They try to have some sessions devoted to pedagogical issues at their annual meeting.

The American Society for Microbiology has developed a particularly impressive program. Their society acts as a "match maker" to match teachers with local ASM members active in educational outreach. Their database and networking capabilities are impressive! Keep in mind they have 50,000 members and 550 of them indicate a primary interest in education and outreach. They are pleased that the number of members actively participating in this program has been increasing. They have offered to make some of their networking capabilities available to other CELS members.

Several points became clear as the various society activities were described. First, it was stressed again and again that it is important to have workshops at the teachers meetings (not at the meetings of the professional society as we have been trying to do). Several societies try to interact with science teachers on a regular basis at science education meetings (NSTA, NABT, state academy of sciences, etc.). I feel it is very important that APS begin doing this. Secondly, it is important to have activities and materials which the teachers can use right away, with little preparation time and simple equipment. Finally, always remember the multiplier effect. While it may seem inefficient to go one-on-one with a teacher during a summer program or in a classroom, remember, that teacher may influence 1000 students in 7–10 years time. Our scientific societies have tremendous person power to get involved in these outreach efforts. Most scientists are willing but don't know how to get started-we need to facilitate this.

In my judgment, APS involvement with CELS is critical. We must be "in the loop" and know what other groups and other scientific societies are doing. We must be aware of where we can fit in. Participation with CELS will also help us keep abreast of changes in pedagogy as well as changes in the climate of K–12 and higher education in general. For example, how should the development of national standards for science education affect our outreach efforts to K–12 teachers and students? CELS provides a great opportunity for APS to network and collaborate with other societies. It is clear to me that there is much we can learn from them and many things we can share with them. It seems reasonable that the chair of the Teaching Committee could serve as the APS representative at CELS conferences, but the society should also consider sending some of our innovative teachers (George Hudler, Jo Handelsman, Gail Schumann, etc.) who could also participate by making presentations or conducting workshops.

MSA Official Business

Mycological Society of America Awards
Call for Applications

The MSA bestows awards on outstanding mature scientists, "rookies," and graduate students at all stages. Here is the roster of awards with details on how to apply. The addresses of members of the awards committee are listed at the end of this article.

[Note the "Application Procedure" section for each award. In some cases the applications are received and reviewed by a special committee.]

Distinguished Mycologist Award

Awarded annually to an individual who has been outstanding in his or her mycological career. Nominees for the award will be evaluated on the basis of quality, originality, and quantity of their published research and on the basis of service to the MSA or to mycologists in general.

Application Deadline: 1 April 1996.

Requirements: (1) The nominee must be a current member of the MSA or eligible for emeritus membership. The nominee must also have been a member of MSA for at least five years. (2) The nominee must have received his or her terminal degree at least twenty years prior to the year in which the award is given. Honorary degrees shall not be considered in determining the time interval. (3) An individual may receive the Distinguished Mycologist Award only once. (4) Self nomination is not allowed; this is one of the highest awards bestowed by the MSA. (5) Nominators must also be members of the MSA.

Documents Required: The nominator should send the required nomination materials to each member of the Awards Committee. The nomination folder should include: (1) A nominating letter, including a detailed evaluation of the nominees outstanding contributions to mycology. (2) A curriculum vitae. (3) A list of the nominee's publications. (4) Up to four additional letters of support.

Application Procedure: Prepare four copies of the completed nomination folder and send one copy to each of the four members of the committee. Each copy of the completed application must include all four types of information listed above.

Note: Awards Committee members are not eligible to nominate or be nominated for this honor. The Chairperson of the Awards Committee will appoint ad hoc committee members in place of committee members whose major professor may be nominated for the awards. The committee may choose to make more than one award in a given year, if it is appropriate. Presentation of the award will take place at the awards ceremony at the annual meeting of the MSA. The recipient will be notified so that he or she may plan to attend the presentation. The name of the winner of the award will be published along with the announcement of the awards.

Alexopoulos Prize

Awarded annually to an outstanding "young" mycologist based on evaluation of his or her research. The nominees will be evaluated primarily on the basis of quality, originality, and quantity of their published mycological work.

Application Deadline: 1 April 1996.

Requirements: (1) The nominee must be a member of the MSA. (2) Nominees are to have received their last degree within the ten year period immediately preceding January 1st of the year in which the award is given. This will normally be an individual who received his or her degree 7–10 years previously. (3) An individual may receive the Alexopoulos Prize only once. (4) Nominees who are not chosen for the prize in the year they are nominated will be reconsidered for up to two additional years (within the 10 year limit). The Chairperson of the Awards Committee will request updates of the nominee's materials. (5) Self nomination is not allowed.

Documents Required: The nominator should request that the nominee prepare four copies of the first two items and send one to each of the four members of the Awards Committee: (1) a curriculum vitae and (2) reprints of the nominee's most significant papers. In addition, (3) A letter from the nominator which states the nominee's merits. (4) At the nominator's discretion, up to four additional supporting letters may be sent to the Awards Committee Chairperson, who will collate and distribute them to committee members.

Application Procedure: Send the material described under "Documents Required" to each of the four members of the awards Committee.

Note: The award consists of a plaque and a monetary award derived from the annual interest on the principal deposited in the MSA Alexopoulos Fund. The recipient will be notified so that he or she can attend the award presentation.

William H. Weston Award for Excellence in Teaching

The William H. Weston Award for Excellence in Teaching of mycology is usually awarded annually by the MSA to a person selected by the Teaching Committee. However, if none of the nominees meets the standards of excellence acceptable to the committee, an award need not be made.

Application deadline: 1 April 1996.

Restrictions: Awardee preference should be given to active teachers of either graduate or undergraduate courses in mycology. No preference should be made according to candidate's age, sex, or type of institution (e.g., liberal arts college, agricultural school, medical school, junior college). A nominee's folder should be made up by a responsible qualified person who knows the nominee and the award requirements. The nominator or person designated by the MSA Teaching Commit-

tee Chair in consultation with the committee, the nominee, and the nominator should prepare the nominee's folder.

Documents Required: The folder should contain: (1) Current curriculum vitae, including courses taught in mycology, plant pathology and related areas. (2) A list of graduate students with research (thesis) topics, degrees and dates, publications of these, and current addresses. (3) A list of publications related to the teaching of mycology; textbooks; teaching seminars, symposia or workshops given by the nominee to either lay or academic groups; and national, regional, state or local committees, panels, etc., on teaching. (4) A statement from the nominee on teaching philosophy, i.e., what the nominee personally believes it takes to make an excellent teacher and what the candidate is trying to accomplish in teaching mycology and how various teaching techniques and strategies help to accomplish this goal. (5) A list of previous awards or recognition for outstanding teaching. (6) Evaluation of the nominee's teaching. (To be completed by the folder compiler.) This section should contain: solicited and unsolicited letters from students and colleagues who have taken or audited the nominee's courses; course evaluation forms; and any other information documenting teaching excellence. Letters of evaluation should address the nominee's interest in teaching, enthusiasm for the subject, special attributes, innovative and special techniques, ability to present clearly ideas or concepts, capacity to motivate students, concern for students, ability to relate to students, and the characteristic of going above and beyond normal teaching duties. The Chair of the MSA Teaching Committee should contact a minimum of three former students, listed by the nominee, requesting letters of evaluation.

Application Procedure: Send one copy of the candidate's folder to Dr. Andrew S. Methven, Chair, MSA Teaching Committee, Botany Department, Eastern Illinois University, Charleston, IL 61920.

Note: The nomination folder of unsuccessful nominees will be retained by the MSA Teaching Committee for two years. The nominee will have the option of updating or adding to the folder each year. The award will be presented at the MSA Awards Ceremony at the Annual Meeting.

Martin-Baker Endowment Fund

An award to a young Ph.D. mycologist, based on proposed research and past research record.

Funds Available: $1000. (not necessarily to be awarded as a lump sum)

Application Deadline: 15 April 1996.

