

Newsletter of the Mycological Society of America

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— Important Dates —

December 10 Deadline:
Inoculum 57(1)

July 29-August 2, 2006:
MSA/CPS/APS Meeting,
Québec City, Québec,
Canada

August 21-26, 2006:
8th International
Mycological Congress,
Cairns, Australia

Please send the editor notices about upcoming important events.

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Towards a Single Scientific Name for Species of Fungi: A Rebuttal

By Walter Gams

The paper by Rossman & Samuels with this title in *Inoculum* 56(3), 2005 asks for a reaction. I had sent the authors some critical comments on their draft before publication and feel that these arguments should also be considered by a broader audience. After the Nomenclature sessions preceding the Botanical Congress in Vienna have passed, I can also test the proposals made in the Rossman-Samuels paper against a modification of Art. 59 achieved in that congress.

Pre-Vienna: Concerning the Hawksworth proposals in Taxon 53: 597. 2004, the Committee for Fungi (CF) has given a negative vote of 3 yes : 8 no : 2 for more discussion : 2 abstention, as I wrote in my Report-13 in Taxon of August 2005. In view of this and the negative outcome of a vote held during the IMC in Oslo (see *Mycotaxon* 88: 493–508, 2003), I certainly consider the gist of Rossman & Samuels's proposals premature. The suggestions made there would destroy Article 59 and have just the same chaos-inducing consequences for nomenclature as a complete abolition of Art. 59 would have. Preventing nomenclatural chaos in the course of a move from dual to unitary nomenclature is a major concern that will require a very intricate ruling, that is, if unitary nomenclature is desirable at all. The present situation ruled by Art. 59 is characterized by an abnormal situation in regard to typification, as is outlined by Hennebert in a text available on the CBS website <www.cbs.knaw.nl/nomenclature/index.htm>. Contrary to botanical ruling, a difference is made between teleomorph- and anamorph-typified material of one and the same fungus. This situation would require modification from a certain date onwards, if a move to unitary nomenclature were to succeed. In addition, a major obstacle on the way to a unitary nomenclature is the lack of congruence in generic delimitation between teleomorph-typified and anamorph-typified genera.

Article 59 has grown during the years to serve all mycologists. We had well rounded discussions on the issue at the IMC in Oslo, and Dick Korf very effectively emphasized there that every act of tinkering with Art. 59 has worsened the situation. At that occasion I reminded the defenders of a unitary nomenclature that it will be necessary to test any proposed system with numerous concrete examples. Rossman & Samuels are doing this now laudably, but in a somewhat imperfect way.

My objection to all proposals towards a unitary nomenclature, including Hennebert's option 6, for which I have most sympathy (please study these texts on the CBS website carefully before discussing further!), is that the banning of a secondary name (rendering it illegitimate) is far too heavy-handed. We need a gentle in-

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roduction of some tendency towards a unitary nomenclature, not the enforcement of an imposed structure.

The *Cylindrocladium*–*Calonectria* example presented by Rossman & Samuels is one of the rare cases where teleomorph and anamorph genera presently show a 1 : 1 correlation. *Trichoderma*–*Hypocrea* is a somewhat comparable case. But what do we gain if we declare *Hypocrea lactea* or *H. lutea* a *Trichoderma*, although their anamorphs are morphologically quite different from what everybody understands as *Trichoderma*? Please look into *Gliocladium*–*Sphaerostilbella*. After a clearcut segregation of *Clonostachys* from *Gliocladium*, there are still many unclassified names left in *Gliocladium* which would render such a generic synonymy ridiculous. When a unitary system is established, every genus would appear as if it were a natural entity and this is simply not true. When you try this system on *Fusarium*–*Gibberella* you will find it difficult to decide which of these morphs you should prefer in the attempt to generate acceptable, stable generic delimitations. Should the species of *Fusarium* sect. *Martiella*, whose teleomorphs are generically distinguished as *Haematonectria* from those of other sections belonging to *Gibberella* still be retained in *Fusarium* or not?

I am frightened by Paul Kirk's suggestion (in litt.) that the next edition of the *Dictionary* may declare *Glomerella* a synonym of *Colletotrichum*, and *Curvularia* (also *Bipolaris*?) a synonym of *Cochliobolus*. It means a gigantic loss of information if the anamorph–teleomorph relationship is equated to synonymy. The ensuing situation will be worse than the temporary fashion of the 'meiosporic–mitosporic' terminology imposed by the *Dictionary* some years ago and discontinued after one edition. Please keep the *Dictionary* as a source of objective information, not the outlet of subjective opinions that some editors impose on the mycological community.

The situation with synanamorph names is different from the anamorph–teleomorph problems. Together with Keith Seifert, I am trying to promote the selection of preferential names among competing synanamorph-generic names as far as possible, e.g. *Echinobotryum* being just a synanamorph of *Cephalotrichum* (to name a case where the situation is quite clear). But as yet we both still occasionally fail to decide, for each pair of names, which one is to be preferred as the most significant.

We now have a system of precedence that places teleomorph-generic names over anamorph-typified names. I would hate to lose this rule and I am still not convinced of the desirability of a preference for taking up the associated anamorph genus in any single case. Teleomorphs have been the basis of all higher-rank classification so far. It is true that at species (and sometimes genus) level, the anamorphs often give indispensable taxonomic clues which are more differentiated than those found in the teleomorph, but, as long as morphology has the slightest impact in fungal taxonomy, the teleomorph precedence should be respected and not abandoned light-

heartedly. What would possibly be acceptable is the recognition of an initially anamorphic fungus (with no previously described teleomorph) as a holomorph when its teleomorph is discovered, avoiding the additional introduction of a teleomorph name. This could work only with a starting point set at a fixed date in the future and would only be effective for monotypic or small, naturally delimited genera. But how much unification of nomenclature would really be gained thereby?

Fungi show different degrees of complexity, ranging from sterile mycelia and undifferentiated mycelial propagules to simple conidiogenous cells, more complex conidiophores or their aggregations, conidiomata, and, finally, teleomorphic fructifications. When dealing with my favourite little-differentiated hyphomycetes, I have always tried to search for the most differentiated structure to use in classifying these organisms. If, for example, both verticillate and simple conidiophores are present in a fungus, I give preference to the verticillate one. Continuing on this line, a precedence of the teleomorph will normally ensue, although I am aware of the exceptions to this rule mentioned above. At Oslo a suggestion was briefly discussed to open the possibility of conservation for certain generic names now regarded as exclusively anamorphic so that they could apply to the holomorph. But also this possibility was not further pursued as it was not regarded suitable to solve problems on the way to a unitary nomenclature for pleomorphic fungi.

So much for the situation pre-Vienna. At Vienna a special committee was installed that will study possible changes to Art. 59 in order to move towards a unitary nomenclature. As a novelty, Hawksworth's proposal B as modified in Vienna by Scott Redhead (involving also some minor additions to Art. 59.1–3, new passages in bold), was accepted (minor editorial changes still possible) which reads:

Art. 59.4 Irrespective of priority, names with a teleomorphic type **or epitype (Art. 59.7)** take precedence over names with **only** an anamorphic type when **the** types are judged to belong to the same holomorphic taxon. **Priority of competing teleomorph-typified or epitypified names follows Principle III except that teleomorph-typified names published before 1 January 2007 take precedence over anamorph-typified names subsequently epitypified after 1 January 2007 by teleomorphs.**

Art. 59.7 [new provision to avoid the introduction of unnecessary teleomorph names by designation of epitypes]: **When a teleomorph has been discovered for a fungus previously known only as an anamorph and for which there is no available name for the holomorph, an epitype exhibiting the teleomorph stage may be designated for the hitherto anamorphic name even when there is no hint of the teleomorph in the protologue of that name.**

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This solution seems innocuous, but I objected to it, foreseeing considerable confusion that it will cause. Let me illustrate this using the example of *Hypocrea*, which has been a major stimulant of the present debates. *Hypocrea rufa* must continue to be the correct and only name for the teleomorph of *Trichoderma viride*, even according to the modified Art. 59.4. If a teleomorph is newly discovered for a species previously known only as anamorph in *Trichoderma*, some people would like to cite that species with its *Trichoderma* binomial, documenting it by an epitype that contains teleomorphic material. If both the teleomorph and the anamorph of a new species are simultaneously discovered, epitypification of the teleomorph together with the publication of the anamorph does not make sense (see Art. 9.7 *ICBN*); the genus *Hypocrea* continues to be the appropriate name for the teleomorph of *Trichoderma*, and type material must still be preserved for both morphs. Article 59 as modified in Vienna does not open the way to the application of the generic name *Trichoderma* to all possibly associated

teleomorphs, and both generic names, *Trichoderma* and *Hypocrea*, remain in use according to the present ruling. Otherwise dual and unitary nomenclature would have to coexist within the same genus. Alternatively, a conservation procedure, as suggested above, to declare *Trichoderma* of holomorphic application might offer a solution, but this mechanism might only work for a very limited number of cases and I strongly doubt whether it would be desirable at all.

The only way presently available to avoid creating an unnecessary diversity of names is the adoption of the anamorph epithet when coining a name for the newly discovered teleomorph, which is becoming good practice.

Members of the newly installed Special Committee will include Amy Rossman arossman@nt.ars-grin.gov and Walter Gams.

Questions or comments should be sent to Walter Gams, Centraalbureau voor Schimmelcultuur, PO Box 85167, Utrecht, NL-3508 AB, The Netherlands, email: gams@cbs.knaw.nl

Implications of Changes to Article 59 of the International Code of Botanical Nomenclature Enacted at the Vienna Congress 2005

By Erica Cline

As a post-doctoral researcher dealing full-time with the intricacies of nomenclature, I am writing this article not to argue for or against the changes to article 59, but instead to promote understanding in the wider community of what these changes mean.

The International Code of Botanical Nomenclature (*ICBN*) governs naming of plants and fungi. The Code is an evolving document, with changes implemented at International Botanical Congresses (*IBC*). Attempts to solve nomenclatural problems by amending the Code have met with variable success; some contemporary mycologists might regret, tongue in cheek, the deletion of the following Article from the 1912 Code: “**Article 58.** The rules of botanical nomenclature can only be modified by competent persons...”

In all seriousness, fungi with both sexual and asexual states present a nomenclatural challenge. Special rules have been adopted to allow the use of two names for fungal taxa that manifest themselves in both their sexual and asexual states. The current Article 59 of the *ICBN* originated as Article 57, adopted at the *IBC* at Brussels in 1910 based on proposals submitted by Saccardo (1905) and a group of American systematists (Atkinson et al. 1910). Saccardo (1905) advocated describing separately both the perfect (sexual) state and the imperfect (asexual) state, arguing that “the advantage of describing separately all the forms of imperfect fungi arises from the fact that we are entirely ignorant of the perfect stages to which the vast majority of this immense group belong.”

In fact, it has become evident that many asexually reproducing fungi may not have any sexual state. Even

when a sexual state is discovered, the sexual state may be encountered rarely, perhaps only under artificial conditions. In these cases, it may be desirable to retain the anamorph name. Nevertheless, with the advent of molecular tools, some mycologists would like to move away from the use of two names for the same taxon, and use one genus name for all species in a monophyletic lineage, even if this lineage includes both sexual and exclusively asexual species.

I was exposed to this topic while updating nomenclature of plant pathogenic fungi in the Systematic Botany and Mycology Laboratory databases. In working with older names, I encountered names based on an anamorph type but assigned to a teleomorph genus. The code permits this situation but the name must be applied to the anamorph only; the name cannot be used for the teleomorph. The St. Louis Code (Greuter et al. 2000) provides an example to explain this:

Article 59.6 Ex. 5:

“The name *Ravenelia cubensis* Arthur & J.R. Johnst. (1918), based on a specimen bearing only uredinia (an anamorph), is a valid and legitimate name of an anamorph, in spite of the attribution of the species to a holomorphic genus. It is legitimately combined in a form-genus as *Uredo cubensis* (Arthur & J.R. Johnst.) Cummins (1956). *R. cubensis* is not available for use inclusive of the teleomorph.”

The St. Louis Code does not allow a description of the teleomorph to be added to the anamorph name, al-

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though this was in fact common practice in the past. Addition of a description of the teleomorph to the anamorph name results in an illegitimate later homonym, because the anamorph and teleomorph of a single fungal taxon are treated by the Code as two separate taxa.

Article 59.6 Example 7 (St. Louis Code):

“*Corticium microsclerotium* was originally published as “(Matz) Weber, comb. nov., syn. *Rhizoctonia microsclerotia* Matz” with a description, only in English, of the teleomorph. Because of Art. 36, this may not be considered as the valid publication of the name of a new species, and so *C. microsclerotium* (Matz) G.F. Weber (1939) must be considered a validly published and legitimate new combination based on the specimen of the anamorph that typifies its basionym. *C. microsclerotium* G.F. Weber (1951), published with a Latin description and a teleomorphic type, is an illegitimate later homonym.”

At the latest Nomenclatural Session of the IBC in Vienna, the Congress voted to amend Article 59. The final wording and numbering of articles may be slightly modified by the Editorial Committee before publication of the new Code. The pertinent sections of the draft version of the amended Article 59 are included at the end of this article, with the amended sections in uppercase.

The changes rely on a novel and somewhat controversial use of the epitype, defined by the St. Louis Code as a **“specimen or illustration selected to serve as an interpretative type when the holotype, lectotype, or previously designated neotype, or all original material associated with a validly published name, is demonstrably ambiguous and cannot be critically identified for purposes of the precise application of the name of a taxon. When an epitype is designated, the holotype, lectotype, or neotype that the epitype supports must be explicitly cited.”** (Article 9.7).

At present, if an unnamed sexual state of a named asexual fungus is discovered, the sexual state will often be given a new name in a genus that represents a sexual state. Despite the familiarity of the anamorph name, it is not available for use as the holomorph. **The changes to Article 59 allow the possibility of retaining the anamorph name for the holomorph by epitypifying the anamorph name with a specimen of the sexual state.** This is intended to increase nomenclatural stability by avoiding the introduction of an unnecessary new name for the sexual state.

Now that these changes have been accepted by the IBC, it is time to ask the question how they might be applied.

