10,000 Citations: Congratulations White, Lee, Bruns and Taylor!

What's inside this book?

A chapter on fungi that has been cited more than 10,000 times!

Congratulations to Thomas J. White, Steven B. Lee, Thomas D. Bruns, and John W. Taylor, who pioneered the use of PCR for fungal phylogenetics and ecology. The universal primers designed by this group (1990) continue to be used widely throughout biology and throughout the world. Widely? What is widely? So widely, that the paper has been cited more than 10,000 times according to Google Scholar.

Citation


See the write up at the Berkeley News Center, September 14, 2012:
http://newscenter.berkeley.edu/2012/09/14/fungus-expert-celebrates-10000th-citation-for-1990-publication/

—Meredith Blackwell
Department of Biological Sciences
Louisiana State University
Fungal DNA Survey

I recently attended an NSF-sponsored workshop on DNA Banks and had to do some internet research on resources available to the mycological community. Not surprisingly, there are few established DNA banks, and of those, even fewer that report on cryopreservation of fungal DNA for long-term storage. As is the case for most other organisms, aliquots of extracted fungal DNA are typically stored at -80°C in ultracold freezers in an individual PI’s lab or wherever space affords. While this may not be an ideal situation, it is the methodology embraced by many mycologists conducting molecular research.

How storage at -80°C affects the quality and longevity of DNA compared to other preservation methods, back-up mechanisms and their utility during power failures, the availability of DNA aliquots to the broader mycological community, and the fate of preserved DNA after the PI is gone, are just a few of the challenging questions mycologists face. As part of this workshop, discussions about which DNA preservation method(s) provide the best results within each taxonomic group, the ability to amplify ancient and antique DNA in various taxa, and which taxa within a group produce PCR-amplifiable DNA more reliably than others ensued. Since the answers to these questions are often anecdotal and seldom published in the literature, little knowledge has been gained or transferred among researchers. However, understanding the limitations of current fungal DNA preservation methods is important, especially if differences occur among different groups of fungi as they do in plants. Therefore, a short online survey has been created with the hope that the mycological community will participate. Please take three minutes to complete the survey at: http://wwx.inhs.illinois.edu/research/pi/amiller/links/dnabanking/

It would also be appreciated if you would please forward the survey link to any colleagues you believe would be interested in participating. If enough people complete the survey, the results will be distributed in a future issue of Inoculum.

Many thanks,

—Andrew Miller
Illinois Natural History Survey

MSA BUSINESS

President’s Corner:
Reasons to Attend the 2013 MSA Meeting

This year, the MSA meeting will be held jointly with the American Phytopathological Society from August 10-14, 2013 in Austin Texas. I wanted to present to you ten compelling reasons to register to attend.

1. Give a talk or a poster and share your work. Especially if you prefer to give a talk, register early as the number of slots for talks at the 2013 meeting are limited due to the joint meeting program and to available meeting space. Poster submission is not limited but each society will be reducing the number of accepted oral abstract submissions. MSA will be able to accept about 2/3 of the number of oral presentations we would have at a MSA-only meeting. The MSA program committee will try to prioritize the researchers who most need the exposure, senior graduate students, postdocs and pre-tenure faculty, in assigning slots for talks. If you do not particularly need the exposure, consider offering a poster.

2. Connect with your inner plant pathologist. Mycology and plant pathology trace their origins to Anton DeBary, who, in the 1800’s helped replace magical thinking with careful experimental biology to explain how fungi infect plants. Since then, successive technical and intellectual advances in plant pathology have benefited mycology and vice versa. Mycology’s relationship with an applied science has allowed us to do cool stuff long denied to those studying, for example, algae, bryophytes and tardigrades.

3. Foray into the oak scrub land of central Texas. Don’t expect a bumper crop of mushrooms, but do anticipate wonderful wild habitat.