Documents Required (four copies): (1) Current vita, with publication list and alternative support sources; and (2) research proposal not to exceed three single-spaced pages.

The Committee: To be announced.

Application Procedure: Send application documents to Dr. Linda M. Kohn, Dept. of Botany, University of Toronto, Erindale College, Mississauga, Ontario, Canada L5L 1C6

Alexander H. and Helen V. Smith Research Fund

This award is given to members of the MSA who are working actively on the taxonomy or floristics of fleshy fungi. They should be to a point in their studies where having full access to Dr. Smith's material would advance the applicant's work. These grants will not be used for preliminary studies of possible lines of investigation.

Funds Available: Awarded as a grant-in-aid to cover all or a significant part of the expense of coming to the University of Michigan Herbarium and working with the collections and materials relating to them.

Application deadline: 15 April 1996.

Documents Required: (1) A proposal indicating how the study of Dr. Smith's specimens and manuscripts would advance the applicant's work, (2) an estimated budget to cover all or part of the anticipated expenses (e.g., travel, per diem, copying), and (3) a current curriculum vitae.

The Committee: Drs. Timothy Baroni, Nancy Smith Weber, James Trappe, Robert Fogel

Application procedure and for further information (this award has stipulations not provided here): Dr. Timothy Baroni, Dept. of Biological Sciences, SUNY-College at Cortland, P.O. Box 2000, Cortland, NY 13045

MSA Graduate Fellowships

Two MSA Graduate Fellowships of $1,000 each, one additional $1,000 award (the NAMA Fellowship), and one $500 award (the Backus Award) are awarded annually to promising graduate students in mycology. Applicants are evaluated on the basis of their scholastic merit, research ability, and promise shown as a mycologist. The Fellowship stipends are intended as supplementary grants and may be used by the recipients in any way to further their graduate studies. They are awarded in addition to any fellowship or assistantship support from other sources.

Funds available: Three awards of $1,000 each and one of $500.

Application Deadline: 1 April 1996.

Restrictions: (1) Applicants must be student members of the MSA; (2) applicants must be candidates for the Ph.D. and resident during the tenure of the fellowship in a university in the United States or Canada; (3) previous MSA Fellows are not eligible.

Documents Required (four copies): (1) A curriculum vitae that includes a paragraph concerning the student's training in preparation for the proposed work. (2) A detailed plan of study. The text of the proposal should be no longer than five (5) pages, single-spaced. See below for suggestions. (3) Two letters of recommendation, one of which is from the student's advisor. (4) Graduate school transcripts showing courses taken and grades received. Xerox copies are acceptable if signed by the advisor.

Suggestions for the Plan of Study: (1) Use a one paragraph abstract at the beginning. (2) An introduction should explain what you want to do and why it is interesting/important. (3) A methods section should convince the reader that the project is feasible. (4) A discussion section should explain results and significance. (5) Be concise. Use double spacing between paragraphs to make reading easier. Use section headings to make the organization easier to follow.

Application Procedure: Prepare four copies of the completed application and send one copy to each of the four members of the committee. Each copy of the completed application should include all four types of information listed above. The Awards Committee members are: Drs. Dennis Desjardin, Joanne Ellzey, Daniel Wubah and David Hibbett.

Note: The chairperson will appoint an ad hoc member to replace any committee member who has a student applying for a fellowship or who otherwise feels a conflict of interest. The awardees will be notified upon selection (usually within four weeks of the closing date for nominations) so that they may plan to attend the awards presentation at the annual meeting. Those applicants not notified within this time were not selected as awardees, but all applicants will be notified of their status. The stipends are awarded after confirmation of university registration.

MSA Graduate Research Prizes

Two MSA Graduate Research Prizes of $100 each are awarded annually to the two best research papers in mycology presented orally by graduate students at the annual MSA meeting. Two MSA Graduate Research Prizes of $100 each are awarded annually to the best student posters in mycology, presented by graduate students at the annual MSA meeting.

Requirements: (1) The applicant must be a member of the MSA. (2) Persons eligible for a Graduate Research Prize are M.Sc. or Ph.D. candidates or those who have been awarded the degree within one year of the annual meeting. (3) Previous recipients of either category of Graduate Research Prize are not eligible for a second award.

Application Procedure: An individual should apply for consideration for a Graduate Research Prize by so indicating on the Call for Papers for the MSA meeting. Application may be made for either but not both categories of Graduate Research Prizes. A student can apply for and receive both the Graduate Fellowship and a Graduate Research Prize.

Evaluation: The Awards Committee will evaluate applicants on the basis of significance of the work, creativity, appropriateness of the methods, clarity of presentation, and validity of conclusions. An effort will be made to send at least two members of the committee to each oral presentation and for all of the members to view the poster competition. Ad hoc members of the Awards Committee will be appointed by the Chair to avoid a conflict of interest or to facilitate the judging. These prizes will be announced at the Awards ceremony.

Mentor Student Travel Awards

Mentor Student Travel Awards are given to MSA student members who are participants in the 1996 Annual Meeting (July 27–31, Indianapolis, Indiana). The mentor awards are in the names of some of our famous mycological forbears: Alexopoulos, Backus, Barksdale, Bigelow, Butler, Denison, Korf, Luttrell, Raper, Thiers, and Uecker.

Funds Available: In 1995 twelve awards of $150 each were given.

Application Deadline: Received by 1 April 1996 (early applications appreciated!)

Restrictions: Applicants must be student members of the MSA.

Documents Required (In triplicate): (1) Abstract of paper or poster (note which). (2) Curriculum vitae (provide telephone number and if available, fax and e-mail address). (3) A one page description of the research project including an explanation of how this award will further the applicant's research/study. (4) A letter of support from his or her major professor. (To assist the judging committee in making Mentor "assignments" to award winners, inclusion of comments regarding which Mentor(s) would be most appropriate to the student are welcome but not required.)

Application Procedure: Send all four documents listed above in triplicate to Dr. Walter Sundberg, Dept. of Plant Biology, Mail Code 6509, Southern Illinois University at Carbondale, Carbondale, IL 62901-6509. <sundberg@qm.c-plant.siu.edu>.

Members of the MSA Awards Committee are listed below. Dr. Jeff Stone is an *ex officio* member of the committee.

Dr. Dennis Desjardin (Chairperson)
Dept. of Biology
San Francisco State University
1600 Holloway Ave.
San Francisco, CA 94132
Phone: 415-338-1548
FAX: 415-338-2295
<ded@.sfsu.edu>

Dr. Joanne Ellzey
Dept. of Biological Sciences
University of Texas
El Paso, TX 79968-5844
Phone: 915-747-5844
FAX: 915-747-5808
<jellzey@mail.utep.edu>

Dr. Daniel Wubah
Dept. of Biology
Towson State University
Towson, MD 21204
Phone: 410-830-3123
FAX: 410-830-2604
<e7b2wub@toe.towson.edu>

Dr. David S. Hibbett
Harvard University Herbaria
20 Divinity Ave.
Cambridge, MA 02138
Phone: 617-496-3374
FAX: 617-495-9484
<d_hibbett@harvard.edu>

Report of the MSA Endowment Committee 1994/1995

Between June 1, 1994 and June 1, 1995 a total of $16,290 was contributed to the MSA endowment. Between June 2 and July 15, 1995 an additional $1,125 was donated. The total for named subfunds now stands at approximately $103,285 exclusive of interest over the past year. The totals for individual named funds are as follows; number in parentheses indicate the number of awards in 1995:

Mentor Travel Funds (Target = $2,000 each)

- Alexopoulos (1) $2,400
- Barksdale/Raper (1) $3,275
  (includes $3,000 transferred from the Memorial Fund, which has now been discontinued)
- Bigelow (3) $5,350
- Butler (1) $2,064.28
- Denison (3) $5,550
- Fuller (0) $550
- Korf (1) $2,609.05
- Luttrell (1) $1,300
- Thiers (1) $1,745
- Uecker (0) $950
- Wells (1) $1,700

Graduate Research Funds (Target = $10,000 each)

- M.P. Backus Fund (1) $9,250

Senior Research Funds (Target = $20,000 each)

- Martin/Baker Fund (1) $20,988.66
- A. and H. Smith (1) $16,183.59

Special Prize Funds (Target = $10,000)

- Alexopoulos Prize (1) $9,144.24

The total target endowments for all funds exclusive of the Alexopoulos Prize fund and the Smith fund come to $69,000. The difference between this sum and the $57,682 actually present in the principal of these funds is considered to be covered (handily) by the uncommitted endowment. At the meetings in San Diego MSA will announce 13 graduate travel awards, 1 Backus graduate research award, 1 A.H. and H.V. Smith award, 1 NAMA Fellowship, and 1 Alexopoulos prize. The endowment committee will undertake several fund-raising activities at the San Diego meetings including the annual society auction and T-shirt sales.