Example 1: *Pucciniastrum actinidiae* Hirats. f. 1936

Hiratsuka (1936) published a description of the uredinial (asexual) state of this rust fungus in the holomorph genus *Pucciniastrum*; the telial (sexual) state was unknown at the time. In 1952, he added the description of

the telial state to the anamorph name, thereby creating an illegitimate later homonym (*Pucciniastrum actinidiae* Hirats. f. ex Hirats. f. 1952). There is no legitimate name for the teleomorph, to the best of my knowledge. It would be ideal to retain the name *Pucciniastrum actinidiae* because it is a name in a teleomorph genus that has been used (apparently incorrectly) in the literature to refer to the teleomorph. Without the changes to Article 59, it would be necessary to propose a new name with a different epithet for the holomorph. The changes to Article 59 would allow the name *Pucciniastrum actinidiae* Hirats. f. 1936 to be epitypified with teleomorphic material, to retain this name as the legitimate, accepted name for the holomorph.

Example 2: *Phoma andropogonivora* (R. Sprague & Rogerson) Gruyter 2002.

This fungus causes a leaf spot on perennial bunch grasses in the US. According to Boerema (2004), the probable teleomorph is a *Mycosphaerella* sp., but the connection is not yet proven and the teleomorph has not been named. As a result of the changes to Article 59, if the teleomorphic state were discovered, the teleomorph could be given a new name, *or* the existing anamorph name could be epitypified with teleomorphic material, making *Phoma andropogonivora* into a holomorph name which applies to the taxon in both its sexual and asexual states. Under the amended Article 59, the systematist is given the option to avoid creating two names for different states of the same taxon.

Changes to the Code may result in unintended consequences. To clarify priority rules for newly epitypified anamorph names, the originally proposed changes (Proposal B) were amended on the floor of the Vienna Congress, adding Article 59.4: **“Priority of competing teleomorphic typified or epitypified names follows Principle III except that teleomorphic typified names published before 1 January 2007 take precedence over anamorphic typified names subsequently epitypified after 1 January 2007 by teleomorphs.”**

This prevents an anamorph name newly epitypified as a holomorph from gaining priority over a pre-2007 teleomorph name. The new Article 59.7 only applies **“where a teleomorph has been discovered for a fungus previously known only as an anamorph and for which there is no available name for the holomorph...”** but mistakes can be made, and taxonomic judgments may change. This amendment insures that a pre-2007 teleomorph name will take priority over a newly epitypified (but potentially older, as an anamorph) species name.

We can revisit Example 2 to see why this is important. After *Phoma andropogonivora* was epitypified to transform it into a holomorph name, what would happen if it was discovered that the teleomorph had in fact been

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described prior to 2007? Without the amendment, priority would determine which name would be accepted for the holomorph. A name for the teleomorph published prior to 2007 might have to be placed in synonymy to *Phoma andropogonivora*. Even though *Phoma andropogonivora* was only epitypified in 2007, the priority of the (former anamorph) epithet dates to 1958, from the basionym *Phyllosticta andropogonivora* R. Sprague & Rogerson 1958.

The modified Article 59.4 prevents this from happening. The teleomorph name published prior to 2007 has priority over *Phoma andropogonivora* (R. Sprague & Rogerson) Gruyter 2002 when referring to the teleomorph. *Phoma andropogonivora* would presumably remain the accepted name for the anamorph. Because of the new Article 59.4, a name with a teleomorph epitype cannot take priority over a pre-2007 teleomorph name.

What are the wider implications of the new Article 59? For those who feel that the goal is to achieve one species name for one fungal taxon including both its sexual and asexual states, the changes to Article 59 are a (limited) step in that direction. It will potentially reduce the number of dual species names, by making it possible to avoid creating a new name for a newly discovered teleomorphic state. Several issues must still be resolved. Revisiting Example 2, the epitypified *Phoma andropogonivora* would be a holomorph in an anamorph genus. In fact, as several critics have pointed out, the changes to Article 59 will likely result in an increased number of holomorph names within anamorph genera. The IBC has approved the establishment of a Special Committee to explore potential future changes to Article 59, including the possibility of deleting the Article altogether. No doubt these questions will remain a topic of intense debate in the coming years.

References:

- Atkinson et al. (1910). Motions relating to the rules for nomenclature of the fungi proposed for action at the third international Botanical Congress at Brussels, 14-22 May, 1910. Ithaca, NY, USA.
- Boerema, G.H., De Gruyter, J., Noordeloos, M.E., and Hamers, M.E.C. 2004. *Phoma* identification manual: differentiation of specific and infra-specific taxa in culture. CABI Publishing, 470 pages.
- Greuter, W., and et al., Eds. 2000. International Code of Botanical Nomenclature (Saint Louis Code). Koeltz Scientific Books, 474 pages.
- Saccardo (1905). De Diagnostica et Nomenclatura Mycologica; Admonita Quaedam. Trans. Brit. Mycol. Soc. 2:80-84.

Draft of the Changes Accepted by the IBC in Vienna in 2005

[emended] 59.1. In non lichen-forming ascomycetous and basidiomycetous fungi (including *Ustilaginales*) with mitotic asexual morphs (anamorphs) as well as a meiotic sexual morph (teleomorph), the correct name covering the holomorph (i.e., the species in all its morphs) is the earliest legitimate name typified, OR EPITYPIFIED UNDER ART. 59.7, by an element representing the teleomorph, i.e. the morph characterized by the production of asci/ascospores, basidia/basidiospores, teliospores, or other basidium-bearing organs.

[emended] 59.2. For a binary name to qualify as a name of a holomorph, not only must its type specimen OR ITS EPITYPE SPECIMEN UNDER ART 59.7 be teleomorphic, but also the protologue must include a description or diagnosis of this morph (or be so phrased that the possibility of reference to the teleomorph cannot be excluded).

[no change] 59.3. If these requirements are not fulfilled, the name is that of a form-taxon and is applicable only to the anamorph represented by its type, as described or referred to in the protologue. The accepted taxonomic disposition of the type of the name determines the application of the name, no matter whether the genus to which a subordinate taxon is assigned by the author(s) is holomorphic or anamorphic.

[emended from floor] 59.4. Irrespective of priority, names with a teleomorphic type OR EPITYPE (ART 59.7) take precedence over names ONLY with an anamorphic type when THE types are judged to belong to the same holomorphic taxon. PRIORITY OF COMPETING TELEOMORPHIC TYPIFIED OR EPITYPIFIED NAMES FOLLOWS PRINCIPLE III EXCEPT THAT TELEOMORPHIC TYPIFIED NAMES PUBLISHED BEFORE 1 JANUARY 2007 TAKE PRECEDENCE OVER ANAMORPH TYPIFIED NAMES SUBSEQUENTLY EPITYPIFIED AFTER 1 JANUARY 2007 by TELEOMORPHS.

[new, proposed as 59.8 by Hawksworth but changed to 59.7] 59.7 Where a teleomorph has been discovered for a fungus previously known only as an anamorph and for which there is no available name for the holomorph, an epitype exhibiting the teleomorph stage may be designated for the hitherto anamorphic name even when there is no hint of the teleomorph in the protologue of that name.

Questions or comments should be sent to Erica Cline, Systematic Botany and Mycology Laboratory, USDA Agricultural Research Service, Beltsville, MD, email: ecline@nt.ars-grin.gov

MSA BUSINESS

From the President's Corner ...

Dear Friends and Colleagues,

Thank you newly serving MSA committee members! Still new on the job as MSA President, I was amazed by the nearly 100% rate of positive responses to my requests and was cheered by the enthusiasm of members for contributing time and effort. If you are not now on a committee, but would like to serve in the future, please contact me in the next few months. I will communicate all requests to President-Elect **Greg Mueller**, who will fill open committee positions for next year's Roster. While there is no guarantee that every request will result in the perfect appointment, the likelihood is high that your offer to serve will be matched with an opportunity to participate.

As for those ongoing positions so important to the MSA, special thanks are due to **Don Natvig**, Editor-in-Chief of *Mycologia*, **Jeff Stone**, Managing Editor of *Mycologia*, **Rich Baird**, Editor of *Inoculum*, **Roy Halling**, Webmaster, **Karen Snetselaar**, Treasurer, and **Faye Murrin**, Secretary. Each of these assignments carries enormous responsibility on which the MSA depends.

Last summer's MSA/MSJ joint meeting in Hilo still resonates and will for a very long time. Despite the long travel distances to Hilo, the turnout was impressive and the meeting was surely among our best ever. This fine result was no accident. Several MSA members worked and planned continuously for several years: **Don Hemmes**, Local Organizer (and now MSA Vice President), **Jean Lodge**, Program Chair, 2005, and **Maren Klich**, Chair, Special Organizing Committee Liason to the Mycological Society of Japan. The meeting would not have been the same without **Helen Hemmes**, the enthusiastic and welcoming host and informative guide to Hawaii. Our partnership with the Mycological Society of Japan should serve as a model for future joint meetings with other groups. The MSA is deeply grateful to MSJ President **Akira Suzuki** and MSJ Program Chair **Junta Sugiyama**. I believe that the hyphal bridges established across the Pacific at the meeting in Hilo will be permanent - in hopes of making this so, from the MSA to the MSJ, one-gaishimasu.

Planning is now well under way for our upcoming meeting with the American Phytopathological Society and the Canadian Phytopathological Society in Québec City, July 29 - August 2, 2006. MSA Program Chair **Tom Bruns** has issued a call for symposia and has received many excellent offers. I recently traveled to Minneapolis to meet with the APS Program Chair **Jan Leach**, CPS President **André Levesque**, APS Director of Meetings **Betty Ford**, APS Meeting Manager **Paul Trenda**, and the full APS Program Committee. The genuine spirit of cooperation bodes well for the meeting. The site of meeting, the Québec City Convention Centre, is only a few steps away from the "old city," the only one of its kind surrounded by a wall in North America. The possibili-



**James Anderson,
MSA President**

ties for food, entertainment, and accommodation are numerous; in recognition of the lively Québec nightlife, we hope to start the morning paper sessions no earlier than 9 am.

In addition to dealing with a parade of short-term issues, the MSA also must plan for the long-term. The MSA is alive and well, but it is time to take stock of our organization. At least two questions seem obvious. Are we doing enough to ensure recruitment of excellent younger members, who become hooked for life on the MSA? Are we doing enough to encourage a diversity of excellent science at our annual meetings and beyond? I have therefore struck an ad-hoc committee for this year only, a "blue sky" group, with no limits on ideas. The precedent for this was a similar group established by MSA President **George Carroll** (1999) and continued by MSA President **Linda Kohn** (2000). Thanks to **Dave Geiser**, **Steve Harris**, **Rick Kerrigan**, **Francois Lutzoni**, **Michelle Momany**, **Karen Snetselaar**, **Joey Spatafora**, and **John Taylor**, for agreeing to participate. More on our deliberations later. I invite all MSA members, *especially our newest members*, to communicate your thoughts either to me or to any of the committee members. Ultimately, MSA Council will be the "cooling saucer" for our ideas and for deciding what is to be done.

I wish our Gulf Coast friends affected by Hurricanes Katrina and Rita all the best for a full recovery. The MSA stands ready to help in any way it can.

MSA Secretary Email Express

Since the annual meeting in Hilo, Hawaii (July 27 to August 3, 2005) **Council** approved polls nominating **Philippe Callac** and **Ian K Ross** as *Mycologia* Associate Editors.

New Members: The MSA extends a warm welcome to new (or returning) members: New memberships will be formally approved by the Society at the Annual Meeting, 29 July - 2 August 2006, Québec City, Québec, Canada. **Canada:** Sepideh Massoumi Alamouti, Katherine M Hunter, Ben Wilson; **Germany:** Christiane Baschien; **India:** Asish Kar; **South Africa:** Gavin Hunter; and **United States:** Clementina Adenipekun, Andrea Porrás-Alfaro, Swathi Bangaru, Maria V Kalevitch, Pele Eve Rich, Christopher N Tchudi, Peter G Werner, Gordon Lee Whitbeck.

Emeritus members: There were no applications for emeritus membership.

Deaths: I am sad to report the recent deaths of three mycological colleagues: **Dr. Henry Aldrich**, President of the MSA 1984-85 (Aug 9th), **Dr. John Krug** (Aug. 29th) and **Dr. Keisuke Tubaki** (Aug). Each was a long-standing member of MSA with many friends in the Society.

With warmest thanks to mycological colleagues for their support during the last while, I offer a picture of one of my favourite Newfoundland mushrooms, *Boletus(Suillus) placidus*, in memory of my husband, Joe Brown, and in memory of lost friends and colleagues.

Respectfully submitted,
Faye Murrin,
MSA Secretary
fmurrin@mun.ca



Boletus (Suillus) placidus (photo F.Murrin)

Minutes of the MSA 2005 Council Meeting

**Moku Ola I Ballroom,
Hilo Hawaiian Hotel, Hilo, Hawaii
Sunday, July 31, 2005**

CALL TO ORDER AND APPROVAL OF THE MINUTES

(1) The 2005 MSA Annual Council Meeting was called to order by President *David J McLaughlin* at 8:30 am, Sunday, July 31st in the Moku Ola I Ballroom of the Hilo Hawaiian Hotel, Hilo, Hawaii. Present were President *McLaughlin*, President-Elect *James B Anderson*, Vice-President *Gregory M Mueller*, Secretary *Faye Murrin*, Treasurer *Karen Snetselaar*, Past-President *John Taylor* (2002-2003), Councillors *Tom Bruns*, *Cathy Cripps*, *François Lutzoni*, *Brian Shaw* and *Thomas Volk*. Invited participants attending were *Mycologia* Managing Editor *Jeffrey Stone* and Editor-in-Chief *Donald Nativg*, and incoming Councillor *Lisa Castlebury*. *Don Hemmes*, incoming Vice-President and Chair of the MSA 2005 Local Organizing Committee, and Liaison Committee member, *Dennis Desjardin*, attended the morning session until approximately 11 am. *Keith Seifert*, Chair of the *Mycologia* Memoirs Committee, arrived and presented his report at approximately 2:30 pm. Apologies were received from Past-President *Carol Shearer* (2004-2004)

and Councillors *David Geiser*, *Harvey Hoch*, and *Lisa Vaillancourt*.