4. Meet colleagues, plan action, outline proposals and manuscripts.

5. Awards. Celebrate great work and great futures. Congratulate senior scientists and students winning poster or oral presentation awards during the MSA Auction/Award ceremony on the last night of the conference. Applaud students receiving travel and research awards at the Sunday morning Business Meeting.

6. Drink beer, on a patio or rooftop as the heat of the day slowly fades.

7. Eat Mexican food, not I hope, adjusted for Canadian taste buds.

8. Catch live music, for example, $2 Tecate Tuesday w/ Susan Torres & Conjunto Clemencia Every Tuesday at The Scoot Inn & Bier Garten.

9. Bid on a book, a very special tie, or a lovely fly agaric salt shaker in the MSA Auction.

10. Dance with a plant pathologist at the party at the Final Night Closing Celebration.

Looking forward to seeing you in Austin,

—Mary Berbee
MSA President 2012-13
Greetings from the Palouse! Although many of us are still locked in the grips of winter, preparations for the annual meeting in sunny Austin, Texas are already in full swing. See Annual Meeting (below) for more information.

Council Business: There were three official email polls conducted by Council since my last column. One poll approved the recommendation of a request for Emeritus status (see Emeritus Members, below), a second poll approved proposed changes to the By-Laws for the spring ballot, and the third poll approved Ning Zhang’s nomination as an Associate Editor for Mycologia.

2013 Membership Renewal: A big thanks to all of you who have already renewed your MSA membership. Your support and participation are critical to the future of our society. If you have not yet done so, renewing your membership is easy—just go the MSA website at http://www.msafungi.org and click on <Membership> in the upper left hand corner of the page. When you reach the MSA Business site, there is now an email reminder system for those of us who forget our MSA user ID or password.

Emeritus Members: Jack D. Rogers, a MSA past-president (1977-1978) and member for 50 years, has requested Emeritus status for 2013. Council has recommended by ballot to put this request before the membership for vote at the 2013 Annual Business Meeting.

Spring Ballot: Look for the spring ballot in mid-March. This year’s ballot includes elections for MSA Vice President, Treasurer and four Councilors (Cell Biology/Physiology, Genetics/Molecular Biology, Systematics/Evolution and Ecology/Pathology) and proposed By-Laws changes.

Annual Meeting: This year’s annual meeting will be held with the American Phytopathological Society in Austin, TX on August 10-14. The joint meeting promises to be an exciting and busy event. The MSA Foray will be held on Saturday morning (August 10) at the Barton Creek Greenbelt, which is one of Austin’s best outdoor destinations according to Annual Foray Coordinator Harold Keller and Local Arrangements Chair Brian Shaw. Abstracts for oral and poster presentations can be submitted through March 15, with meeting registration and hotel reservations open in mid-March. Check the APS and MSA meeting site for meeting updates and look for email reminders on important deadlines:

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Blues Explosion Black Mold

Gerald Bills brought the following video to our attention as a potential teaching tool. It is called Black Mold and is from the Jon Spencer Blues Explosion.

http://thejonspencerbluesexplosion.com/

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Executive Vice President’s Report

Lori Carris, Executive Vice President

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This book from the International Agency for Research on Cancer (IARC), the specialized cancer agency of the World Health Organization, aims to sensitize the international community to the mycotoxin problem in a format that is accessible to a wide audience and is useful to decision makers across a broad spectrum of disciplines, including agriculture, public health, marketing, and economics. Dedicated to mycologist the late Prof. Wallie Marasas, this involved input from nearly two dozen experts and was drafted by John Pitt (CISSRo; principal editor), Chris Wild (IARC), Ron Riley (USDA), Felicia Wu (U Pittsburg), J. David Miller (Carleton University), and Wenzel Gelderblom (U Stellenbosch).

The intent is to provide reliable information to governments, nongovernmental and international organizations, and the private sector to initiate measures designed to minimize mycotoxin exposure in high-risk populations.

In low-income countries, subsistence or small-scale farmers produce foods for local consumption that may be heavily contaminated with mycotoxins; these foods are untested; and regulatory controls either do not exist or are not enforced. In low income countries, exposure to mycotoxins at high levels is often closely associated with inequality and poverty.