The accumulation of approximately $58,000 in contributions in the last three years and some $20,000 in uncommitted funds from auction and T-shirt sales since 1988 represents a significant increase in the MSA endowment, and if continued at the present rate of about $20,000/year could raise the total to something on the order of $1/2 million over the next 15–20 years. This total might well be more if MSA were to receive any significant bequests. Such an amount should generate a payout on the order of $25,000–$40,000/year. Could our society use this much money wisely? You bet! This year we received requests for 26 graduate travel stipends. The society has been looking for $10,000 to send complete sets of *Mycologia* to academic institutions in third-world countries. We could easily have justified funding 5–10 MSA graduate fellowships at a level of $2,000–$3,000 each. Senior research prizes on the order of $5,000 instead of $1,000 would more realistically serve the needs of worthy projects.

Fund-raising is hard work and the endowment committee has been a working committee. The current members of the committee are: Jeff Stone, David Porter, Meredith Blackwell, Charles Bracker, Bob Lichtwardt, Diane Te Strake, Charles Mims and George Carroll. Special appreciation is due Jeff Stone, who dealt with T-shirt design last year and this; David Porter, who organized the auction last year; and Meredith Blackwell, who has done the same for this year's meeting. Thanks are due to Dennis Desjardin and Robbie Roberson, who undertook fund-raising initiatives for the Thiers and Fuller travel awards respectively. June Wang has continued to solicit money for the Martin/Baker award. Other notable achievements this year include the implementation of an endowment investment program under the guidance of Orson Miller and Tim Baroni and the "test-marketing" of a letter on bequests by Bob Lichtwardt. We expect to publish this in the newsletter later in 1996.

Respectfully submitted on behalf of the endowment committee.
George Carroll

Secretary's Report 10 August 1994–6 August 1995

1. Sent list of 1994–1995 Council to AIBS, AAAS, NSF, and IUMS.

2. Mailed renewal form and nomination ballot directly to members.

3. Sent request for agenda items and reports for the mid-year Executive Committee meeting to Council and all Committee Chairs.

4. Established production schedule with Allen Press for 1995 Membership Directory, proofed galleys (with assistance of A. Rossman).

5. Held mid-year Executive Committee meeting in Beltsville, Maryland, on Saturday, 18 February 1995. Minutes were taken, placed on the MSA Bulletin Board and in Inoculum 46 (2):4–7.

6. Mailed MSA Ballot, Endowment Fund contribution form, announcement of travel awards, and request for auction items to members.

7. Mailed request for agenda items and reports for the annual Council meeting.

8. Sent letter of welcome, a copy of A Brief History of Mycology in North America, and a 1992 Directory of Members to new MSA members.

9. Corresponded with various members and responded to inquiries via phone, mail and e-mail.

10. Corresponded with AIBS, ASC, IUMS, AAAS and organizing committee of IMC VI.

11. Polled Council and moderated e-mail discussion (all items passed):
a. Approval of O.K. Miller as Chair of Finance Committee and 1996 MSA Annual Mtg. with APS, July 27–31, Indianapolis, IN. (26/09/94)
b. Approval of MYCOLOGIA Associate Editors: Leslie, Speigel, Correll, Griffin (2/12/94); Miller (26/02/95); Stone to replace Miller (3/04/95); Mueller and Blackwell (23/05/95).
c. Approval of up to $250.00 disbursement for two students to assemble sets of surplus Mycologia at Beltsville. (28/03/95)
d. Conversion of the Barksdale/Raper memorial fund to graduate student travel awards, with remainder placed in the General Endowment. (23/05/95)

12. Moderated e-mail discussions among Council of financial support and guidelines for Annual Lecturer and procedures for Graduate Awards.

13. Received notices of deaths of Francis (Bud) A. Uecker, Josef Poelt, Dieter Seibt and John Karling. The deaths of Clyde M. Christensen, Vladimir J. Krajina, Larry P. Lehnen, Jr, Richard A. Nolan, Nils Fries and James G. Horsfall have been noted in *Inoculum*.

14. Received one request for Emeritus status from Minoru Aragaki (Univ. of Hawaii at Manoa).

Respectfully Submitted,
Linda M. Kohn, Secretary, MSA

Treasurer's Report—Fiscal Year 1994–1995
1 August 1994–31 July 1995

Fiscal

The 1993–1994 financial activities of the Society were filed with the IRS on time. The 1994–1995 financial activities of the Society will be filed with the IRS in December of 1995 by the outgoing Treasurer.

New receipts and disbursements from 1 August 1994 to 31 July 1995 were as follows: Receipts of $118,302.19 and disbursements of $66,225.28 (see accompanying ledgers for details). The Society is in excellent financial condition, with our overall assets currently near the $300,000.00 level. Much of these increased revenues have come from the vigorous fund raising activities of the Endowment Committee, most especially George Carroll and Jeff Stone. The Endowment Funds were separated from the Operational Funds this past May and are now being managed by the investment firm of Wheat First Butcher and Singer. Orson K. Miller, Jr. is chairing the Investment Committee and overseeing this new effort by the Society to increase its interest earnings on our Endowment Funds.

Interest rates on our certificate of deposit accounts continue to remain low. None of our current CD accounts earn more than 5.5%. The Cortland checking account earned only 1.75%. Nonetheless, the Society is in very sound financial condition with receipts plus interest exceeding disbursements.

The Society's financial records, covering the fiscal years of 1993–1994 and 1994–1995, have received an unqualified audit report from the firm of Port, Kashdin, & McSherry, Certified Public Accountants. In other words, the Society's financial records, as maintained and reported on by the Treasurer, present fairly and accurately the assets and liabilities of the Society as of July 31, 1995 and 1994.

Membership

On 31 July 1995, the Society membership consisted of 1245 paid members in the following categories: 844 regular members, 158 student members, 21 honorary members, 56 emeritus members receiving the journal, 55 emeritus members receiving only the Newsletter, 45 life members, 16 Sustaining members, 38 associate members, 12 family members, and no affiliate members. Of these members, 851 are from the US, 95 from Canada, 12 from Mexico and 287 from other countries. The Society had a net increase of 29 members over the last year. Please continue to recruit new members as this activity is essential to the health of our Society.

Comments

Our new membership services group at Allen Press (Allen Marketing & Management) continues to do a very fine job from my perspective. I firmly believe the Society made a wise choice in selecting this group to handle our membership.

I suggest that the financial records of the Society receive an official audit from a certified public accountant at the end of each Treasurer's term. Our assets have doubled in the past three years and the number of accounts have also multiplied. Multiple accounts make the task of record keeping and balancing the books much more difficult. An official audit at the end of the Treasurer's term will make the transition from former to new Treasurer a much smoother operation, and will also assure the financial integrity of the Society.

Serving the Society these past three years was a pleasure and an experience I shall long remember.