Secretary *Murrin* distributed hard copies of the annual meeting packet that had been sent out electronically prior to the meeting and which included the agenda, MSA Roster (2004-5), Annual Reports, minutes of the 2004 Annual Meeting in Asheville, NC, minutes of the Executive Council Midyear Meeting in Minneapolis, Minnesota, the Society Constitution and By-laws and the Manual of Operations, Section I (updated July 2005).

Motion 1: Moved by President McLaughlin and seconded by Secretary Murrin that council approve the MSA 2004 General Council Minutes as published in *Inoculum* 55(5) 2004. - Approved unanimously.

(2) **President McLaughlin** presented highlights of his report [*Inoculum* 56 (5)]. He acknowledged the significant amount of time and planning required for this truly joint meeting with the MSJ in Hilo, particularly thanking Endowment Committee Chair *Thomas Harrington* for his efforts to make increased funding available for Mentor Travel Awards and Treasurer *Snetselaar* for preparing the details of the financial agreement between MSA and MSJ for our joint meeting.

Other highlights of the year included the move of *Mycologia* to Albuquerque and the negotiation of a financial agreement to support the editorial office there, the set up of the *ad hoc* Committee on Permits, chaired by *Sabine Huhndorf*, the Society's decision to join the group in support of the DC Principals which aims for open access to scientific publication while preserving financial stability for non-profit publishers, the inclusion of *Mycologia* in JSTOR, the renewal of the MSA/ALMS Agreement with *Roy Halling* as MSA signatory, our decision to become Supporting Members of the AIBS Policy Office and to join the working group on data sharing in ecology which is dedicated to producing an on line long-term data repository. He noted that the Society is receiving a significant number of requests for joint meetings with other societies. Present and future challenges for the Society include the changing face of publishing in the sciences, the continued development of interactions with other societies and our need to continue to broaden our society.

(3) **President-Elect James Anderson** presented his report on the progress of preparations for the **2006 MSA meeting**. He and local organizing

Continued on following page

committee member, *Linda Kohn*, met with APS and CPS organizers in Quebec City in March. For the 2006 meeting, registration fees will be approximately that of the 2005 Hilo meeting. Planning is well underway with exciting social activities planned and excellent venues for the meetings. There will be relatively inexpensive accommodations for students and outstanding food at reasonable costs. He is optimistic and is working with Program Chair *Tom Bruns* to ensure a smooth meeting.

President-Elect *Anderson* also reported that the **MSA committee roster** for the upcoming year is almost complete with just one more place to fill; he extended his sincere thanks to those members who wish to be involved in running of the Society. [At this point the Secretary almost fainted with gratitude for his efforts in producing the near-complete roster so quickly].

The President-Elect fully agreed with the challenges outlined by the President in his report (above). To help mold the direction of the Society he expressed his intention to resurrect the "**Blue Sky**" committee to address how progress could be made in a number of areas including recruitment of new members. He will report on the activities of that committee at MSA 2006 in Quebec City and in *Inoculum* under the President's corner forum.

- (4) **Vice - President Mueller** presented his report [*Inoculum* 56 (5)]. He expressed his regret that his efforts to find a second person to run for the position of Councillor of Cell Biology/and Physiology on the **Annual Ballot** were unsuccessful. He suggested that this may reflect either our need to change the categories for Councillors to better reflect present disciplines or that we need to engage mycologists in this area to a greater extent. A total of 243 members voted with approximately 10 % casting paper votes and the remainder voting on-line voting this year.

The following new officers will start their terms at the conclusion of this year's Business Meeting in Hilo: *Donald Hemmes*, Vice-President; *Lisa Castlebury*, Councillor for Systematics/Evolution; *Steve Harris*, Councillor for Cell Biology/Physiology; *Greg Thorn*, Councillor for Ecology/Pathology; and *Barbara Valent*, Councillor for Genetics/Molecular Biology. The **By-law amendment** replacing the term "audit" with "financial review" passed 204 to 8 with 31 abstentions.

Vice - President *Mueller* also referred Council to the report by *Meredith Blackwell* on the progress of the MSA 2007 meeting in Louisiana.

- (5) **Secretary Murrin** referred to her midyear and annual reports [*Inoculum* 56 (3) and (5)] summarizing Council activities over the past year. For the benefit of *Don Hemmes*, this year's local organizer and incoming Vice-President, she reviewed in particular the motion passed at the midyear Executive Council meeting which added to the Vice-President's duties the task of identifying a site and local organizer for the next MSA Annual meeting for which a site was not yet identified.

FINANCES

- (6) **Treasurer Karen Snetselaar's** report began with thanks to those who helped her in her first year in

office, and in particular *Jeffrey Stone*, Chair of the Finance Committee, Endowment Chair *Thomas Harrington*, past Treasurer *James Worrall* and *Mycologia* Editor-in-Chief *Donald Natvig*. The three-year review of the Society finances required at the end of past Treasurer *James Worrall's* tenure was completed and found satisfactory (which she said wryly, is about as excited as the accountant gets). She noted that the bottom line on all financial reports needs to be interpreted in view of where the Society stands with regard to the number of issues of *Mycologia* paid for in any one fiscal year (out of a total of six) and the on meeting income and payments - both of which may be out of synchrony with the fiscal year. *Mycologia* is presently in the black but payments for two more issues are forthcoming. Finances of the 2004 and 2005 meetings also overlap this year. Institutional subscription numbers have stabilized after some worrisome drops in the past few years; however there may be some concern for the total individual memberships, notably in the decreases in membership outside of North America.

The ensuing discussion by Council of how the Society might address this drop in membership included a reminder of an earlier request for International travel awards for international members to the MSA Annual meeting and identification of ways in which we might promote the Society. Managing Editor *Stone* noted that extra complimentary copies of *Mycologia* could be printed for promotion, with Vice-President *Mueller* suggesting that an up-coming issue highlighting Deep Hypha might be good for that purpose. In addition, Past-President *Taylor* suggested that we should promote the idea that for the price of an on line Institutional subscription many individuals may have access rather than just one. **Action Item 1: Vice-President Mueller will spearhead a committee to prepare and distribute publicity items for the Society and upcoming meetings which may include a brochure and power point slide(s), etc.**

Action Item 2: Dennis Desjardin volunteered to investigate publicity at future conferences in Asia including an MSA "vendor" table to promote the Society, Mycologia and future MSA meetings.

Treasurer *Snetselaar* continued her report observing that the Society has now completed all upfront payments for taking *Mycologia* on line. There remains a yearly expense and this is expected to increase as new items become available. The move of the *Mycologia* finances to Albuquerque was smooth and the new quarterly billing for the editorial office is working well. The larger issues produced over the past year to catch up with the backlog of manuscripts are more expensive and this should be kept in mind. The bottom line for the Annual Meeting was very good last year with a net profit of \$16,905. This year the meeting finances were set up to break even and next year, under the financial agreement already in place with APS, the MSA will not make a profit nor incur a loss overall. (Note, however, that the MSA auction remains independent of that agreement.)

There followed a discussion of the relative merits of profit making at meetings and in particular its

impact on the numbers of students attending.

Recommendation: That in the future the Local Organizing Committee will produce a final report with statistics including the ratio of students to other members attending the Annual Meeting.

Treasurer *Snetselaar* reported that fund raising by the **Endowment Committee** went very well over the past year, including a successful auction in 2004. The 2005 MSJ/MSA financial agreement includes profit sharing based on the percentage of regular registrants from each Society and, for the first time, sharing of the auction profit. The increased Mentor Travel Award outlay has this year (\$14,000 in support of 19 awards) has depleted much of funds available for travel awards and fewer awards than normal may be expected in the next few years. The purpose of the unrestricted and permanently restricted endowments continues to cause some confusion; she suggested that the bylaws need to be clearer and the Society appears to have no clear mechanism to set up new endowment awards. With the aim of clarifying some of these issues, informal discussion among the Treasurer, Endowment Chair *Tom Harrington* and Finance Chair *Stone* is ongoing.

Action Item 3: Treasurer Snetselaar will form a committee to report to the Executive Council at the midyear meeting on recommendations for use of the unrestricted and permanently restricted endowment funds which have been a source of contradictory interpretations for a number of years.

- (7) **The Finance Committee Report** was presented by Chair *Jeffrey Stone* [*Inoculum* 56 (5)]. The Society investments appear to be in good shape. Prior to the changes instituted by past Chair *Orson Miller Jr.*, Society investments were very conservative but Chair *Miller* brought in a modern investment approach which included mutual fund investments. However, investing is more difficult today and since 2001 rates of return have dropped from approximately 8 to 3%. Thus, in the near future the financial committee will be considering reinvestment strategies. The Finance Chair and the Treasurer are also investigating effective ways to ensure further transparency in the handling of endowment funds.

PUBLICATIONS

- (8) **Mycologia Managing Editor, Jeffrey Stone**, presented his report. A new three-year contract has recently been signed with Allen Press for publication of *Mycologia*. Increases in the cost of publication have been seen due to the increase in the size of the issues and increasing costs of color illustrations. Present policy on color illustrations has been clarified in instructions to authors and page charge forms. The policy is for members to have one free color plate per year, with the consent of the Editor-in-Chief, with all other color pages charged to members and non-members. The cost is \$800 per color page per non-member and to those members who have used their one free one. In addition, any accepted color illustrations must be necessary, not merely elective. Income from regular page charges has remained

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consistent for a number of years and the charged rate is low relative to those of other comparable journals.

Motion 2: Moved by Managing Editor Stone and seconded by Treasurer Snetselaar that the page charge fee for *Mycologia* be increased from \$60 to \$75 starting with volume 98. - Approved unanimously.

Action Item 4: Treasurer Snetselaar will ask Allen Press for an analysis of the costs for color printing in *Mycologia*.

Managing Editor Stone has begun working with JSTOR by sending journals from Allen Press. JSTOR will archive electronically all back issues of *Mycologia* (including Journal of Mycology) produced since 1885 and will provide the ability for fully searching text. Access to this archive will be available to all libraries who are JSTOR members and to all MSA members via an access code. This is a non-exclusive agreement and will not affect regular access through High Wire.

Changes in communications and access to sophisticated search capabilities on line inspired the following two motions.

Motion 3: Moved by Managing Editor Stone and seconded by Secretary Murrin that the Society discontinue production of a hard copy of the MSA member directory. - Approved unanimously.

Motion 4: Moved by Councillor Bruns and seconded by Past-President Taylor that the contract for indexing *Mycologia* not be renewed when the present contract expires in 2007 - Approved (7 for, 3 abstain). This presently costs the Society \$5,000 annually.

Motion 5: Moved by Managing Editor Stone and seconded by President-Elect Anderson that Council approve a request from the Wilson Abstracting Service for a complimentary hard-copy subscription to *Mycologia*. - Approved (8 for, 2 against). This abstracting service is aimed at the non-specialist. The public relations benefits for the Society were considered by Council to offset the subscription cost of \$220. The Society already has about six such complimentary subscriptions allocated to abstracting and search businesses.

Managing Editor Stone continued by addressing the problem of the number of subscribers who have not activated their on-line subscriptions to *Mycologia*: only 43% of the 743 institutional subscribers have activated their on-line subscriptions. He then reviewed other impressive statistics which can be obtained from the High Wire on-line usage reports. He noted that many on-line users who are not subscribers appear to be in the area of health care and medicine.

Action Item 5: Managing Editor Stone will head a committee to investigate the revision of the wording for on-line terms of use for *Mycologia*.

- (9) *Mycologia* Editor-in-Chief, Donald Natvig, presented his report [*Inoculum* 56 (5)]. He took over as Editor-in-Chief in August and moved the Editorial Office from New Orleans to Albuquerque, New Mexico. Editorial Assistant Gerard Hebert moved to Albuquerque as well, while Editorial Assistant John (Mitch) Donahue has continued to help with copy editing thus provid-

ing much needed continuity from the New Orleans office. They each presently have a six month contract as approved by Council and this may need to be renewed.

Due to this transition, the first issue of this year was late but this is not expected to continue. *Mycologia* 97 (2) is completed and the corrected proofs for issue 3 are back to Allen Press; 97 (4) is assembled and soon off to Allen Press; 97 (5) is not filled yet but this is likely just due to the slower summer season. The lack of a backlog of papers is interpreted as a good sign as is the trend toward an increased submission rate. A total of 194 new submissions were received by *Mycologia* over the past year, 146 articles were published with an average of 24.3 articles per issue (many of which were from the earlier backlog and thus it should not be interpreted that *Mycologia* has a 70% acceptance rate). Editor-in-Chief Natvig expressed the need to work on shortening time from submission to completion of first part of the review process. There is now 100% online submission of manuscripts via Allen Track, very few of which are uploaded from the editorial office; in contrast some reviewers still do not like to review on line. Editor-in-Chief Natvig expressed concern that some reviewers electronically mark comments on PDF and doc files and thus are identifiable by anyone reading the manuscript and using the "modified by..." tool.

Navig and colleagues have tackled the long sought holy grail of having our journal included in PubMed. An application was submitted in June and a response is expected by October. He expressed his optimism for the success of this application.

Council adjourned for lunch between 12:30-1:30.

OTHER CONSIDERATIONS

- (10) Following a discussion item arising from the Report of the Program Committee Chair, Jean Lodge [*Inoculum* 56 (5)], Council considered the following motion.

Motion 6: Moved by Councillor Bruns and seconded by President-Elect Anderson that MSA meeting abstracts no longer be printed as part of the program booklet; copies of the abstracts will continue to be available on-line and the option to purchase a hard-copy of the abstracts should be included in the registration. - Approved unanimously. This is intended to save both money and time for the Society.