Chapters: Executive summary; Fungi producing significant mycotoxins; Chemical and physical characteristics of the principal mycotoxins; Sampling and sample preparation methods for determining concentrations of mycotoxins in foods and feed; Analysis of mycotoxins; Effects in food-producing animals; Mycotoxins and human health; Risk assessment and risk management of mycotoxins; Economics of mycotoxins: evaluating costs to society and cost-effectiveness of interventions; Practical approaches to control mycotoxins.

Distribution for all IARC Publications is managed by WHO Press:
(http://apps.who.int/bookorders/WHP/detart1.jsp?sesslan=1&codlan=1&codcol=73&codch=158).

—J. David Miller
Carleton University
Ottawa

McIlvainea is an open-access, refereed journal for the amateur and professional mycological community. It is published by the North American Mycological Association as a rolling publication. Articles are published as soon as they have been refereed and approved. Instructions for authors appear on the NAMA website www.namyco.org/publications/mcilvainea/mcil_instructions.html.

NAMA plans to develop McIlvainea as a tool to educate citizen scientists who can assist with establishing a North American mycoflora. McIlvainea will be a home for more technical papers than those that appear in Fungi Magazine and Mushroom: The Journal and more directed at the lay public than articles that may appear in Mycologia. Articles that review recent developments in fungal taxonomy of Macromycetes would be particularly welcome. It could also become a home for outstanding senior student research papers that may not yet be quite ready for Mycologia.

Feel free to contact me about ideas that you may have for a paper.

—Michael W. Beug
Editor, McIlvainea
Professor Emeritus
The Evergreen State College
beugm@evergreen.edu

Bryophylous Fungi
July 7 - 13
Peter Döbbeler, Researcher, Ludwig-Maximilian Univ., Munich, Germany

Mushroom Identification for New Mycophiles: Foraging for Edible and Medicinal Mushrooms
July 28 – August 3
Greg Marley, Author, Consultant, Northern New England Poison Center
Michaeline Mulvey, Mycologist

Boletes of North America: A Field Seminar and Workshop
September 8 - 14

—Anne Favolise
Eagle Hill Institute
PO Box 9
59 Eagle Hill Road
Steuben, ME 04680-0009

For more information, please contact the Eagle Hill Institute, 207-546-2821 x2, office@eaglehill.us (http://www.eaglehill.us)
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The Illinois Natural History Survey is offering a competitive Post Doctoral Research Associate position for 2 years, which includes a generous salary, benefits, funds for research expenses, and the opportunity to live in glorious East-Central Illinois. Research areas that would add new directions and build on my lab’s strengths include endophytes and environmental sampling, although I am open to additional suggestions. Applications are due March 15, 2013. Please contact Dr. Andrew Miller (amiller@inhs.illinois.edu), if you are interested to discuss this position further. Please see the position announcement at: http://wwx.inhs.illinois.edu/opportunities/post-doctoral/postdoc-sponsors/

—Andrew Miller, Ph.D.
Mycologist and Director of the Herbarium/Fungarium
University of Illinois
Illinois Natural History Survey
1816 South Oak Street
Champaign, IL 61820-6970

REMINDER: MSA Directory Update

Is your information up-to-date in the MSA directory? The Society is relying more and more on email to bring you the latest MSA news, awards announcements and other timely information, and our newsletter. To ensure that you receive Society blast emails and the Inoculum as soon as it comes out, and so that your colleagues can keep in touch, please check the accuracy of your email address and contact information in the online directory. This can be accessed via our web site at www.msafungi.org. If you need assistance with updating your membership information, or help with your membership log-in ID and password, please contact Kay Rose, Association Manager at Allen Press, at krose@allenpress.com.
In depth information about the genus *Amanita*
www.amanitaceae.org

A New Web Page About Tropical Fungi, Hongos Del Parque "El Haya" (58-5)
hongosdelhaya.blogspot.com/