Respectfully submitted,
Timothy J. Baroni

[*Please note*: The Mycological Society of America is a Section 170(c) Organization of the IRS Code of 1954, and is listed in the official IRS publication List of Organizations (Department of Treasury, IRS Publication 78, Rev. 10–91). Contributions to the MSA are deductible for most individuals. Consult a tax specialist if you have any questions or if you are considering donating a large sum to the Society.]

Financial Summary - Fiscal Year 1994

1 August 1994 - 31 July 1995

Balances as of 31 July 1994

- confirmed by PKM (auditors) via bank confirmations & reconciliations: October 1995

CORTLAND ACCOUNTS	
Checking Account (M&T Bank acct. #015298490)	$59,460.25
Checking Account (Douglas Co. Bank acct. #1003027944)	$22,931.12
Savings Account (CD Cortland Savings Bannk acct. # 60-47883) (includes interest to 6-30-94)	$62,264.87
Savings Account (CD Citizen's Savings Bank acct. #820471-21)	$101,284.74
MARYLAND ACCOUNTS	
Savings Account (M. Palm - Credit Union)	$368.83
TOTAL FUND BALANCES - 31 July 1994	**$246,309.81**

RECEIPTS

Membership dues	$62,893.83
Sustaining Members	$4,000.00
Interest on checking & savings accts.	$8,733.85
T-shirt and Auction sales - 1994	$11,275.32
Brief History of Mycology	$40.00
Contributions to Endowment - 1994-1995	$14,050.00
Full set Mycologia backissues	$359.19
Dr. J. S. Karling bequest	$10,000.00
Dr. C. Rogerson donation - Mycologia project	$5,000.00
Anonymous donation - Travel Awards	$300.00
North American Mycological Association	$1,000.00
Mycologia Index	$650.00
TOTAL FOR 1994-1995	$118,302.19

DISBURSEMENTS

Mycologia (Vol.86, 1994) membership subscriptions	$20,562.50
Bad checks (Citizen's Savings)	$31.00
Mid-year Executive Council meeting	$2,335.80
Annual Incorporation fee (Washington, DC)	$25.00
Treasurer expenses 1995 Meetings	$678.00
Secretary's expenses	$2,700.00
Past Secretary's expenses (M. Palm)	$239.21
Newsletter Editor expenses	$393.30
Treasurer's expenses	$507.36
Associate Editor MYCOLOGIA - David Griffin 1995 Meetings	$500.00
Allen Marketing & Management - 1994-1995	
Membership Annual Fees 1995 & membership manageme	$7,493.89
Services Mycologia vol. 86(2-6); 87(2-3)	$5,840.80
AM&M - INOCULUM production & mailing, vol 46(1-3)	$3,635.35
Endowment Expenses (IMC5 '94; T-shirts '95)	$4,521.61
IMC5 - expenses: 1994	
IMC5: best poster awards	$400.00
IMC5: Tuller Trophy INC. - trophy production	$117.04

IMC5: misc. copy & reproduction	$119.90
IMC5: MSA Officer's certificates	$75.00
IMC5: room rentals, food, etc.	$1,702.54
IMC5: Venue West - services	$421.45
IMC5: Field Trip liaison expenses	$285.60
IMC5: Hawksworth gift	$100.00
Mail Mycology Career Booklets	$35.81
Move Backissues of Mycologia from NYBG to Beltsville	$4,486.00
Mail set of Mycologia	$136.00
Dues reimbursement	$60.00
Final issue INOCULUM 45(4) - Cornell University	$776.06
Dues to other Societies	
AIBS - 1995	$360.00
Int. Union of Microbiol. Societies - 1994	$610.00
Int. Union of Microbiol. Societies - 1995	$610.00
Assoc. of Syst. Coll. - 1995	$100.00
1995 Meetings San Diego (in part)	
Tuller Trophy INC., 1995 Meetings	$123.06
reimbursemt to awardees for breakfast tickets	$143.00
Graduate fellowships	$3,000.00
Travel Awards (contingency funds)	$300.00
Travel Awards (Endowment funds)	$1,950.00
Backus Awards (Endowment funds)	$500.00
Alexopoulos Prize - R. Vilgalys (Endowment funds)	$350.00
TOTAL FOR 1994-1995	$66,225.28

ITEMIZATION OF FUNDS

Operational Funds (includes part of checking and CD accounts)

1. "Contingency Funds" (unrestricted)

Balance 1 August 1994	$36,569.21	
RECEIPTS	$30,389.54	
DISBURSEMENTS	$1,300.00	
(NAMA Scholarship & Anonymous Donor Travel Awards)		
NET	$65,658.75	
Balance 31 July 1995		$65,658.75

2. Reserve Funds (Unrestricted)

Balance 1 August 1994	$68,744.65	
RECEIPTS:		
Sustaining Membership Dues	$4,000.00	
TOTAL	$72,744.65	
DISBUREMENTS: (Travel, fellowships, awards-'94)	$2,400.00	
NET	$70,344.65	
INTEREST	$2,518.94	
Balance, 31 July 1995		$72,863.59

3. Life Membership Fund (Unrestricted)

Balance, 1 August 1994	$20,029.51
RECEIPTS	
1994-95	$2,000.00
1993-94	$2,000.00
DISBURSEMENTS	$0.00
NET	$24,029.51

INTEREST	$790.43	
Balance, 31 July 1995		$24,819.94

4. Publication Fund (Unrestricted)

Balance, 1 August 1994	$24,949.56	
RECEIPTS:		
Mycologia Index	$650.00	
Brief Hist. Myc.	$40.00	
DISBURSEMENTS	$0.00	
NET	$25,639.56	
INTEREST	$964.15	
Balance, 31 July 1995		$26,603.71

Endowment Funds

NOTE: several corrections from the 1993-1994 ledgers have been made to reflect accounting employed by the Chair of the Endowment Committee,

1. General Fund [uncommitted endowment] (Restricted)

Balance, 1 August 1994	$19,151.30	
RECEIPTS:		
T-shirts & Auction (1994)	$11,275.32	
Contributions	$225.00	
DISBURSEMENTS:		
T-shirt production IMC5, 2nd run & Auction costs (1994)	$3,194.61	
T-shirt production (1995)	$1,327.00	
awards (93-94)	$4,290.30	
awards (94-95)	$2,800.00	
NET	$19,039.71	
INTEREST		
(93-94)	$3,390.24	
Balance, 31 July 1995		$22,429.95

2. Alexopoulos Prize Fund (Restricted)

Balance, 1 August 1994	$8,999.83	
RECEIPTS	$0.00	
Balance, 31 July 1995		$8,999.83

3. Travel Funds (Restricted)

- balances reflect books of Endowment Chair and only include contributions

C. J. Alexopoulos (est. 1992)

Bal. 1 Aug. 1994	$1,220.00	
RECEIPTS	$1,180.00	
Balance, 31 July 1995		$2,400.00

H. E. Bigelow (est. 1992)

Bal. 1 Aug. 1994	$3,950.00	
RECEIPTS	$1,400.00	
Balance, 31 July 1995		$5,350.00

E. S. Luttrell (est. 1992)

Bal. 1 Aug 1994	$300.00	

RECEIPTS	$1,000.00	
Balance, 31 July 1995		$1,300.00
E. E. Butler (est. 1992)		
Bal. 1 Aug. 1994	$1,864.28	
RECEIPTS	$200.00	
Balance, 31 July 1995		$2,064.28
W. C. Denison (est, 1992)		
Bal. 1 Aug. 1994	$4,835.00	
RECEIPTS	$715.00	
Balance, 31 July 1995		$5,550.00
R. P. Korf (est. 1993)		
Balance, 1 Aug. 1994	$1,649.05	
RECEIPTS	$960.00	
Balance, 31 July 1995		$2,609.05
Barksdale/Raper (est. 1995)		
Balance (transfer of Memorial Funds)	$2,820.11	
RECEIPTS	$275.00	
Balance, 31 July 1995		$3,095.11
Fuller (est. 1995)		
RECEIPTS	$500.00	
Balance, 31 July 1995		$500.00
Thiers (est. 1995)		
RECEIPTS	$1,745.00	
Balance, 31 July 1995)		$1,745.00
Uecker (est. 1995)		
RECEIPTS	$950.00	
Balance, 31 July 1995		$950.00
Wells (est. 1995)		
RECEIPTS	$1,700.00	
Balance, 31 July 1995		$1,700.00
SUBTOTAL BALANCE FOR TRAVEL FUNDS, 31 July 1995	$27,263.44	
4. Research Funds (Restricted)		
M. P. Backus (established 1992)		
Bal. 1 Aug. 1994	$8,150.00	
RECEIPTS	$1,100.00	
Balance, 31 July 1995		$9,250.00
Martin-Baker (established 1992)		
Bal. 1 Aug. 1994	$19,533.66	
RECEIPTS	$2,815.00	
Balance, 31 July 1995		$22,348.66
Smith Fund (established 1987)		
Balance, 1 August 1994	$17,217.89	
RECEIPTS	$25.00	
Balance, 31 July 1995		$17,242.89