- (11) **Motion 7:** Moved by President McLaughlin, seconded by Secretary Murrin and with friendly amendments (4-6, below) proposed by George Carroll, Chair of the Honorary Awards Committee: that the Society revise the way it handles nominations and voting by Council for the Honorary Member and Distinguished Mycologist Awards to include the following: 1) a requisite period for discussion allotted prior to calling the vote, 2) discussion through a secure website administered through Allen Marketing and Management, 3) approval of a nomination to be by a majority of the full complement of all 15 Council members (rather than the majority of those voting); 4) that Council be given one month to deliberate over Honorary member nominations and that that waiting period be incorpo-

rated into the schedule which the selection committee should adhere to, 5) that the people who submitted letters in support of the nomination may also be brought into the discussion and 6) that all comments be first-hand and come directly from the people to whom they have been attributed and that all comments be signed. - Approved unanimously.

MEETINGS

- (12) Don Hemmes, Chair of the Local Organizing Committee, gave his report on the progress in organizing this present meeting, MSA-MSJ 2005 in Hilo. He noted the difficulty in estimating meeting costs: for example, the original estimate of the number of registrants was 250 but has reached 450. He raised external funds including \$40,000 from the University of Hilo, and \$5000 from USDA, the latter for travel support for Paul Stametz of Fungi Imperfecti to give a presentation to the general public. There are registrants from 27 different countries at this meeting and publicity will include two newspaper articles. Council expressed its enthusiastic and heartfelt thanks for Don's heroic and highly effective efforts at making this such a successful meeting, and he exited to much applause.

- (13) President-Elect Anderson gave his report on the progress of the MSA/APS/CPS 2006 Annual Meeting in Quebec City (see above). There followed a discussion of the events planned for the celebration of the 75th Anniversary of the MSA including a special symposium. Councillor Volk also suggested an anniversary calendar (an idea borrowed from APS).

Action Item 6: In celebration of the 75th anniversary of the Society next year in Quebec City, Local Organizing Chair Anderson and Program Chair Tom Bruns will investigate the offering of a special symposium on the past and future directions of the MSA.

- (14) The report on MSA 2007 in Louisiana by Local Organizing Chair, Meredith Blackwell [*Inoculum* 56 (5)] was considered and gratefully received. Vice-President Mueller advised that we should be careful to include the Latin American mycologists in this meeting by posting its announcement on the ALM website and by integrating symposia, for example on the topic of biodiversity.

- (15) The report on MSA 2008 in Pennsylvania from Local Organizing Chair David Geiser [*Inoculum* 56 (5)] was considered and gratefully received. **Action Item 7:** Secretary Murrin will contact Local Organizer David Geiser to suggest that a joint meeting with the Phycological Society of America be considered for the 2008 meeting in Pennsylvania.

- (16) President McLaughlin reported on the progress of talks with BSA to hold a joint meeting in 2009 in Snowbird, Utah. He noted that MSA is one of the founding groups on BSA and that efforts will be made for a truly joint meeting.

Motion 8: Moved by Managing Editor Stone and seconded by Vice-President Mueller that the Society agree to meet with the Botanical

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MSA BUSINESS

Society of America in 2009 at Snowbird, Utah.
- **Approved unanimously.**
Action Item 8: President McLaughlin will contact Bradley Kropp as a potential local organizer for the meeting.

President *McLaughlin* reported that there are a number of other societies requesting joint meetings with the MSA including the Phycological Society of America and APS. Past President *Taylor* reported an expression of interest from the French Mycological Society for a joint meeting.

OTHER BUSINESS

- (17) **Chair of the Mycologia Memoirs Committee, Keith Seifert**, brought to Council for discussion a quote from Allen Press of approximately \$10,000 in support of the publication of a new volume of *Mycologia Memoirs* in CD-ROM format. The Memoirs Committee have been shepherding this "beautiful" monograph for several years and have received a quotation from Allen Press to prepare a fully hypertext linked CD-ROM (\$7,650) and a further amount for processing fig-

ures and tables (\$2400).

Motion 9: Moved by Past-President *Taylor* and Councillor *Volk* that Council express its strong support for the CD-ROM publication and its shepherding by the *Mycologia Memoirs Committee* by 1) allocating \$500 to support the hiring of a person by the authors to effect the linking of the figures with text and 2) that the MSA facilitate distribution by putting the CD for sale on the MSA website. - **Approved unanimously.**

- (18) **Recommendation:** that the contact person within the Society for group supporting the DC principals be *Managing Editor Stone*. There was little support for including the DC logo on our website at this time. To date we have had no outside logos on our website
- (19) **Recommendation:** Council reconfirmed its support for the BSA 2006 anniversary and our earlier decision to send a letter and a delegate providing that we can identify someone who plans

to attend that meeting (noting however the overlap with MSA 2006 in Quebec City).

- (20) Vice-President *Anderson* reported on a request from *Weiland Meyer* for MSA support for IMC in Cairns, Australia. Other international meetings were put forward by Council for which student travel funding might be requested, including ICOM in Granada, Spain and the International Root and Butt Rot Conference.
- Action Item 6: Secretary Murrin will send President-Elect Anderson the guidelines for applications to the MSA for support from other meeting organizers and will investigate guidelines for approval of international travel funds for MSA student members and postdoctoral fellows so that these travel awards, if approved by Council, may be announced in a timely fashion.**

Council meeting was adjourned at 3:05 pm.

Aloha and mahalo,
Faye Murrin, Secretary

MYCOLOGICAL SOCIETY OF AMERICA CALL for NOMINATIONS for COUNCIL

- FOR THE UPCOMING YEAR THE MSA MEMBERSHIP WILL ELECT SIX NEW COUNCIL MEMBERS INCLUDING VICE PRESIDENT, SECRETARY AND FOUR COUNCILORS.
- PLEASE CONTRIBUTE BY NOMINATING A COLLEAGUE FOR ANY OR ALL OF THESE POSITIONS (LISTED BELOW) AS SOON AS POSSIBLE.

The candidate for each office who receives the greatest number of nominations from the membership will be contacted and, if willing to stand, placed on the spring ballot along with a candidate selected by the MSA Nominating Committee. The spring ballot will be made available to all members at least three months prior to the society annual meeting to be held in Quebec City, Canada from 29 July - 2 August 2006, Québec City, Québec, Canada.

**These nominations and elections are important to the Society,
and you are strongly encouraged to participate.**

Refer to the MSA home page at www.msafungi.org for a list of past and present Councilors and Officers.

Officers

VICE-PRESIDENT _____
SECRETARY _____

Councilors (all two year terms)

CELL BIOLOGY/PHYSIOLOGY _____
GENETICS/MOLECULAR BIOLOGY _____
SYSTEMATICS/EVOLUTION _____
ECOLOGY/PATHOLOGY _____

Thank you for your participation!

Please return your nominations by **FEBRUARY 15, 2006** to
MSA Vice-President Don Hemmes by email, fax, or regular mail.

Dr. Don E. Hemmes

Biology Department, Univ Hawaii
Hilo, HI 96720, United States

Phone: (808) 974-7383, Fax : (808)974-7693, Email: hemmes@hawaii.edu

MYCOLOGICAL NEWS

2005 MSA Fellows Named at Hilo Conference

Lorelei Norvell

Lorelei Norvell comes from the Ammirati branch of the Kaufman mycological clade. She entered mycology by a circuitous route, beginning her academic career with an MA in Slavic languages from the University of Texas at Austin. She worked as a translator for a year, then somehow ended up in Oregon, where she became proprietress of a leaded glass studio in Portland for 8 years. During the 80's her interests evidently shifted to mushrooms; in 1990 she earned a second BA in Biology, and in 1998 a Ph.D. in mycology. In the 90's Lorelei became seriously involved with groups of amateur mycologists, and despite a shy and retiring personality took on the task of corralling groups of amateurs over a ten + year period to census Chantrelles in study plots near Portland and document the effects of mushroom harvest on this sought-after culinary tidbit. Lorelei has been widely involved in fungal biodiversity inventories, both in the PNW and in the Great Smokey Mountains. She is a nomenclature maven and member/secretary of the IAPT committee on fungal nomenclature. She is currently Editor-in-Chief of Mycotaxon.



Norvell

Lorelei is a life member of the Oregon Mycological Society since and a member of MSA since 1983. She has served MSA as editor of *Inoculum* and subsequently as secretary of our society – in all a record of incredible energy and high competence.

Dennis Desjardin

Dennis Desjardin belongs to the Petersen branch of the Coker clade, although he also claims honorary membership in the Kaufman clade based on a Master's degree under Harry Thiers. Following in Thiers's shoes, Dennis has been a professor at San Francisco State Univ. since 19__, where he teaches no fewer than 5 different courses in mycology as well as other less specialized offerings in biology. Dennis has published extensively (75 papers) on the systematics of euagaric fungi and is an author on 3 book-length monographs, including the "Mushrooms of Hawaii" which some of us may even have used on field trips during these meetings. He is working on the agaric flora of SE Asia and su-



Desjardin

perpoulos and Weston Awards in the same year.

This recitation may suggest a sober, hard-working mycologist (read dull), but in fact Dennis is something of a jet-setter (think of all of those graduate students in Thailand) and even might be said to move in the circles of the glitterati. He tells me he is a professional jazz and blues saxophonist and has recently played gigs with famous people (Mickey Hunt of the Grateful Dead and others – ask Dennis). Jazz saxophonists historically have fallen prey to the blandishments of various mind-altering substances. It is difficult to imagine such a fate for Dennis, but if he should be tempted we can all guess what the mind-benders of choice might be. At least he won't make any fatal mistakes.

John Taylor

John Taylor comes from the Wells branch of the G.W. Martin mycological clade. He became a member of the Department of Plant Biology at the University of California at Berkeley in 1980 and has maintained a continuous record of research funding since that time. Throughout his career John has used molecular techniques to focus on questions about the systematics, population biology, and evolution of Ascomycetes (especially human pathogens) and more recently of Glomomycetes. Considering John's doctoral work on the fine structure of a ballistosporous yeast and post-doctoral work on Chytridiomycetes, he probably would have been surprised at the turn his career has taken. However, John has

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MYCOLOGICAL NEWS



Taylor

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always focused on the big, fundable questions and on tractable or medically important model systems – which often seem to lie with the Ascomycetes.

During his career John has lived both in Australia and in Copenhagen while on sabbatical leaves. He has been involved with research leading to the publication of an astounding 140 research papers. He is well known in North American mycological circles for his generosity in making lab facilities and technical know-how available to colleagues seeking a retreat in molecular biology. John is a Fellow of the AAAS and recipient of numerous awards and distinctions, including a Miller research professorship at U.C. Berkeley, medals from two international medical mycology societies, the MSA Alexopoulos award and the MSA Weston Award for teaching. He is a sought-after speaker and shoulders an onerous editorial load. John has been a member of MSA since 1974, and served as president of the society in 2002. Since then, he has followed the *cursus honorum* prescribed by our bylaws for past presidents, continuing to serve on council and on the Honorary membership committee.

John also possess a little-remarked talent, evident at the MSA auction in Corvallis 3 years ago. Jim Trappe put his personal truffle rake up for auction. John managed to sell the sacred truffle rake back to Jim, for well over \$1,000. Would you buy a used car from this person? The distinction of MSA Fellow is conferred for excellence in research and service to our society, not for hucksterism. But a little sales savvy never hurt. In fact John might legitimately say, as professor he has been in sales all his career.

MSA Awards 2006

- **New Deadline : Feb 15th 2006**
- **See www.msa.fungi for details**

For over 20 years the **Mycological Society of America** has been recognizing excellence in research, teaching and service among its membership by awarding **Students** as well as **Distinguished Teachers** and **Researchers**. This is your chance to do something for that promising student or distinguished mycologist. If you don't nominate them, they will surely not receive an award!

The following table summarizes what Awards are available, who is eligible, the award received, and administering MSA committee. *Amounts are estimates and may vary for some awards depending on interest earned on investments.*

| Award | Eligibility Requirement | Award Received | Administering Committee |
|--|---------------------------------|-------------------------|-------------------------|
| Distinguished Mycologist | Mycologist | Plaque | MSA Distinctions |
| C. J. Alexopoulos Prize | Early-career Mycologist | Plaque & Monetary Award | MSA Distinctions |
| W. H. Weston Award for Teaching Excellence | Teacher of Mycology | Plaque | MSA Distinctions |
| MSA Fellow | Mid-career Mycologist | Plaque | Honorary Awards |
| MSA Honorary Member | Mycologist | Plaque | Honorary Awards |
| MSA Graduate Fellowships | Graduate Student | 2 @ \$2000 each | Student Awards |
| NAMA Memorial Fellowship | Graduate Student | \$2000 | Student Awards |
| Backus Award | Graduate Student | \$1000 | Student Awards |
| Best Oral Presentation | Graduate student | 2 @ \$100 each | Student Awards |
| Best Poster Presentation | Graduate student | 2 @ \$100 each | Student Awards |
| Mentor Travel Awards | Graduate Student | Varies | Mentor Travel Awards |
| Martin-Baker Award | Early Career Mycologist | \$2200 | Research Awards |
| C. T. Rogerson Research Award | Graduate/ Undergraduate Student | \$1000 | Research Awards |
| Forest Fungal Ecology Award | Graduate Student | \$1000 | Research Awards |
| A. H. & H. V. Smith Award | MSA Member | \$1200 | Research Awards |

MYCOLOGICAL NEWS

World Phytophthora Collection Threatened with Destruction

The **World Phytophthora Collection** (<http://phytophthora.ucr.edu>) at UCR is threatened with destruction. **Phytophthora was responsible for the destruction of the potato crop in Ireland and resulted in the Great Famine.** With the drastic budget cuts still facing the University of California Riverside this collection which is over 40 years old may be lost forever in the very near future. The most urgent need is \$14,500 to cover the estimated annual cost of liquid nitrogen supplies essential for the cryopreservation of 6500 isolates of ~90 species or types. Funds are also needed to replace aging equipment, some of it 20 years old, such as the programmed freezer (replacement cost ~\$18,000) and the 5 liquid nitrogen refrigerators (replacement cost ~\$84,000). There is currently no technical help available and future operations are in potential jeopardy. Part-time technical help is urgently needed (cost ~\$28,000 per annum for salary and benefits a part-time lab assistant).

Phytophthora is one of the most dangerous plant pathogens in the world. The UCR collection houses the largest collection of genetically distinct strains of this plant destroyer. This last year has seen a dramatic increase in interest in **Phytophthora** within the academic community. The appearance of Sudden Oak Death caused by *P. ramorum* and the possibility of its global impact on oaks and other important hosts has caught the eye of government, media and scientists.