ASCOfrance.com, a very useful site for illustrations of ascomycetes including anamorphs (accessible in both French and English)
ascofrance.com/?lang=us

Ascomycota of Sweden
www.umu.se/myconet/ascom/indexASCO.html

Basiidiomycete Research Group (University of Helsinki, Finland) studies systematics, ecology and evolution of fungi in forest environment.
www.basidiol.fi

Bibliography of Systematic Mycology
www.speciesfungorum.org/BSM/bsm.htm

Cold Spring Harbor Laboratory; Meetings & Courses Programs (58-2)
meeings.cshl.edu

Collection of 800 Pictures of Macro- and Micro-fungi
www.mycol.com

Cordyceps Website
www.mushtech.org

Cornell Mushroom Blog (58-1)
http://blog.mycology.cornell.edu/

Cortbase (58-2)
andromeda.botany.gu.se/cortbase.html

Corticoid Nomenclatural Database (56-2)
www.phytoinformatics.org/

The Cybertruffle internet server for mycology seeks to provide information about fungi from a global standpoint (59-3).
www.cybertruffle.org.uk

Cyberliber, a digital library for mycology (59-3).
www.cybertruffle.org.uk/cyberliber

Cybernome provides nomenclatural and taxonomic information about fungi and their associated organisms, with access to over 548,000 records of scientific names (59-3).
www.cybertruffle.org.uk/cybernome

Dictionary of The Fungi Classification
www.indexfungorum.org/names/fundic.asp

Distribution Maps of Caribbean Fungi (56-2)
www.biodiversity.ac.psweb.com/carimaps/index.htm

Entomopathogenic Fungal Culture Collection (EFCC)
www.mushtech.org

Fungal Environmental Sampling and Informatics Network (58-2)
www.bio.utk.edu/fesin/

Fungi of Ecuador
www.mycokey.com/Ecuador.html

German Mycological Society DGM
www.dgfm-ev.de

Glomeromycota PHYLOGENY
amf-phylogeny.com

MYCO-LICH facilitates mycology and lichenology studies in Iran.
www.myco-lich.com

Mycologia
mycologia.org

Humboldt Institute — Located on the eastern coast of Maine, the institute is known for the extensive series of advanced and professional-level natural history seminars it has offered in Maine since 1987, along with ecological restoration seminars and expeditions to the neotropics. It publishes the Northeastern Naturalist and Southeastern Naturalist, two scholarly, peer-reviewed, natural history science journals.
www.eaglehill.us

Website relating to the taxonomy of the Hysteriaceae & Mytilinidiaceae (Pleosporomycetidae, Dothideomycetes, Ascomycota) to facilitate species identification using a set of updated and revised keys based on those first published by Hans Zogg in 1962. 59(4)
www.eboehm.com/

Index of Fungi
www.indexfungorum.org/names/names.asp

Interactive Key to Hypocreales of Southeastern United States (57-2)
nt.ars-grin.gov/sbmlweb/fungi/keydata.cfm

ISHAM: the International Society for Human and Animal Mycology
www.isham.org

JSTOR (58-3)
jstor.org

Libri Fungorum Mycological Publications (58-3)
194.203.77.76/LibriFungorum/

Mold Testing and Identification Services (58-2)
www.pioneer.net/~microbe/abbeylab.html

McCrone Research Institute is an internationally recognized not-for-profit institute specializing primarily in teaching applied microscopy. 59(4)
www.mcri.org

Mountain Justice Summer (58-3)
www.MountainJusticeSummer.org

Mycology Education Mart where all relevant mycology courses can be posted. www2.bio.ku.dk/mycology/courses/

MycokKey
www.mycokey.com

The Myconet Classification of the Ascomycota
www.fieldmuseum.org/myconet

New Electronic Journal about mushrooms from Southeast Mexico (61-4)
http://fungavera.blogspot.com