SUBTOTAL BALANCE FOR RESEARCH FUNDS, 31 July 1995	$48,841.55	
subtotal		**$297,480.76**
TOTAL FUNDS		**$297,480.76**

FINANCIAL SUMMARY OF MSA ASSETS

Certificat	Citizen's Savings CD #82047121: closed (matured) 3-28-95	$103,983.95
	Cortland Savings CD #60-47883: opened 3-24-94 (incl. int. to 7-31-95)	$65,068.72
	M&T Bank CD #31003903416343: opened 4-4-95 (incl. int. to 7-31-95)	$40,700.11
	Key Bank CD #45-411807866: opened 8-24-94 (incl. int. to 7-31-95)	$42,568.04
Checking	M&T Bank Acct. # 015298490	$40,342.41
	Douglas County Bank Acct. #027944	$15,925.26
Investme	Acct. nbr. BB03-5889-5324: opened 4 May 1995	$92,746.60
Savings account, Maryland Accounts		$129.62
TOTAL ASSETS IN ACCOUNTS, 31 July 1995		**$297,480.76**
Total assets as of 1 August 1994		$246,309.91
NET CHANGE IN ASSETS		$51,170.85

Mycology Online

Finding Mycological Information

Remember to check the Smithsonian Natural History Gopher Server <nmnhgoph.si.edu> for copies of *Inoculum*, an up-to-date directory (as of 11/13/95) of MSA members and a link to the MSA Bulletin Board. Look on the Botany menu for the "Mycological and Lichenological Information" submenu.

Send news for immediate distribution to the MSA Bulletin Board. Submit news as an e-mail message to <msa-news@huh.harvard.edu>.

[Note: As an editorial policy, I will try to enclose all Internet addresses within "greater than/less than" symbols (< >) to avoid confusion with sentence punctuation and long addresses that wrap to a second line. There are no spaces in Internet addresses and the < > symbols are not part of the address.]

Ellen Farr

New Access to MSA Directory

A copy of the MSA Directory is now available on the World Wide Web. Visit the Web site of the USDA's Systematic Botany and Mycology Laboratory at <http://nt.ars-grin.gov/> and look under "MSA Directory." Users with a graphical Web browser can search by name, state, and country and can submit a correction to their directory entry which will be forwarded to Allen Press.

Remember that all corrections to the directory must go through Allen Press. The online directories are copies of the database at Allen Press and they will be updated several times a year.

Discussion List On Lichens

LICHENS-L is a list server with the aim of promoting communication among lichenologists on any topic that may be of interest to participants. For example, in preparation for the Salzburg IAL meeting, we would like to hear from lichenologists regarding the preparation of a world-wide list of endangered lichens for IUCN. Though a complete listing is almost impossible to achieve, we would like to have a representative list of approximately fifty lichens ready for the Salzburg meeting. A questionnaire has been developed which will be distributed soon. The List will also be a means of disseminating information rapidly and alerting subscribers to world wide web sites with lichen information.

If you are interested, please send the following **one-line** message to <listproc@hawaii.edu>:

SUBSCRIBE LICHENS-L
YourFirstName YourLastName

If you have any questions, please contact Cliff Smith at <cliff@hawaii.edu>.

URLs Briefly Noted

Take a look at the Microbial Germplasm Database World Wide Web site at <http://mgd.cordley.orst.edu>. We are rapidly moving information over from our gopher database at <gopher://bcc.orst.edu:70/11/mgd>. You'll find much information regarding bacteria, fungi, nematodes, mycorrhizae and other soil-associated microorganisms. For the next month or so the gopher site will be more complete; but, as we proceed with the cut over to WWW then the easier-to-use web site will become the best choice. [Joe Hanus <hanusj@mgd.cordley.orst.edu>]

You can download our mycology books catalog at our Web site: <http://www.shuot.net/~koeltz/>. Go to the catalogs link or icon and you will then see a listing of subject area catalogs. [Pamela Burns-Balogh, Koeltz USA]

The University of Michigan Herbarium has just installed a new web site at <http://www.herb.lsa.umich.edu/umherb.htm>. [Robert Fogel <rfogel@umich.edu>]

Mycological News

News of Collections

The **"Culture Collection of Fungi,-Kew, England"** is now at: International Mycological Institute, Bakeham Lane, Egham, Surrey TW20 9TY, UK. Phone: (01784) 470 111. Fax: (01784) 470 909. The Curator is Dr. David Smith. <d.smith@cabi.org>.

Centraalbureau voor Schimmelcultures (P.O.Box 273, 3740 AG BAARN, the Netherlands) has new telephone and fax numbers and Internet addresses.

Telephone +31 (0)35 5481211
Telefax +31 (0)35 5416142

CBS, Yeast Division,
Julianalaan 67,
2628 BC Delft, The Netherlands.
Phone: +31 (0)15 - 2782394, 2783214
Fax +31 (0)15 - 2782355

New CBS Email addresses: <sales@cbs.knaw.nl> for (information about) ordering cultures, <library@cbs.knaw.nl> to contact the librarian, and <info@cbs.knaw.nl> for all general messages and requests to the CBS.

The mycologists can be reached with their last name@cbs.knaw.nl. The CBS Yeast division has its own e-mail addresses, <cbs@dutsf29.stm.tudelft.nl>, for general messages and requests including orders.

CBS can be visited on the World Wide Web at <http://www.cbs.knaw.nl>. The pages give general information about the CBS and its services (identification, ordering cultures, contract research etc.), and allow you also to search the databases. Information on courses, publications, etc., are regularly updated.

News of Mycologists

Prof. James W. Kimbrough, mycologist from the Plant Pathology Department of the University of Florida, visited Prof. Leonor C. Maia of the Departamento de Micologia, UFPE, Recife, Brasil from May 15–July 18, 1995. He presented four seminars, taught a course on Ascomycetes and Basidiomycetes, and did considerable field and herbarium work. Drs. Maia and Kimbrough have a joint project funded through CNPq (Brasil) to study ectomycorrhizal fungi of Pernambuco. [Leonor Maia]

Deaths

Joe Czarnecki, father of Jack Czarnecki, died on October 28. He was 84. Joe was passionate about wild mushrooms, an avid photographer, a fine teacher, and a splendid cook. There are some good descriptions of the relationship between Joe and his son Jack in the introduction to the 1986 *Joe's Book of Mushroom Cookery*, a relationship which was to continue the traditions of Joe's restaurant after it passed from Joe's to Jack's and Heidi's hands. Joe's Restaurant was awarded the Fine Dining Hall of Fame Award in 1990. The memorable thing about Joe was his love for creating new recipes for the wild mushrooms for which he and his family combed the woods and fields. The non-fruiting years must have been frightening! In the words of his son Jack, "Pop got the whole wild mushroom movement going in the U.S. with his passion for knowing them, and for sharing his knowledge of cooking and eating them." [Maggie Rogers, Coordinating Editor, *Mushroom*]

Calendar of Events

To assist members in planning their calendars and scheduling events, Jim Ginns has given me a list of dates for mycological and non-mycological meetings well into 1999. I have no additional details about some of these meetings, but will update the entries as more information becomes available.