The collection is a unique world resource for research on **Phytophthora**, one of the most devastating plant pathogens on this planet. As such it is now the only remaining large comprehensive collection of genetic diversity representative of this important plant pathogen. Since 1981 it has been

under the curator ship of Professor Michael D. Coffey and in the last 20 years it has increased dramatically both in size and genetic diversity. It has acquired important collections from worldwide sources. As an example it houses over 500 isolates of the destructive tropical plant pathogen *P. palmivora* from different hosts and regions. The collection also includes a genetically diverse collection of isolates of *P. infestans*, cause of late blight of both potatoes and tomatoes.

A searchable database is maintained on its own server <http://phytophthora.ucr.edu> and allows for printout by accession number, or by species.

The World Phytophthora Collection is the only remaining major germplasm resource for research into this extremely important plant pathogen. The collection contains important species and varieties preserved under ideal cryogenic conditions. The taxonomy, genetics, biology, ecology and pathology of many of these **Phytophthora** species are poorly understood. Many of the diseases are predominantly soil borne and consequently are difficult to control. Losses due to **Phytophthora** problems run into billions of dollars annually.

Donations can be made out to “**The UCR Foundation**” specifying it is for the “**The World Phytophthora Collection Fund**”. The address to send the charitable donations to is **The UCR Foundation, Building A, 252 Highlander Hall, University of California, Riverside, California 92521, USA. Note: An accompanying letter should state that this a gift for “The World Phytophthora Collection Fund”.**

—Michael David Coffey,
coffey@ucr.edu



'Shroom-mobile'

John Dighton, Director of Rutgers University Pinelands Field Station, has been donated a new Subaru Forester by Subaru of America to use in the field. Given that his interest is in the role of fungi in ecosystems (see *Fungi in Ecosystem Processes: Marcel Dekker and The Fungal Community: its Organization and Role in the Ecosystem*, CRC Press, 3rd Edition), Subaru kindly wrapped the car in an appropriate manner! Please go to the website for details at marine.rutgers.edu/pinelands

MYCOLOGICAL NEWS

Drug-Free Methods for Purifying Contaminated Fungi Cultures

Purifying strains of filamentous fungi that are contaminated with bacteria is increasingly difficult as antibiotic-resistant bacteria become more prevalent. Yeast contamination is similarly problematic. The following methods exploit the growth habits of filamentous fungi for strain purification since bacteria and yeasts cannot penetrate agar.

One method is to overlay the contaminated culture with a slab of fresh agar cut from another plate. The filamentous strain will grow through the overlay and the contaminant will be trapped beneath. Another method is to grow the contaminated strain on a 3 cm x 3 cm piece of dialysis tubing that has

been autoclaved in distilled water and placed on agar medium. Cut a slit in the tubing with a sterile scalpel. Inoculate the contaminated strain near but not at the slit and allow it to grow. The filamentous strain will penetrate the agar through the slit, and the contaminant can be removed with the dialysis tubing.

These methods were originally developed to purify ampicillin-resistant bacteria-contaminated *Saprolegnia* strains isolated from fish. Each time, a single round of purification was sufficient.

—Susan G. W. Kaminskyj
Susan.Kaminskyj@usask.ca

Student Poster and Oral Presentations at 2005 MSA Meeting

MSA Award for Best Poster Presentation (Two Winners)

Andrea Porrás-Alfaro for her poster entitled “Mycorrhizal fungi of *Vanilla*: Specificity, phylogeny and effects on seed germination and plant growth”. This work was done under the supervision of Paul Bayman.

Gi-Ho Sung for his poster on the “Phylogenetic classification of *Cordyceps* and clavicipitaceous fungi. This work was done in Joey Spatafora’s laboratory.

Honorable mention: Sandra Woolfolk for her poster entitled “Morphology of the alimentary canal of *Chrysoperla rufilabris* adults: Do those yeasts play roles in nutritional provision to lacewings? This work was done in the supervision of Inglis Douglas.

MSA Award for Best Oral Presentation

Cathryn Rehmeier for her oral presentation “Structure and dynamics of *Magnaporthe grisea* telomeres”. This work was done under the supervision of Mark Farman.

Matthew Smith for his oral presentation “Dismantling the disconnect between EM fruiting bodies and root tips - Hypogeous, resupinate, and inconspicuous taxa are dominant and diverse on EM roots and as fruiting bodies in a xeric oak woodland. This work was conducted in David Rizzo’s laboratory.

Honorable mention: Travis Clark for his oral presentation “Ploidy determines evolvability in filamentous basidiomycetes.” The study was done under the supervision of James Anderson.

IBC XVII (Vienna, Austria, 2005): The Code and the Congress

When naming new taxa, mycologists follow the International Code of Botanical Nomenclature. Only actions by a Botanical Congress, held every six years, can revise the *Code*. The 17th International Botanical Congress was held in July 2005, and from July 12-16, mycologists and botanists of the Nomenclature Section at the University of Vienna considered amendments to the *St. Louis Code* (2000). The new *Vienna Code* (not to be confused with the *Vienna Rules* of the 2nd International Botanical Congress in Vienna in 1905) will be published sometime in 2006.

The Nomenclature Committee for Fungi (CF) is one of eight International Association for Plant Taxonomy (IAPT) permanent committees that recommend conservation proposals. Since the 1999 St. Louis IBC, *Secretary* Walter Gams, *Chair* Vincent Demoulin, and 13 other CF members have voted on proposals to conserve or reject fungal names. Their recommendations (which have been summarized periodically in *Inoculum*) were approved by the General Committee and finally ratified by the full Nomenclature Section in Vienna.

The 312 published (*Taxon*) proposals to amend the



Attendees of the 17th IBC Nomenclature Section pose for their official photograph in the hot sun on the steps at the University of Vienna on July 13. Ten mycologists attended the session, including (pictured here in the mob) MSA members Chair Vincent Demoulin (Belgium), Retiring Secretary Walter Gams (Netherlands), David Hawksworth (Spain), Lorelei Norvell (USA), and Scott Redhead (Canada). Official photo by Rudolf Hromniak

Continued on following page

MYCOLOGICAL NEWS

St. Louis ('Black') *Code* (2000) were first voted on by the IAPT members, who mailed in ballots to *Rapporteur-général* John McNeill in May. Proposals receiving $\geq 75\%$ negative votes were not considered during the Nomenclature Section, unless five members requested reconsideration. During the July sessions, the Section approved 65 proposals and referred another 45 to the Editorial Committee. The more interesting proposals are summarized below.

Article 59 (Pleomorphic fungi): With respect to the intrinsically mycological and eternally controversial Article 59, the botanically oriented Section depends on the CF for advice regarding dual nomenclature of anamorphic and teleomorphic fungi. Despite the recent push for unified nomenclature (dating to well before the 2002 IMC 7 in Oslo), the CF has not yet reached consensus on how best to modify the *Code* with respect to names of fungi with pleomorphic life cycles. Neither was there a majority vote of the CF for accepting the five Hawksworth proposals, but the IBC Section did accept an amended Proposal 184. The Vienna Code will add a *new* paragraph to Article 59 that allows designating an epitype that shows the teleomorph stage for a "hitherto anamorphic name even when there is no hint of the teleomorph in the protologue." This 'ingenious mechanism' (according to the rapporteurs) permits epitypification without "requiring the type of a holomorph name to be in the teleomorph state". The Section also agreed to establish a Special Committee to study Article 59 as a whole. Those interested in serving on this *ad hoc* committee should contact IAPT General Committee Secretary Fred Barrie <fbarrie@fieldmuseum.org>. The committee will eventually draft a proposal to be considered by the CF and IBC XVIII, scheduled for 2011 in Melbourne, Australia.

Illustrations as types: The Section sliced a Gordian knot — how to allow mycologists to use illustrations as types when they cannot designate microfungi or cultures as type specimens—by adding the word 'microfungi' to an amended Art. 37.4. Types of names may be published illustrations for microscopic algae and microfungi when preservation of type specimens is 'technically difficult', but names for all other organisms published on or after 1 January 2007 will require specimens as types.

'Zoological' fungi —Last year, CF member Redhead confronted the validity of names for fungi described under the zoological *Code*, which does not require Latin diagnoses. Sequence analyses now imply *Microsporidia* and *Pneumocystis* inter al. within Kingdom Fungi, rendering previous names invalid under the botanical *Code*. The Section recommended inserting "or fungi" after "algae"



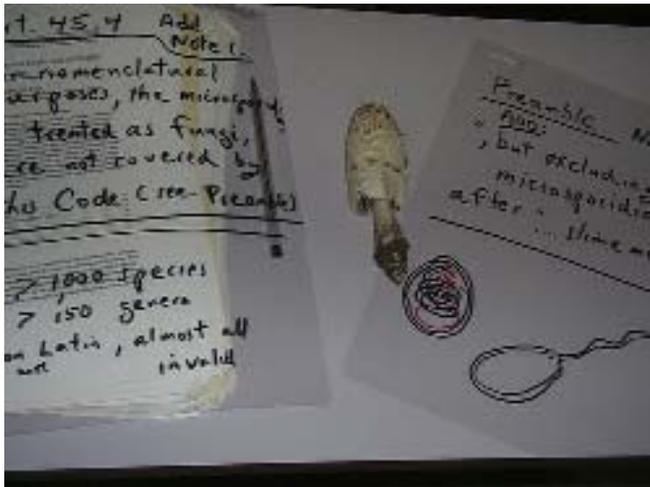
Scott Redhead (center) suggests possible rewording while fellow MSA & CF members Lorelei Norvell (right) and Vincent Demoulin (below center) study the original proposal. Official photo by Rudolf Hromniak



Walter Gams, among fungi in W (the herbarium in Vienna's Museum of Natural History), basking in the glow of newly acquired non-secretaritude after adjournment of the Nomenclature Section on July 16. Photo by Lorelei Norvell

Continued on following page

MYCOLOGICAL NEWS



The Nomenclature Section accepted the Committee for Fungi's recommendation to retain the shaggy mane as type for the genus *Coprinus*. Scott Redhead's celebratory *C. comatus* rests next to his transparencies suggesting a possible Code revision to cover microsporidian names. Photo by Lorelei Norvell

in Art. 45.4 to retain names of >1,000 'microsporidian' & *Pneumocystis* taxa as valid: this means that such names need only meet the requirements of the pertinent non-botanical *Code* under which they were first described.

Fungi transferred from the animal kingdom—Molecular based phylogenies now place among the fungi several groups of odd-ball organisms, previously thought to be protozoan. Because the zoological code does not require Latin diagnoses or descriptions while the botanical code that covers fungi has this requirement, large numbers of names of some groups (e.g., the microsporidians) could become invalid. A change in Art. 45.4 makes exceptions for fungi described under other codes, basically validating under the botanical code names previously available under the zoological code.

The *Vienna Code* does not recognize online publication of nomenclatural novelties, unless hard copies are simultaneously deposited. New text for electronically published periodicals will be added that stipulates that print & electronic copy must be identical in content & pagination, in 'platform-independent & printable' (e.g., PDF) format, and publicly available via the internet. Both publications must bear dates, include references, and mention nomenclatural novelties in abstracts.

Effective publication of taxonomic names in graduate theses or dissertations has been another problem in the *Code*. One difficulty surrounded how to interpret the intent of the authors, since some authors consider their pro-

posed names as provisional while others wish to publish their new names and combinations in their university-published theses. The Vienna Code clarifies that novelties appearing in works submitted for a degree on or after January 1, 1953, are not to be considered effectively published unless the works contain statements to that effect or present other 'internal evidence' (e.g., publisher's name, ISBN) that the new names are effectively published.

Conservation vs. Priority: Probably the Section's most turbulent controversy concerned a proposal to conserve *Acacia* Mill. with a conserved type of non-African origin. The paraphyletic *Acacia s.l.* contained 1352 species to require segregation into different genera. The controversy surrounding which segregate genus should retain the type species paralleled the recent mycological controversy regarding whether *Coprinus comatus* continue as type of the genus *Coprinus* (which, ultimately, was recommended). Here, however, the type species of *Acacia s. s.* was switched from the 1913 type, *A. scorpioides*, to *A. penninervis*, moving the type locality from Africa to Australia (much to the Africans' outspoken dismay). The Section voted to follow the Spermatophyta Committee's recommendation of 'conservation' over 'priority' and the resultant transfer of 243 African species to the new genus *Senegalia*. The Australians who pled 'don't whittle our wattle' feel this is far better than transferring ~1000 species names to the genus *Racosperma*. It appears that those of us who envision giraffes stretching up to eat acacia leaves must either learn the name *Senegalia* or add *sensu lato* after the name *Acacia*.

The newly approved Committee for Fungi now has 17 members. They are (MSA members in bold): **Lee Crane** (Urbana-Champaign IL), Chair **Vincent Demoulin** (Liege), **Walter Gams** (Utrecht), **David Hawksworth** (Madrid), **Teresa Iturriaga** (Caracas), **Paul Kirk** (Egham), **Pei-Gui Liu** (Kunming), **Tom May** (Melbourne), **Jacques Melot** (Reykjavik), Secretary **Lorelei Norvell** (Portland OR), **Shaun Pennycook** (Auckland), **Christian Printzen** (Frankfurt am Main), **Scott Redhead** (Ottawa), **Svengunnar Ryman** (Uppsala), **Gary Samuels** (Beltsville MD), **Harrie Sipman** (Berlin), and **Dagmar Triebel** (München). Those with questions regarding recent *Code* revisions may contact any of the above or **Wendy Untereiner** (Brandon University, Canada), Scott, or Lorelei on the MSA Nomenclature Committee.

—Lorelei Norvell
Chair, MSA Nomenclature Committee

MYCOLOGIST'S BOOKSHELF

Five books are reviewed below. Books received since August are listed followed by books received earlier. Please look on-line for the latest *Inoculum* for new books months before the hardcopy of *Inoculum* arrives. When you review a book, then you may keep it! All requests for books to review should be sent to Dr. Amy Rossman at arossman@nt.ars-grin.gov.