Northeast Mycological Federation (NEMF) foray database (58-2)
www.nemndata.org

Pacific Northwest Fungi — A peer-reviewed online journal for information on fungal natural history in Alaska, British Columbia, Idaho, Montana, Oregon and Washington, including taxonomy, nomenclature, ecology, and biogeography.
www.pnwfungi.org/

Pleurotus spp.
www.oystermushrooms.net

Rare, Endangered or Under-recorded Fungi in Ukraine (56-2)
www.cybertruffle.org.uk/redlists/index.html

Registry of Mushrooms in Art
members.cox.net/mushroomsinart/

Robigalia provides information about field observations, published records and reference collection specimens of fungi and their associated organisms, with access to over 685,000 records (59-3).
www.cybertruffle.org.uk/robigalia

Searchable database of culture collection of wood decay fungi (56-6)
www.fpl.fs.fed.us/rwu4501/index.html

Small Things Considered — A microbe blog on microbes in general, but carries occasional pieces specifically on fungi.
www.schaechter.asm.org/blog/schaechter/

Tree canopy biodiversity project University of Central Missouri (58-4)
faculty.cmsu.edu/myco/

Trichomycite site includes monograph, interactive keys, a complete database, world literature, etc. (61-4)
www.nhm.ku.edu/~fungi/

The TRTC Fungarium (58-1)
bbc.botany.utoronto.ca/ROM/TRTCFungarium/home.php

U.S. National Fungus Collections (BNF)

Complete Mushroom Specimen Database (57-1)
www.ars.usda.gov/ba/psi/sbml

Valhalla provides information about past mycologists, with names, dates of birth and death and, in some cases, biographies and/or portraits (59-3).
www.cybertruffle.org.uk/valhalla

Website for the mycological journal Mycena (56-2)
www.mycena.org/index.htm

Wild Mushrooms From Tokyo
www.ne.jp/asa/ish/mushroom/tokyo/
NOTE TO MEMBERS:
Those wishing to list upcoming mycological courses, workshops, conventions, symposia, and forays in the Calendar of Events should include complete postal/electronic addresses and submit to Inoculum editor Don Natvig at dnatvig@gmail.com.

March 12-17, 2013
The 27th Fungal Genetics Conference
Asilomar Conference Center
Pacific Grove, CA
http://www.fungalgenetics.org/2013/pages/program.shtml

May 14-19, 2013
31st New Phytologist Symposium
on Orchid symbioses: models for evolutionary ecology
(14-16 May 2013)
http://www.newphytologist.org/orchid/default.htm

5th International Orchid Workshop
on Orchid population dynamics
(17-19 May 2013)
http://www.iow2013.it/

Aug. 10-14, 2013
Mycological Society of America with the American Phytopathological Society
Austin, TX

International Marine and Freshwater Mycology Symposium (IMFMS)
Beijing International Convention Center
People Republic of China

Aug. 25-31, 2013
10th International Congress of Plant Pathology
Beijing, China

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Sponsoring a gift membership in MSA offers tangible support both for the recipient of the membership as well as for mycology in general. Providing both Mycologia and Inoculum, a gift membership is an excellent way to further the efforts of our mycological colleagues, especially those who cannot afford an MSA membership. In addition to a feeling of great satisfaction, you also will receive a convenient reminder for renewal of the gift membership the following year.

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(507) 663-7631
rita.kuznia@syngenta.com

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Attn: Michael Ward
925 Page Mill Rd
Palo Alto, CA, 94304
(650)846-5850
mward@genencor.com

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Attn: Wendy Yoder
1445 Drew Ave
Davis, CA, 95618
(530) 757-8110
wty@novozymes.com

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Attn: Emilia Rico
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Rockford, TN, 37853
(865)558-6819
emirico@msn.com

You are encouraged to inform the Membership Committee (D. Jean Lodge, Chair, djlodge@caribe.net) of firms or foundations that might be approached about Sustaining Membership in the MSA. Sustaining members have all the rights and privileges of individual members in the MSA and are listed as Sustaining Members in all issues of Mycologia and 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)
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