8–13 February, 1996. AAAS, Baltimore, MD.

24–27 March 1996. ESF Systematic Biology Network will organise a **Workshop on Disseminating Biodiversity Information** to be held in Amsterdam. Key theme of this workshop will be the organisation and subsequent dissemination world-wide of information on the Earth's biological diversity. The workshop will cover various topics including specimen based collection databases, species based taxonomic databases, accessibility and the user needs, input of data and data management, technical developments and standardisation, and legal and ethical aspects. Contact: Conference Office / University of Amsterdam, Spui 21, NL-1012 WX Amsterdam, The Netherlands. Phone: +31.20.525.2690. Fax: +31.525.4755. <congres@bdu.uva.nl>.

27–30 March 1996. ECFG 3. **3rd European Congress of Fungal Genetics** in Muenster, Germany. Contact: Prof. Dr. Paul Tudzynski, Westfdlische Wilhelms-Universitdt, Institut f. Botanik, Schlossgarten 3, 48149 Muenster, Germany. Fax: 0251 / 83 3823. <tudzyns@uni-muenster.de>.

14–17 April, 1996. An International Interdisciplinary Conference: **Carry on Collecting? Developing a Strategy for the Future of Collecting.** University of Leicester. The conference builds upon the existing role of museums as collecting agencies in society to consider how they can achieve the best possible practice. By gathering together expertise from around the world this conference aims to examine and develop strategies for collecting which go beyond the limitations of current approaches. Offers of papers and requests for further details please contact: Simon Knell & Kevin Moore, Department of Museum Studies, University of Leicester, 105 Princess Road East, Leicester LE1 7LG. Phone: 0116-2523963. Fax: 0116-2523960. <SJK8@le.ac.uk>.

15–19 April 1996. **Second International Congress on the Systematics and Ecology of Myxomycetes** (ICSEM2). Real Jardin Botanico, CSIC. Madrid, Spain. The program will include sessions on Systematics, Ecology and Distribution of Myxomycetes, Cellular slime molds, and Tropical Myxomycetes as well as workshops and sessions for offered papers and posters. Registration deadline: 1 February 1996. Deadline for abstracts: 1 March 1996. Contact: ICSEM2, Dr. C. Lado; Real Jardin Botanico, CSIC; Pza. de Murillo, 2; E-28014 Madrid. Fax: +34-1-4200157. <lado@ma-rjb.csic.es>.

6–10 May 1996. **Tenth New Zealand Fungal Foray**. Outdoor Pursuits Centre, Hunua Falls. The Outdoor Pursuits Centre is in the Hunua Ranges, about 45 minutes south of Auckland City. The Ranges include areas of coastal forest, regenerating *Leptospermum/Kunzea* dominated forest, as well as small patches of *Nothofagus truncata*. The variety of forests should provide great collecting (depending of course on the weather ...). A limited number of microscopes, driers, etc will be provided. Depending on demand, a pre-foray visit (on Monday May 6) to the *Metrosideros* forests on the lava flows of Rangitoto Island may be arranged. The cost for the lodge style accommodation will be approximately NZ$10 per night. There is an additional cost for food, which will be prepared by our famous, long-term resident chef. You will need to provide your own pillow case, sleeping bag or sheets and blankets.

If you are planning a mycological visit to New Zealand next year, consider joining the week at Hunua. Space is limited, please register your interest as soon as possible. Contact: Peter Johnston, Landcare Research, Private Bag 92170. Auckland, New Zealand. Phone: +64 (9) 849 3660. Fax: + 64 (9) 849 7093. <johnstonp@landcare.cri.nz>

9–11 May, 1996. **The Portuguese Association of Medical Mycology** (ASPOMM) invites all fellow researchers and clinicians to join the European Confederation Members for the 3rd ECMM Meeting, taking place in Lisbon, Portugal. Provisional Scientific Program includes: Environmental Mycology (Myc. & Public Health and New pathogenic agents), Molecular Biology (Taxonomy and Molecular Epidemiology). Dermatological Mycology. Systemic Mycosis in Oncology and Haemathology. Aids and Mycosis. and New antifungal treatments. Contact: <joao8528@mail.telepac.pt> or write to Manuela Rocha (ASPOMM President), ASPOMM, R. Jose Estevao, 135, 1100 Lisboa.

19–21 May, 1996. "Global Genetic Resources: Access, Ownership and Intellectual Property Rights." **Agricultural research Service, U.S. Department of Agriculture, Beltsville Symposium 21/Association of Systematics Collections Annual Meeting**, Beltsville, Maryland. The purpose of the meeting is to explore issues related to ownership of and access to genetic resources and biological specimens as they affect the ability of scientists to do their job of providing knowledge to benefit the people of the world. While scientists desire free, international distribution of germplasm and scientific information on biodiversity, current forces and trends are leading away from this position. A mutually beneficial compromise is needed and this meeting will explore these possibilities.

Twenty-four international, national and local speakers will participate in this symposium with emphasis placed on the value of specimen-based research to the global community. Registration is $195 if received by April 1, 1996, and includes meetings, two receptions, a banquet, and the Proceedings. Posters may be presented. Contact: Virginia Hupfer, B003, Rm. 200, 10300 Baltimore Ave., Beltsville, MD 20705-2350. Phone: 301-504-6108. Fax: 301-504-6357. <mbohning@ars-grin.gov>.

27–31 July, 1996. **American Phytopathological. Society/ Mycological Society of America.**, Indianapolis, IN. MSA program chair is Elwin Stewart.

4–8 August, 1996. **AIBS**, Seattle, WA.

4–9 August, 1996. **International Conference on Mycorrhizae**, Berkeley, CA. Contact: Dr. Tom Bruns, 108 Hilgard Hall, Dept. ESPM, Univ. Calif., Berkeley. CA, 94720-3110.

5–8 August 1996. **3rd Symposium of the International Working Group on Plant Viruses with Fungus Vectors** (IWGPVFV), University of Dundee, Scotland. Papers and posters are invited on molecular biology of viruses with fungal vectors, virology and viral pathology, mycology of vector fungi, interaction between viruses and vectors, disease resistance, and epidemiology and management. Additional information about IWGPVFV and the August '96 meeting can be found on the Web page at <http://www.res.bbsrc.ac.uk /plantpath/Iwgpvfv/>.

Registration and deposit are required by 10 January 1996. Contact: Dr. Michael J Adams, Plant Pathology Department, IACR-Rothamsted, Harpenden, Herts, AL5 2JQ, UK

18–23 **August, 1996. International Bact. & Applied Microbiol. Congr.**, Jerusalem, Israel.

20–24 August 1996. **2nd International Symposium and World Congress on the Preservation and Conservation of Natural Science Collections**: "Natural Science Collections—A Resource for the Future" (St Johns College, Cambridge, U.K.). The Congress is being organized by the Geological Conservation Unit and the Department of Each Sciences of the University of Cambridge and is co-sponsored by several collections support organizations, including the Association of Systematics Collections and the Society for the Preservation of Natural History Collections. Contact: Chris Collins, Natural Sciences Congress '96, Geological Conservation Unit, Department of Earth Sciences, Downing Street, Cambridge, CB 2 3EQ, U.K.

25–29 August 1996. **6th International Fungal Spore Conference.** Konstanz, Germany. The conference will include topics such as fungal sporulation, spore germination, mating, spore release, spores in biotechnology. Persons wishing to organize small groups for research discussions or demonstration of techniques are welcome. To receive the 2nd Circular, submit a preliminary registration form (with a preliminary title of any contribution and your address) by 15 July 1995 to Kurt Mendgen, Phytopathologie,Universitat Konstanz, Postfach 5560, D-78464 Konstanz, Germany.