Introduction to Food and Airborne Fungi, 7th Edition

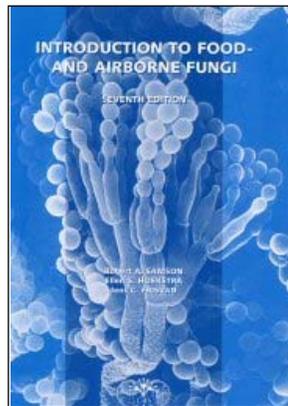
Introduction to Food and Airborne Fungi, 7th edition. 2004. Robert A. Samson, Ellen S. Hoekstra, & Jens C. Frisvad. Centraal-bureau voor Schimmelcultures, Utrecht, The Netherlands, www.cbs.knaw.nl/publications/index.htm, 389 pp. Price: €50.00.

This book is important for mycologists who are educators or work with public health issues. The recent edition includes updates on nomenclature of *Aspergillus* and *Penicillium*, descriptions of *Alternaria* and, in the *Stachybotrys* section, a brief mention of *Stachybotrys chlorohalonata*. A useful addition is the printing of 48 color plates of *Aspergillus*, *Eurotium* and *Penicillium* cultures on CMY and MEA.

I especially urge my American mycological colleagues to read closely the non-taxonomic chapters about the role of fungi in human affairs, relating both to our respiratory and alimentary environments. The material includes trade agreement information that bolsters my opinion that mycology holds a key role in economic affairs.

The book is divided into 9 chapters and 2 appendices, the first 278 pages covering the taxonomy of food and airborne fungi, mostly but not all anamorphs. Each taxonomic group is prefaced with an introduction and morphological overview, especially of *Aspergillus* and *Penicillium*. Each species description is accompanied by line drawings and photomicrographs. Descriptions include information about habitat and toxins if dangerous. This first section is well executed and useful as an accessory for an introductory mycology course in taxonomy. The selection of species covers the most commonly encountered fungi in at least the temperate climates; I have no basis for comparison with what one might find in the tropics for food and airborne contaminants. A word of caution to investigators new to the field of mold contamination – this book contains most, but not all, of the fungi one might encounter in contamination investigations. There are plenty of other fungi not treated in this book that commonly turn up in airborne mold samples.

Chapter 2 covers general methodology for collecting



and analyzing food-borne fungi, including heat-tolerant, xerophilic, proteinophilic, and other environmentally specialized groups. This chapter includes extensive descriptions of TLC and HPLC methods for analyzing mycotoxins from culture plugs, tables with R_f values for mycotoxins, and tables specific for mycotoxins produced by species of *Fusarium* and *Penicillium*. Molecular methods for fungal identification are discussed only briefly and are not enumerated. Hopefully future editions will expand on molecular methods to the same extent that the 7th edition covers thin-layer chromatography of mycotoxins.

Detection and isolation of fungi from indoor environments is covered in the third chapter. It concentrates on the issues environmental mycologists face in assessing building contamination by fungi. Although a good introduction for any mycologist considering entering this field, it is, by no means, comprehensive. This chapter is well-written and concise, describing methodologies in volumetric air sampling, direct sampling, dilution plating, growth media, and, most importantly, interpretation of results. At the end of the chapter, readers are directed to the CBS website describing protocols and guidelines for indoor air sampling.

Mycologists and food technologists working with contamination of foodstuffs will be delighted with Chapter 4, which covers different food groups and the fungi that contaminate them. Valuable information about water activity of different species of spoilage fungi is presented along with information on toxins produced in foods and an extensive table and discussion of fungi most likely to cause food spoilage. An introductory mycology or plant pathology course would get great information from this chapter for a field trip to the grocery store to get material for a lab on the taxonomy of fungi that induce spoilage.

Mycotoxins are discussed in Chapter 5 and opens with a definition of a mycotoxin as a secondary metabolite, which, in small concentrations, can evoke an acute or chronic disease in vertebrates. There is a long list of mycotoxins produced by individual fungi and a subsection on mycotoxins considered important because of their elevated toxicity. In most cases, the effects of exposure is left out or only briefly mentioned, and the reader is referred to citations at the end of the chapter. There is an extensive reference list just on mycotoxins.

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MYCOLOGIST'S BOOKSHELF

Chapter 6 is a short but fascinating look into international aspects of mycotoxins and regulation of contaminated foodstuffs. It also contains information on the direct effects of some common mycotoxins on humans. Mycologists unfamiliar with this topic will be interested to learn about regulations in many countries that control specific mycotoxins, and also where regulations do not exist.

Spoilage fungi in industrial food processing is the topic of the seventh chapter. The reader is introduced to a lengthy discussion of ascospore resistance and activation and inactivation by heat. Information on airborne counts of different fungi in food processing areas is followed by a presentation on contamination control including basics such as the quality of material being processed, packaging materials, and various methodologies for escaping or lowering fungal contamination in processed foods. Contamination control is a subject worthy of several large tomes in itself.

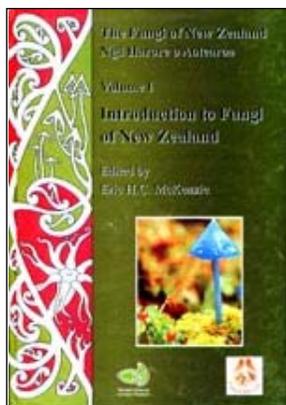
The final chapter focuses on food preservatives against fungi, bringing to the fore a brief but informative review of manufacturing practices, and the interrelationships between the American FDA, the European General Standard for Food Additives (GFS), GATT, the WTO and the Codex Alimentarius Commission. It presents a good discussion of the desired characteristics of preservatives followed by short descriptions of the more important preservatives in use today. A number of tables are included that delineate concentrations of several common preservatives effective against a range of different fungal species.

This book should be in the library of any mycologist who is an educator as well as those who work in the field of contamination. I heartily recommend it.

— **Steven E. Carpenter**
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Philomath, OR 97370

The Fungi of New Zealand . . . Volume 1

The Fungi of New Zealand Ngā Harore o Aotearoa. Volume 1. Introduction to Fungi of New Zealand. 2004. Eric H.C. McKenzie, ed. Fungal Diversity Press, Centre for Research in Fungal Diversity, The University of Hong Kong, Pokfulam Road, Hong Kong SAR, China. www.fungaldiversity.org/fdp/fdp.htm ISBN 962-86765-6-3, 498 pp. Price: \$80.00.



With this publication a new book series is heralded about the Fungi of New Zealand. Congratulations to the hard-working mycologists of New Zealand on collaborating to initiate such a worthy project in this era of interest in biological diversity. Your work will ensure that in New Zealand the fungi will not be ignored. At present, four of the volumes have already been published (see this issue of *Inoculum* for a review of volume 4 and Feb. 2005 for a review of volume 3).

This inaugural volume begins with a series of chapters that set the stage for future publications. Authored by ten mycologists the first chapter is an introduction that serves as a basic account of fungi with data on the species diversity in New Zealand compared with the rest of the world. Based on the current number of 7,400 species of fungi known in New Zealand, this is 34% of the estimated total of 22,000 species. The known genera of fungi in New Zealand include 25% of the genera known worldwide but only 9% of the species. Clearly many fungi in New Zealand have yet to be discov-

ered. This chapter includes a section on fungal conservation with a list of “nationally critical” species in New Zealand that include primarily mushrooms but some ascomycetes, polypores, and four species of rust fungi. Each major taxonomic group is described followed by sections on ecologically defined groups of fungi. In presenting a useful overview of the fungi this chapter alone contributes to the value of this volume.

The second chapter on the history of taxonomic mycology in New Zealand reviews the major collectors of fungi with an account of such fungi as *Auricularia cornea* “wood ear” that was the subject of commercial trade with China in the late 1800’s. The graphs of New Zealand specimens added to the New Zealand Fungal Herbarium (PDD) with the upward trajectory after about 1950 illustrate the increased mycological activity of the past half century. The chapter on Maori knowledge of fungi opens sadly with the statement that a majority of this knowledge has been lost. Nevertheless the chapter reviews ten fungi with their Maori names and uses. Most interesting to me was the use of *Cordyceps robertsii* or vegetable caterpillar as a source of ta-moko (tat-tooting) ink.

The next chapters are more conventional but very useful including: keys to genera of agarics, boletes, and related fungi; a checklist of agarics, boletes and related fungi from New Zealand both with numerous references; bibliography of New Zealand taxonomic mycology; and a checklist of New Zealand fungi including Protozoa, Chromista and lichens.

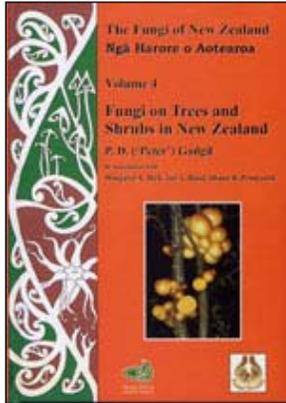
In summary, this is a terrific introduction to the fungi of New Zealand of use to mycologists everywhere.

— **Amy Y. Rossman**
Book Review Editor

MYCOLOGIST'S BOOKSHELF

The Fungi of New Zealand . . . Volume 4

The Fungi of New Zealand Ngā Harore o Aotearoa. Volume 4. Fungi on Trees and Shrubs in New Zealand. 2005. P.D. ("Peter") Gadgil. Fungal Diversity Press, Centre for Research in Fungal Diversity, The University of Hong Kong, Pokfulam Road, Hong Kong SAR, China. www.fungaldiversity.org/fdp/fdp.htm ISBN 962-86765-9-8, 437 pp. Price: \$80.00.



This book is fourth in the series on *The Fungi of New Zealand* covering those fungi that occur on shrubs and trees and written primarily by a forest pathologist. In this volume over 700 species of fungi are briefly described along with information on host, distribution in New Zealand, their significance as pathogens, and many references. Sixteen colored plates illustrate 90 of these species including many microfungi not often illustrated such as a number of leaf spots caused by species of *Pseudocercospora*. The range of fungi is broad including foliicolous fungi such as powdery mildews, rust fungi, leaf galls, and *Cyttaria gunnii* on stems of *Nothofagus menziesii* to mycorrhizal-forming mushrooms and hypogeous fungi such as *Amanita muscaria* and *Chamonixia pachydermis*. The information associated with each species varies considerably from minimal with only one reference to several pages of details especially for important forest pathogens such as *Dothistroma pini* with a section on the infection process, factors

governing infection, and chemical control.

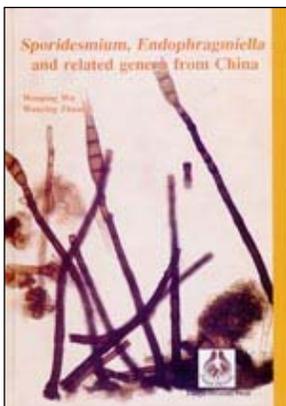
Given the breadth of the fungi included, the introduction is welcome with a review of the overall classification of fungi and life cycle diagrams for ascomycetes and basidiomycetes as well as the complex rust life cycle and a glossary. The body of the book is divided into sections based on the where the fungi occur, i.e. foliicolous fungi, caulicolous fungi, corticolous fungi, radicicolous fungi, xylophilous fungi and lignicolous fungi followed by sections on downy mildews, powdery mildews, rust and smut fungi, sooty moulds and similar fungi, mycorrhizal fungi, and foliicolous algae. Given the diversity of fungi included, this division seems practical. A surprising number of Chromista are included primarily as radicicolous fungi but with a few under foliicolous fungi. Although seven species of foliicolous algae are included, the book lacks any reference to lichens that grow intermixed with the algae and foliicolous free-living fungi mentioned. The references are plentiful. The book concludes with a synoptic host-fungus index that indicates the plant part affected, an index of common names of host plants, and an index to scientific accepted names and synonyms of fungi and algae.

The book is attractively adorned with a Maori rendering of *Aseroë rubra*, well-bound, and printed on high-quality paper. The colored plates are also of excellent quality. One could easily use this as an introductory text to forest pathology in New Zealand and serves as an important contribution to a synthesis of the knowledge of New Zealand fungi.

— Amy Y. Rossman
Book Review Editor

Sporidesmium, *Endophragmiella* and Related Genera from China

***Sporidesmium*, *Endophragmiella* and Related Genera from China.** 2005. Wenping Wu & Wenying Zhuang. Fungal Diversity Press, Centre for Research in Fungal Diversity, The University of Hong Kong, Pokfulam Road, Hong Kong SAR, China, www.fungaldiversity.org/fdp/fdp.htm, ISBN 962-86765-5, 168 pp. Price: \$60.00.



This book is one in the series issued as Fungal Diversity Research Series that emphasize microfungi in eastern Asia. Entire books dedicated to anamorphic fungi are rare and this one is truly unique in concentrating on the demati-

aceous hyphomycetes *Sporodesmium*, *Endophragmiella* and numerous related genera. All known from mainland China this book includes 143 species in 25 genera of which there is one new genus and 43 new species. Each species is thoroughly described and accompanied by line drawings of the conidiogenous cells and conidia as well as a synopsis of substrata, geographic distribution, and relevant literature. The introduction reviews the history of the group as a whole followed by a brief account of the morphological characteristics of these fungi and the few teleomorph connections all in the Sordariales. The book is divided into two main sections, one on *Sporidesmium*-related genera that comprises about 2/3 of the book and the other on *Endophragmiella*-related genera. A key to the 17 *Sporodesmium*-related genera from China is followed by a key to 36 species of *Sporidesmium*. Additional keys to species of each genus are scattered throughout the

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MYCOLOGIST'S BOOKSHELF

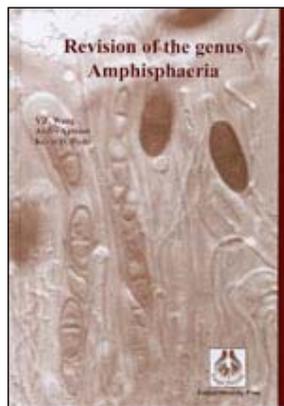
section. Most species included in this section have long, multiseptate conidia "that secede schizolytically from the conidiogenous cell at maturity" and thus the species appear to be quite distinctive. The smaller section on *Endophragmiella*-related genera includes species with conidia that "secede rhexolytically from the conidiogenous cells" some of which are appendaged or staurospores as well as narrow to broad, multiseptate conidia. Again there are keys to the eight genera known from China followed by a key to the 18

species of *Endophragmiella*. Each genus is described and discussed with an account of recent literature. The book concludes with an index to both accepted and synonymous fungal names. The paper is of high quality and the printing clear. This book appears to be a useful contribution not only mycologists in China but throughout the world who are interested in dematiaceous hyphomycetes.

— Amy Y. Rossman
Book Review Editor

Revision of the Genus *Amphisphaeria*

Revision of the Genus *Amphisphaeria*. 2004. Y. Z. Wang, André Aptroot, Kevin D. Hyde. Fungal Diversity Press, Centre for Research in Fungal Diversity, The University of Hong Kong, Pokfulam Road, Hong Kong SAR, China. www.fungaldiversity.org/fdp/fdp.htm, ISBN 962-86765-5, 168 pp. Price: \$60.00.



This book is a revision of the genus *Amphisphaeria* with 12 accepted species but much more. Following an introduction and history of the genus with a very brief methods section, a generic description and key to species are presented with a description and illustrations of each accepted species. These constitute less than one-quarter of the book. The rest of the book deals with the excluded taxa and their placement within five *Amphisphaeria*-like genera of the pyrenomycetes and "species excluded to other genera", which constitutes

more than half the book. Many described species of *Amphisphaeria* are determined to be loculoascomycetes and thus belong in such genera as *Didymosphaeria* and *Kirschsteiniotelia*. In fact, this book covers black, uniloculate ascomycetes immersed in wood having dark, two-celled ascospores that belong in a wide range of pyrenomycete and loculoascomycetes orders. In determining the accurate placement of species described as *Amphisphaeria*, where possible, new required combinations are established and synonyms are officially recognized. Most but not all species listed include a brief description. If no description is provided, whatever characteristics could be gleaned from the type specimen are presented in the remarks section. The book includes 92 black & white photographic plates each covering one species, thus serving as a good set of illustrations of black pyrenomycetes and loculoascomycetes. A synopsis of the ordinal and family placement of these similar-looking ascomycetes that are all over the taxonomic map would have been useful. Nevertheless, for anyone attempting to identify these difficult microfungi, this book is essential.

— Amy Y. Rossman
Book Review Editor

Recently Received Books

September-October 2005

- **Compendium of Bean Diseases, 2nd edition.** 2005. Howard F. Schwartz, James R. Steadman, Robert Hall, and Robert L. Forster. APS Press, 3340 Pilot Knob Road, St. Paul, MN 55121, aps@scisoc.org, ISBN 0-89054-327-5, 109 pp. Price: \$55.00. *Review needed.*
- **Fungi of the Antarctic: Evolution under Extreme Conditions.** 2005. G.S. de Hoog. Studies in Mycology 51: 1-79. Centraalbureau voor Schimmelcultures, P.O. Box 85167, Utrecht, The Netherlands. <http://www.cbs.knaw.nl/publications/simonline/index.htm>. *Review needed.*
- **The Fungi of New Zealand Ngā Harore o Aotearoa. Volume 4. Fungi on Trees and Shrubs in New Zealand.** 2005. P.D. ('Peter') Gadgil. Fungal Diversity Press, Centre for Research in Fungal Diversity, The University of Hong Kong, Pokfulam

Road, Hong Kong SAR, China. www.fungaldiversity.org/fdp/fdp.htm ISBN 962-86765-9-8, 437 pp. Price: \$80.00. *Reviewed in this issue.*

- **A Colour Atlas of Cucurbit Diseases. Observation, Identification and Control.** 1996. D. Blancard, H. Lecoq, and M. Pitrat. Originally published by Manson Publishing. Available from APS Press, 3340 Pilot Knob Road, St. Paul, MN 55121, aps@scisoc.org, ISBN 1-8774545-15-4. 304 p. Price: \$159.00. Hardcover. *Review in progress.*

Previously Listed Books

- **Antifungal Agents: Methods and Protocols. Methods in Molecular Medicine 118.** 2005. E.J. Ernst & P.D. Rogers. The Humana Press, 999 Riverview Drive, Suite 208, Totowa, New Jersey 07512, USA, email: humana@humanapr.com, ISBN 1-58829-277-0. 198 p. Price: \$99.50. *Reviewed in Sep-Oct 2005.*

- **Biodiversity of Fungi: Inventory and Monitoring Methods.** 2004. GS Mueller, GF Bills, & MS Foster (eds). Elsevier Academic Press, Burlington, MA, www.elsevier.com, ISBN 0-12-509551-1, 777 pp. Price: \$99.95. *Requested from publisher.*
- **CBS Centenary: 100 Years of Fungal Biodiversity and Ecology.** 2004. PC Crous, RA Samson, W Gams, RC Summerbell, T Boekhout, G. Sybren de Hoog, JA Stalpers (eds). Studies in Mycology 50(1&2): 1-580. Centraalbureau voor Schimmelcultures, Utrecht, The Netherlands, www.cbs.knaw.nl. Price: € 100.00. *Review in progress.*

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MYCOLOGIST'S BOOKSHELF

- **Common Mushrooms of the Talamanca Mountain, Costa Rica.** 2005. R.E. Halling & G.M. Mueller. *Memoirs of the New York Botanical Garden* 90: 1-195. The New York Botanical Garden, 200th St. & Kazimiroff Blvd., Bronx, New York 10458-5126 USA, <http://www.nybg.org/bcsi/spub>, ISBN 0-89327-460-7. Price: \$19.95. *Review needed.*
- **Cultivation and Diseases of Proteaceae: *Leucadendron*, *Leucospermum* and *Protea*.** 2004. PW Crous, S Denman, JE Taylor, L Swart, & ME Palm. Centraalbureau voor Schimmelcultures, Utrecht, The Netherlands, <http://www.cbs.knaw.nl/publications/index.htm> 227 pp. Price: € 60.00. *Review needed.*
- **Environmental Microbiology, A Laboratory Manual. Second Edition.** 2004. IL Pepper, CP Gerba. Elsevier Inc, Amsterdam, The Netherlands, <http://books.elsevier.com>, ISBN 0-12-550656-2, 232 pp. Price: \$39.95. *Reviewed in Mar-Apr 2005.*
- **Flora Agaricina Neerlandica. Volume 6.** 2005. M.E. Noordeloos, Th. W. Kuyper, & E.C. Vellinga. CRC Press, 6000 Broken Sound Parkway, NW, Suite 300, Boca Raton, FL 33487, USA, email: orders@crcpress.com. ISBN 9-0541-0496-1, 310 p. Price: \$59.95. *Requested from publisher.*
- **Fungal Biotechnology in Agricultural, Food and Environmental Applications.** 2004. DK Arora (ed). Marcel Dekker, Cimarron Road, P.O. Box 5005, Monticello, NY 12701-5185. www.dekker.com, 509 pp. Price: \$195.00. *Reviewed in Sep-Oct 2005.*
- **The Fungal Community: Its Organization and Role in the Ecosystem. Third Edition.** 2005. CRC Press, 6000 Broken Sound Parkway, NW, Suite 300, Boca Raton, FL 33487, USA, email: orders@crcpress.com. ISBN 0-8247-2355-4, c. 936 p. Price: \$139.95. *Requested from publisher.*
- **Fungal Disease Resistance in Plants: Biochemistry, Molecular Biology, and Genetic Engineering.** 2004. ZK Punja (ed). Food Products Press, New York, <http://www.HaworthPress.com/store/product.asp?sku=5093>, ISBN 1-56022-961-6, 266 pp. Price \$39.95 softbound, \$59.95 hardbound. *Review in progress.*
- **Fungi: Experimental Methods in Biology.** 2005. R. Maheshwari. CRC Press, 6000 Broken Sound Parkway, NW, Suite 300, Boca Raton, FL 33487, USA, email: orders@crcpress.com. ISBN 1-57444-468-9. ca. 350 p. Price: \$149.95. *Requested from publisher.*
- **Fungi of New Zealand. Nga Harore o Aotearoa. Vol. 1. Introduction to Fungi of New Zealand.** 2004. E.H.C. McKenzie (ed.). Fungal Diversity Press, Centre for Research in Fungal Diversity, The University of Hong Kong, Pokfulam Road, Hong Kong SAR, China. www.fungaldiversity.org/fdp/fdp.htm, ISBN 962-86765-5. 168 pp. Price: \$60.00. *Reviewed in this issue.*
- **Fungi of Northwestern China.** 2005. W.-Y. Zhuang (ed.). Mycotaxon, Ltd. ISBN 0-930845-14-5. Hardbound, 430 pp. Price: \$40.00 plus postage. Please order directly from Wen-Ying Zhuang, P.O. Box 2714, Beijing 100080, China, email: zhuang-wy@sun.im.ac.cn. *Reviewed in Sep-Oct 2005.*
- **Handbook of Industrial Mycology.** 2005. Z. An. CRC Press, 6000 Broken Sound Parkway, NW, Suite 300, Boca Raton, FL 33487, USA, email: orders@crcpress.com. ISBN 0-8247-5655-X, 784 p. Price: \$169.95. *Requested from publisher.*
- **Insect-Fungal Associations: Ecology and Evolution.** 2005. FE Vega, M Blackwell (eds). Oxford University, Oxford, United Kingdom, www.oup.com/us, ISBN 0-19-516652-3, 333 pp. Price: \$49.50 (hardbound). *Review in progress.*
- **Introduction of Biodeterioration, 2nd Edition.** 2004. D Allsopp, K Seal & C. Gaylarde. Cambridge University Press, New York, NY, <http://uk.cambridge.org/>, 237 pp. Price: \$75.00 hardback, \$34.99 paperback. *Review in progress.*
- **Introduction to Food and Airborne Fungi. Seventh Edition.** 2004. RA Samson, ES Hoekstra & JC Frisvad. Centraalbureau voor Schimmelcultures, Utrecht, The Netherlands, <http://www.cbs.knaw.nl/publications/index.htm>, 389 pp. Price: €50.00. *Reviewed in this issue.*
- **Isolation and Characterization of Melanized, Slow-growing Fungi from Semiarid Rock Surfaces of Central Spain and Mallorca.** 2004. C. Ruibal Villaseñor, Tesis Doctoral, Universidad Autonoma de Madrid, Facultad de Ciencias, Departamento de Biología Molecular. For further information, contact G. Bills, email: Gerald_Bills@Merck.com.
- **List of Plant Diseases in Korea, Fourth Edition.** 2004. W-D Cho, H-D Shin (editors-in-chief), The Korean Society of Plant Pathology, Seoul, Korea, email: s3213@korea.com, ISBN 89-88154-37-1, 779 pp. Price: unknown. Data available online at <<http://nt.ars-grin.gov/fungaldatabases/fungushost/fungushostframe.cfm>>.
- **Macrofungi of North Korea Collected in 1982-1986.** 2004. W. Wojewoda, Z. Heinrich, & H. Komorowska. Polish Bot. Stud. 18: 1-289. IB Publisher Polish Academy of Sciences. W. Szafer Institute of Botany, Lubica 46, PL-312-512, Kraków, Poland, email: ed-office@ib-pan.krakow.pl. Price: €50.00 plus postage. *Reviewed in Jul-Aug 2005.*
- **Mushrooms: Cultivation, Nutritional Value, Medicinal Effect, and Environmental Impact, second Edition.** 2004. S.-T. Chang & P.G. Miles. CRC Press, 6000 Broken Sound Parkway, NW, Suite 300, Boca Raton, FL 33487, USA, email: orders@crcpress.com. ISBN 0-8493-1043-1. 480 p. Price: \$159.95. *Requested from publisher.*
- ***Mycosphaerella* and its Anamorphs: 1. Names Published in *Cercospora* and *Pas-salora*.** 2003. PW Crous & U Braun. Centraalbureau voor Schimmelcultures, Utrecht, The Netherlands, www.cbs.knaw.nl/publications/index.htm, 571 pp. Price: €75.00. *Review needed.*
- ***Phoma* Identification Manual. Differentiation of Specific and Infra-specific Taxa in Culture.** 2004. GH Boerema, J de Gruyter, ME Noordeloos, MEC Hamers. CABI Publishing, Oxfordshire, United Kingdom, www.cabi-publishing.org, 448 pp. incl. one color plate. Price: \$140.00. *Reviewed in Sep-Oct 2005.*
- **Die Pilzflora des Ulmer Raumes.** (translated: The Fungus Flora of the Ulm area/Southern Germany). 2004. M Enderle. Süd-deutsche Verlagsgesellschaft Ulm, Germany, www.suedvg.de, 521 pp incl. numerous color illustrations. Price: €24.50. *Review in progress.*
- ***Penicillium* subgenus *Penicillium*: new taxonomic schemes, mycotoxins, and other extrolites.** 2004. RA Samson & JC Frisvad. *Studies in Mycology* 49: 1-257. Centraalbureau voor Schimmelcultures, Utrecht, The Netherlands, <http://www.cbs.knaw.nl/publications/index.htm>, 257 pp. Price: €50.00. *Reviewed Mar-Apr 2005.*
- **A Preliminary Monograph of *Lentinellus* (Russulales).** 2004. RH Petersen & KW Hughes. *Bibliotheca Mycologica* 198: 1-268. <http://www.schweizerbart.de/pubs/series/bibliotheca-mycologica-59.html>. Price: €80.00. *Review needed.*
- **Revision of the Genus *Amphisphaeria*.** 2004. YZ Wang, A Aptroot, KD Hyde. Fungal Diversity Press, Centre for Research in Fungal Diversity, The University of Hong Kong, China, www.hku.hk/ecology/mycology/FDP.html, ISBN 962-86765-5, 168 pp. Price: \$60.00. *Reviewed in this issue.*
- **Röhrlinge und Blätterpilze in Europa.** 2005. E. Horak. Elsevier GmbH, Spectrum Akademischer Verlag, Verlagsbereich Biologie, Chemie und Geowissenschaften, Dr. Ulrich G. Moltmann, Slevogtstr. 3-5, 69126 Heidelberg, Germany, email: info@s-f-g.com. Price: €40.00 plus postage. *Review in progress*
- ***Sporidesmium*, *Endophragmiella* and related genera from China.** 2005. W Wu & W Zhuang. Fungal Diversity Press, Centre for Research in Fungal Diversity, The University of Hong Kong, China, www.hku.hk/ecology/mycology/FDP.html, ISBN 962-86765-5, 168 pp. Price: \$60.00. *Reviewed in this issue.*

MYCOLOGICAL CLASSIFIEDS

Mycology Assistant Professorship at Clemson

The Department of Entomology, Soils, and Plant Sciences at Clemson University is seeking a motivated and creative individual to fill a 75% research/25% teaching, 9-month, tenure-track position at the Assistant Professor level. The successful candidate must be broadly-trained in the field of mycology—particularly in the area of taxonomy and systematics, including both traditional morphological as well as state-of-the-art molecular approaches. He or she will be expected to develop an innovative, extramurally-funded research program on economically important plant pathogenic fungi. Teaching duties will include responsibility for an undergraduate course in Introductory Mycology, a graduate course in Plant Pathogenic Fungi, and one additional undergraduate or graduate course based on the needs of the department and the interests of the successful candidate. Active participation in graduate education is expected and essential. The person hired will be encouraged to collaborate with the faculty in this and other departments on projects and issues pertaining to mycology. The mild climate and diverse geography (e.g., mountains, piedmont, and coast) of South Carolina make it an excellent place to study fungi.