25–29 August 1996. **8th International Congress for Culture Collections**, "Culture Collections to Improve the Quality of Life," Veldhoven, The Netherlands. Dr. Dirk van der Mei, Chairman, Organizing Committee. Contact: Secretariat ICCC-8, Centraalbureau voor Schimmelcultures, PO Box 273, 3740 AG Baarn, The Netherlands Phone: +31-2154-81211. Fax: +31-2154-16142. <iccc8@cbsc.nl>.

29 August– September 1, 1996. **NAMA with North East Mycological Foray**, Ascutney, VT.

1–7 September, 1996. Progress and Problems in Lichenology in the Nineties (**3rd International Association for Lichenology Symposium**), Salzburg. Contact: Dr. Roman Türk, University of Salzburg, Institute of Plant Physiology, Hellbrunnerstr. 34, A-5020 Salzburg, Austria. Phone: +43 662 8044 5588. Fax: +43 662 8044 5010. <tuerk@edvz.sbg.ac.at>. WWW announcement at <http://www.sbg.ac.at/pfl/projects/lichen/index.htm>. (*Inoculum* 45(4): 15.)*

16–20 September, 1996. **First World Congress On Allelopathy**. A Science For The Future will be held in Cadiz, Spain. Information available at <http://www2.uca.es/dept/quimica_organica/allelopathy.htm>. [posted on MSA Bulletin Board, Editor has no additional information]

October 1996. **2nd Latin American Congress of Mycology**. (*Inoculum* 45(3):13.)

1997 (February 13–18). **AAAS**, Seattle, WA.

1997 (August 3–7). **AIBS/ Mycological Society of America**, Montreal, Quebec. MSA program chair is Steve Miller.

1998 (February 12–17). **AAAS**, Philadelphia, PA.

1998 August 2–6). **AIBS/Ecological Society**, Baltimore, MD.

1998 (August 23–28). **6th International Mycological Congress**, Jerusalem. The Council of the British Mycological Society invites from Members constructive suggestions on the format for IMC6. Those persons who attended IMC5 in Vancouver may consider that future Congresses should incorporate additional features, e.g., Plenary Sessions, programme for accompanying persons. Comments received will be collated by the General Secretary and forwarded to Professor Margalith Galum, Organizer of IMC6. Comments should be sent to the Society's General Secretary, Dr. Stephen Moss, School of Biological Sciences, University of Portsmouth, King Henry 1 Street, Portsmouth, Hampshire, PO1 2DY.

1998 August. **International Plant Pathology Congress**, Scotland.

1999 (January 21–26). **AAAS**, Anaheim, CA.

1999 (August 1–7). **The International Botanical Congress** will be held in St. Louis, MO. The organizers want mycology to be included and would like to have some fully intergrated symposia including mycology. Although the meeting will not occur until 1999, we must offer suggestions now if they are to be considered. Mycology needs to nurture its botanical roots! Contact: Don Pfister or Meredith Blackwell with any ideas of topics that will be of interest to the botanical community as a whole, as well as mycology.*

1999. **Amer. Phytopath. Soc./Canad. Phytopath. Soc.**, Montreal, Quebec.

1999. **International Bact. & Applied Microbiol. Congr.**, Sydney, Australia.

Book Reviews

Brako, L., A.Y. Rossman, and D.F. Farr. 1995. Scientific and Common Names of 7000 Vascular Plants in the United States. APS Press, St. Paul. vi + 295pp.

Common names present themselves as hosts or substrates on collection labels of field mycologists (and yes, botanists as well) in herbaria worldwide. This volume will provide great assistance in assigning an accurate scientific name in many of those cases in the United States. This collection of 7000 names (I didn't count them) is well organized into 5 sections. The introduction explains how to use the volume (don't be concerned at finding that *Abies* in the example is now in the Poaceae), followed by alphabetical listings of the "Vascular Plant Names," "Common Name Index," "Synonyms," and the "Families and Genera" treated. My search for common names not included resulted in not finding "tag alder" under *Alnus rugosa*, and that was after a good deal of searching. The listings are very complete.

In this age of heightened attention to the host/substrate associations this volume will be an absolute necessity for the field mycologist working on herbarium specimens. [H.Burdsall]

Mycological Classifieds

Read the Mycological Classifieds for announcements of courses, employment opportunities, positions wanted, and mycological goods and services offered or needed.

Fungi Wanted

***Penicillium* Identification.** Martha Christensen and her collaborators want isolates of *Penicillium* from soil, primarily members in *Aspergilloides* (*Monoverticillata*) and *Furcatum* (*Divaricata*) plus *P. citrinum* Series, to use in the testing of synoptic keys. They can examine and tentatively identify up to 10 isolates per sender, but please call or e-mail before sending cultures. Phone: 307-677-2140. Fax: 307-766-2851. <mchris@uwyo.edu>.

Mycological Goods and Services

Mold Identification Services. We identify fungal molds for industry, agriculture and academia. Information is available via e-mail at microbe@peak.org or by writing Cascade Research Associates & Abbey Lane Laboratory, P.O. Box 1665, Philomath, OR 97370 USA. Phone: 503-929-5984. [Steven Carpenter]

Positions Available

Mycologist, Assistant Professor. The **Department of Biology and Microbiology, University of Wisconsin-La Crosse** invites applications for an academic year, tenure-track position at the assistant professor level to start August 26, 1996. Applicants should have a strong commitment to undergraduate education. The successful candidate will be expected to teach General Mycology and Medical Mycology, and to participate in introductory Microbiology and/or Biology courses. The successful candidate will be expected to develop an externally-funded research program and direct undergraduate and graduate (MS) research. A Ph.D. is required with an emphasis in mycology. Send curriculum vitae, statements of teaching and research interests, graduate and undergraduate transcripts, and three letters of recommendation to Dr. James E. Parry, Chair, Department of Biology and Microbiology, University of Wisconsin-La Crosse, La Crosse, WI 54601. Deadline: materials received by February 15, 1996. The University of Wisconsin-La Crosse is an affirmative action, equal opportunity employer. Women and minorities are encouraged to apply.

Pending approval by the provost, the **Department of Botany and Plant Pathology (Michigan State University)** invites applications for a position at the Assistant Professor level (academic year, full-time, tenure track) in the field of mycology/cell/molecular biology. The successful candidate will be expected to develop and maintain an active program in genetic, cellular, physiological, molecular and/or systematic mycology. Applicants should have a Ph.D. and post-doctoral experience. Prior teaching experience (teaching portfolio) is desirable. Interactions with other departments and centers of excellence, including the Center for Microbial Ecology, the Cell and Molecular Biology Program, the Genetics Program and the Ecology and Evolutionary Biology Program are encouraged. Salary will be commensurate with qualifications and experience. Application deadline is not known as the position has not yet been officially released by the Provost's office. Call, write or e-mail for application deadline. Send statement of career objectives, curriculum vitae, reprints of significant publications and names of four references to: Dr. Dennis W. Fulbright, Chairperson of Search Committee, Department of Botany and Plant Pathology, Michigan State University, East Lansing, MI 48824-1312. <fulbrigh@msu.edu>. Michigan State University is an Equal Opportunity/Affirmative Action Employer.

The Department of **Biology and Microbiology, University of Wisconsin Oshkosh** invites applications for a tenure-track assistant professor position starting September 1996. Responsibilities include: teach a course in Mycology; take major lecturing responsibility for an introductory biology course, Biological Concepts—Diversity; develop an upper-level course in an area such as Phytopathology, Soil Microbiology, Mycorrhizal Biology, or Industrial Mycology; and develop a mycological research program, pursue extramural funding, and supervise MS theses. Ph.D. required; post-doctoral and teaching experience desirable. Closing date: 15 January 1996. Send application, CV, 3 letters of recommendation and transcripts to: M. A. Rouf, Chair, Department of Biology and Microbiology, University of Wisconsin Oshkosh, Oshkosh, WI 54901. The University of Wisconsin Oshkosh is an affirmative action/equal opportunity employer.

Post-doctoral position/Fungal genetics. A post-doctoral position is available to undertake the genetic and molecular analysis of *Aspergillus nidulans* genes required for growth at high temperature. Also available is an additional project to characterize gene products required for the establishment of polarity during spore germination. The candidate should have experience with fungal or yeast molecular biology/genetics. This position is funded for three years and the start date is flexible. Interested candidates should send a CV and names of three references to: Dr. Steven Harris, Dept. of Microbiology, University of Connecticut Health Center, Farmington, CT 06030-3205. Phone: 203-679-2774. Fax: 303-679-1239. <sharris@panda.uchc.edu>.

Graduate Assistantships in Mycology. The Field Museum has one assistantship, funded through the NSF - PEET program, available for a Ph.D. student to work on a monographic study of *Chaetosphaeria* or *Lasiosphaeria* (Sordariales, Ascomycetes). The project emphasizes training in 1) the diverse components of

traditional collections-based studies, 2) molecular techniques, phylogenetic reconstruction, data handling and analysis and electronic dissemination of information, and 3) tropical field work. Experience in ascomycete studies is advantageous. The successful candidate will join a group of mycologists using multidisciplinary approaches in systematic research. Additional sources of funding are available for outstanding students interested in other aspects of fungal systematics and such students are invited to apply for admittance to the program. Field Museum Mycologists include Sabine Huhndorf (nonlichenized Ascomycetes), Francois Lutzoni (lichenized fungi), Gregory Mueller (macrofungi, especially Agaricales), and Qiuxin Wu (macrofungi, primarily coral fungi). Contact: Dr. Gregory M. Mueller, Department of Botany, Field Museum, Chicago, IL 60605. Phone: 312-922-9410 ext. 319. Fax: 312-427-2530. E-mail: mueller@fmnh.org. Potential students need to apply either to the Department of Ecology and Evolution at the University of Illinois, Chicago or the Committee on Evolutionary Biology at the University of Chicago.

Graduate Student Fellowships are available at Harvard University, Department of Organismic and Evolutionary Biology, to work on fungal systematics. Harvard offers excellent facilities, collections, and libraries and competitive fellowships. Contact D. H. Pfister, 22 Divinity Ave., Cambridge, MA 02138 <dpfister@oeb.harvard.edu>. [posted on MSA Bulletin Board, 10/31/95]

The Natural History Museum of Los Angeles County solicits applications for an **Assistant Curator to head its Molecular Systematics Laboratory.** We seek an individual who will develop a vigorous research program in systematics and evolutionary biology using molecular techniques, and who will interact successfully on collaborative projects with other Museum curators. This is a full-time, curatorial staff position, which will become available 1 July 1996, subject to availability of funding. Requirements: Ph.D. with a zoological background and a strong research orientation. Postdoctoral experience is desirable. The Museum is a comprehensive natural history institution with 35 million specimens and worldwide research initiatives; the Molecular Systematics Laboratory is a modern and well-equipped facility. Applicants should submit a curriculum vitae, statement of research interests, and names of three references by 15 February 1996 to: Dr. Tod F. Stuessy, Deputy Director for Research and Collections, Natural History Museum of Los Angeles County, 900 Exposition Blvd., Los Angeles, CA 90007. The Natural History Museum of Los Angeles County is an Equal Opportunity/Affirmative Action Employer.

Fungal/Bioaerosol Taxonomist. A taxonomist is sought for a medical research project to develop a new system to identify airborne particles carrying allergens. The taxonomist will collaborate with a computer programmer and other scientists to develop a visual database of airborne particles and algorithms to allow their identification. A sound knowledge of the taxonomy of spores found in indoor and outdoor air is essential. The position, for two years, is funded by the Institute of Respiratory Medicine and will be located in Department of Medicine, and the Electron Microscope Unit, University of Sydney. Salary and conditions will be based on University scales. Enquiries and applications, including CV, should be sent to Dr. Euan Tovey. Fax: 61-2-550 6115 or <ert@blackburn.med.su.oz.au>.

[Note: We would like to make contact with people with an interest in developing DNA probing systems to identify airborne fungal spores (feasible with individual pollen grains ?).]

Publications Available

Lowe, J.L. 1957. Polyporaceae of North America. The Genus *Fomes.* 97 pp. No. 80. $1.00

Lowe, J.L. 1966. Polyporaceae of North America. The Genus *Poria.* 183 pp. No. 90. $1.50

Hirt, R.R. 1964. *Cronartium ribicola* —its Growth and Reproduction in the Tissues of Eastern White Pine. 30 pp. No. 86. $1.50

Wang, C.J.K. 1965. Fungi of Pulp and Paper in New York. 115 pp. No. 87. $1.75

Larsen, M.J. 1968. Tomentelloid Fungi of North America. 157 pp. No. 93. $2.00

French, W.J. 1969. *Eutypella* Canker on *Acer* in New York State. 56 pp. No. 94. $1.30

These are in the Technical Publication series of SUNY College of Environmental Science and Forestry at Syracuse. They can be obtained by writing to: Ms. Jerri-Lynn Smith, Office of News and Publications, SUNY College of Environmental Science and Forestry, 1 Forestry Drive, Syracuse, New York 13210. Tax (7%) must be included if a tax exemption form is not provided.

In addition, many reprints of Dr. Lowe and his students are available. Sets can be obtained by writing to: Dr. Jim Worrall, 350-2 Illick Hall, SUNY College of Environmental Science and Forestry, 1 Forestry Drive, Syracuse, New York 13210.

For sale. **Commonwealth Mycological Institute Papers** (CMI), nos. 1–102 [missing nos. 3, 7–14, 16–27, 29, 37, 42–43, 45, 49, 57, 62, 72, 75, 81, 96]. Best Offer + Shipping. Contact: J.C. Krug, Department of Botany, University of Toronto, 25 Willcocks St., M5S 3B2, Ontario, Canada. <johnk@rom.on.ca>.

The UK Systematics Forum, an initiative set up with the aim of promoting the coordination of UK systematics, has published its 1994–95 Review. Copies are available from E.Watson, UK Systematics Forum, c/o The Natural History Museum, Cromwell Rd, London, SW7 5BD. E-mail: (Internet) ew@nhm.ac.uk. Information on the UK Systematics Forum will shortly be available on the Internet,at <http://www. nhm.ac.uk/index.html>.

inoculum

The Newsletter of the Mycological Society of America

ISSN 0541-4938
Volume 46, No. 6
December 1995

Inoculum is published six times a year and is mailed with the society's journal, *Mycologia*.

Submit contributions to the editor by electronic mail (a message in plain ASCII text), on diskette along with hard copy (ASCII text or common word processor, specify format and software on the diskette), or as hard copy. The editor reserves the right to select, delete, edit, and correct copy submitted for publication in accordance with the policies of *Inoculum* and the Mycological Society of America.

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____	**Family**	**$ 60**	+ **$30 for each additional family member** (fill out form for each each individual) (includes one copy of *Mycologia* and two copies of *Inoculum*)
____	**Sustaining**	**$ 250**	(benefits of Regular membership plus listing in *Mycologia* and *Inoculum*)
____	**Life**	**$ 1,000**	(one-time payment; includes *Mycologia* and *Inoculum*)
____	**Associate**	**$ 30**	(includes only *Inoculum*)
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AREAS OF INTEREST: [Mark most appropriate area(s)]

____	**Cell Biology – Physiology**	(including cytological, ultrastructural, metabolic regulatory and developmental aspects of cells)
____	**Ecology – Pathology**	(including phytopathology, medical mycology, symbiotic associations, saprobic relationships and community structure/dynamics)
____	**Genetics – Molecular Biology**	(including transmission, population and molecular genetics and molecular mechanisms of gene expression)
____	**Systematics – Evolution**	(including taxonomy, comparative morphology molecular systematics, phylogenetic inference, and population biology)

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