Qualifications: Ph.D. in Mycology, Plant Pathology,

Botany, Biology, or related discipline; extensive research experience with fungi is essential. Postdoctoral experience is desirable. Excellent verbal and written communications skills are essential.

Application Procedure: Interested applicants should submit a detailed curriculum vitae (including a complete list of publications, presentations, and grant awards), statement of research and teaching interests and career goals, reprints of refereed publications, and copies of undergraduate and graduate transcripts. Applicants also should request that letters of reference be submitted independently by three individuals. To ensure adequate consideration, a complete application package must be received by **01 February 2006**; however, this position will remain open until a suitable candidate has been selected. Please submit all application materials to: Mycology Search Committee, Department of Entomology, Soils, and Plant Sciences, 120 Long Hall, Clemson University, Clemson, SC 29634-0315. Contact Dr. Steven N. Jeffers (864-656-7157; sjffrs@clemson.edu) with questions or comments.

Clemson University does not discriminate against any person or group on the basis of age, color, disability, gender, national origin, race, religion, sexual orientation, or veteran's status.

Saprolegniaceae Monograph Available On-Line

T.W. Johnson, Jr., R.L. Seymour and D.E. Padgett wish to announce that their monograph entitled *Biology and Systematics of the Saprolegniaceae* (an electronic publication available on-line at dl.uncw.edu/digilib/biology/fungi/taxonomy%20and%20systematics/padgett%20book/) has been updated to include a bibliography of all papers published in English on the group between

1985 and 2004 (about 560 citations). Bibliographic citations are listed under subject headings that best reflect contents of included papers. To facilitate greater accessibility of included contents hyperlinks have been created from the table of contents.

—David Padgett
padgett@uncw.edu

Center for Forest Mycology Research Culture Collection

The Reference Culture Collection at the Center for Forest Mycology Research (CFMR) at the Forest Products Laboratory in Madison, WI is one of the largest assemblages of wood decay fungi in the world. It contains approximately 12,000 isolates representing about 1,500 species. Approximately 3,500 cultures are haploid isolates. Many of the cultures also have dried fruiting bodies associated with them that are stored in the CFMR Herbarium. The cultures are stored in liquid nitrogen and also maintained at 4 C in sterile distilled water. The electronic database containing culture collection information can now be searched on the Internet at "www.fpl.fs.fed.us/rwu4501/index.html." The database can be searched by the genus and/or species name of the fungus or host, by location or by isolate number. Small numbers of cultures are given to researchers at no charge as a professional service.

Industrial users are encouraged to purchase equivalent cultures through commercial culture collections, although collection agreements can be made with industrial partners interested in obtaining large numbers of cultures. In order to obtain cultures or to inquire about dried herbarium specimens, please contact Jessie Micales Glaeser, Project Leader at 608-231-9215 or jmicales@fs.fed.us.

Message from MSA's Business Office

The 2006 membership renewal campaign is currently under way. Please visit MSA's web site at www.msa-fungi.org and click on membership renewal. If you have forgotten your user name and password, please contact Kay Rose (krose@allenpress.com) for assistance.

MYCOLOGICAL CLASSIFIEDS

Agri-Food Canada Postdoctoral Fellowships

The Mycology group at the Agriculture & Agri-Food Canada, Ottawa, Ontario has openings for five post-doctoral scientists for periods of 2.5-3 years. The positions are open to candidates who have completed their PhD within the last five years, and are open to Canadian and non-Canadian citizens. The positions are as follows: (1) Molecular diagnostics of Rusts and Smuts (supervisor: Dr. S. Hambleton, hambletons@agr.gc.ca); (2) Molecular diagnostics of *Phytophthora* and other zoosporic plant pathogens (supervisor: André Lévesque, levesqueca@agr.gc.ca); (3) Molecular diagnostics of *Fusarium* and some other plant pathogens (supervisor: Keith Seifert, seifertk@agr.gc.ca); and (4) Molecular diagnostics of quarantine significant *Colletotrichum* species on legumes (supervisor: John Bissett, bissettj@agr.gc.ca).

These four positions involve the development of species, and in some cases infraspecies, molecular diagnostics. The scientists involved will develop a collection of cultures and specimens, create a multi-gene sequence database, and then select and test oligonucleotide markers for use in either DNA array hybridization or Real Time PCR assays. Positions will be supported by the Canadian Collection of Fungal Cultures, The Canadian National Mycological Herbarium, and a core lab handling bioinformatics and sequencing.

A fifth (5) position is for Barcoding and DNA arrays of plant associated fungi. (supervisors: André Lévesque and Keith Seifert). This scientist will be involved in the Canadian Barcode of Life Network, and be responsible for generating DNA sequence data for a range of fungi associated with a selection of agricultural and forest plants. The scientist will then develop and validate an array based on clade- and species- specific oligonucleotides for use in field experiments.

Applicants for positions 1-4 should start by January 2006. The timing for position 5 will be announced shortly. Please send your CV's to André Lévesque (levesqueca@agr.gc.ca) with the **exact** subject line "Post-doc in Mycology".

Please indicate what position is of special interest to you. However, all applicants will be considered for all positions. All successful applicants will be hired through and will need to register with the program "Visiting Fellowships in Canadian Government Laboratories" administered by the Natural Sciences and Engineering Research Council of Canada (NSERC). See www.nserc.gc.ca/sf_e.asp?nav=sfnv&lbi=3d

The salary is CDN \$42,760 for 2005, and the deadline to receive applications is 30 Sept. 2005. Please visit our website at: res2.agr.ca/ecorc/section4/index_e.htm.

NSF Postdoctoral and Graduate Research Positions

One Postdoctoral Associate position is currently available as part of a newly-funded NSF PEET (Partnerships for Enhancing Expertise in Taxonomy) Award to investigate the systematics and phylogeny of Laboulbeniales. These unusual arthropod-associated fungi have attracted the attention of few mycologists and remain the source of many mysteries. This project will combine both molecular and morphological approaches in a revision of the 43 included genera. A PhD in Mycology or related discipline is required, along with demonstrable skills in molecular techniques and fungal systematics. A record of publication is also desirable and familiarity with databases and web page design also a plus. The project will involve both local (USA) and overseas collecting expeditions (Costa Rica, Ecuador, Jamaica) and will formally begin in January 2006. It is expected that the successful applicant will play a leadership role in the project. Applicants should send a copy of their CV and a letter describing their research experiences and interests to Dr. Alex Weir either by e-mail (aweir@syr.edu) or by hard copy to the address below. For optimal consideration applications should be sent prior to October 28th 2005.

Two Research Assistantships are currently available for MS/PhD students interested in studying the systematics of Laboulbeniales as part of an NSF-funded PEET (Partnerships for Enhancing Expertise in Taxonomy) Award. Student research

projects will focus on the phylogeny and systematics of members of the sub-tribe Stigmatomycetinae, associated with a range of insect hosts. In addition to field training involving both local (USA) and international (Costa Rica, Ecuador, Jamaica) travel, students will 1) undertake traditional collections based approaches using both light (mainly DIC), and scanning electron microscopy, and 2) learn and apply molecular techniques and methods of phylogenetic analyses.

In addition to the dissertation project each student will also participate in a broader training program in systematic biology. Experience in mycology/entomology, molecular systematics and webpage management is deemed advantageous. Applicants should send a copy of their CV and a letter describing their research experiences and interests to Dr. Alex Weir either by e-mail (aweir@syr.edu) or by hard copy to the address below. The project will formally begin in January 2006 but for optimal consideration applications should be sent prior to October 28th 2005.

The Research Foundation of the State University of New York is an Equal Opportunity/Affirmative Action employer. All qualified applicants will receive consideration for employment without regard to their race, color, religion, national origin, age, disability, veteran status, marital status, sexual orientation, or sex, except where sex is a bona fide occupational qualification.

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microbe@pioneer.net or voice mail at 541.929.5984. Surface mail send to Abbey Lane Laboratory, LLC, PO Box 1665, Philomath, OR 97370 USA. For more information see www.pioneer.net/~microbe/abbeylab.html

MYCOLOGY ON-LINE

Below is an alphabetical list of websites featured in *Inoculum* during the past 12 months. Those wishing to add sites to this directory or to edit addresses should email <rbaird@plantpath.msstate.edu>. **Unless otherwise notified**, listings will be automatically deleted after one year (at the editors discretion). * = New or Updated info (most recent *Inoculum* Volume-Number citation)

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

Asociacion Latinoamericana de Micologia (51-5)
www.alm.org.br

Australasian Mycological Society Website
for Introductory Fungal Biology (53-4)
bugs.bio.usyd.edu.au/mycology/default.htm

Authors of Fungal Names (54-2)
www.indexfungorum.org/AuthorsOfFungalNames.htm

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

Bibliography of Systematic Mycology (51-6)
194.131.255.3/cabipages/BSM/bsm.htm

British Mycological Society (54-1)
britmycolsoc.org.uk

Cordyceps Website
www.mushtech.org

Corticoid Nomenclatural Database (56-2)
phyloinformatics.org

Coverage in Ukraine of Higher Fungal Ranks (56-2)
www.cybertruffle.org.uk/lists/index.htm

Cybertruffle's Fungal Valhalla (56-2)
www.cybertruffle.org.uk/valhalla/index.htm

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

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

Distribution Maps of Georgian Fungi (56-2)
www.cybertruffle.org.uk/gruzmaps/index.htm

Distribution Maps of Ukrainian Fungi (56-2)
www.cybertruffle.org.uk/ukramaps/index.htm

Electronic Library for Mycology (56-2)
www.cybertruffle.org.uk/cyberliber/index.htm

European Powdery mildews (52-2)
nt.ars-grin.gov

Fun Facts About Fungi (55-1)
www.herbarium.usu.edu/fungi/funfacts/factindx.htm

Funga Veracruzana (53-6)
www.uv.mx/institutos/forest/hongos/fungavera/index.html

Hadrianus Junius Stinkhorns (52-2)
www.collectivesource.com/hadrianus

IMC7 (51-3)
lsb380.plbio.lsu.edu/ima/index.htm

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

ING (Index Nominum Genericorum) Database (52-5)
rathbun.si.edu/botany/ing/ingForm.cfm

Interactive Catalogue of Australian Fungi (52-1)
www.rbgmelb.org.au/fungi/

Interactive Key, Descriptions & Illustrations
for *Hypomyces* (52-6)
nt.ars-grin.gov/taxadescriptions/hypomyces/

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

Mycologia On-Line (53-3, page 18)
www.mycologia.org

Mycological Progress (52-3)
www.mycological-progress.com

The Myconet Classification of the Ascomycota
www.umu.se/myconet/Myconet.html

Mycosearch web directory/search engine (51-5)
www.mycosearch.com

Mushroom World [new Korean/English site in 2001] (51-6)
www.mushworld.com

NAMA Poison Case Registry (51-4)
www.sph.umich.edu/~kwcee/mpcr

Pathogenic Fungi From South Africa (52-4, page 29)
nt.ars-grin.gov/fungalDATABASES/southafrica
or www.saspp.co.za/

Plant-associated Fungi of Brazil (54-2)
nt.ars-grin.gov
(Select Search Fungal Databases, option 3, Host-Fungus Distributions)

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

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

Searchable database of culture collection
of wood decay fungi (56-6, page 22)
www.fpl.fs.fed.us/rwu4501/index.html

Species of Glomeromycota Website (55-3)
www.amf-phylogeny.com

Systematics of the Saprolegniaceae (53-4)
www.ilumina-dlib.org

Tripartite Similarity Calculator (55-1)
www.amanitabear.com/similarity

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

CALENDAR OF EVENTS

Event dates and descriptions (**bold**) precede event locations (*italic*), contacts (plain font), and Email/Websites (**bold**, no brackets). Those wishing to list upcoming mycological courses, workshops, conventions, symposia, and forays in the Calendar should submit material formatted as shown below and include complete postal/electronic addresses.

2006 (August 21-26)

8th International Mycological Congress

Cairns, Australia

Wieland Meyer, Chair

Ceri Pearce, Vice-Chair

www.sapmea.asn.au/imc8

2006 (July 29 - August 2)

MSA/CPS/APS Meeting

Québec City, Québec, Canada

Centre des Congrès de Québec

NOTE TO MEMBERS: If you have events to announce, please notify the *Inoculum* editor so they can be listed in the *Calendar of Events*.

Change of Address

Send all corrections of directory information, including email addresses, directly to Allen Press

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Lawrence, KS 66044-8897

Vox (800) 627-0629 (US and Canada)
or (785) 843-1221
Fax (785) 843-1274
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or FAX to (785) 843-1274, Attn: Processing Department

*If this membership is given after June 1, please add \$10 to cover postage for past issues.

inoculum

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