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Important Dates

April 23, 1998 — Deadline for next *Inoculum*
MSA 1998 Annual Meeting
May 15 — Registration Due
June 11-16 — Puerto Rico

MSA Homepage:

http://www.erin.utoronto.ca/~w3msa/

About This Issue

Those who did not receive their January/February [Volume 49(1)] *Mycologia* and *Inoculum* until March will be comforted to know that a necessary software conversion designed to expedite future renewals interfered with timely delivery of our publications to ~200 MSA members. Allen Press, which sincerely apologizes for the delay, has reimbursed the Society for any extra expense.

This year Faye Murrin has collated abstracts for both the Mycological Society of America (pages 5-56) and the American Bryological and Lichenological Society (pages 56-64) for the Joint MSA/ABLS Annual Meeting to be held Puerto Rico in June. Don't forget to bring your copy of *Inoculum* with you as you prepare for the trip to San Juan!

-- Lorelei Norvell

APHIS and APS Initiate Prevalent Fungi List

by Karel Jacobs, *The Morton Arboretum*
& Frank Dugan, *American Type Culture Collection*

The U.S.D.A. Animal and Plant Health Inspection Service (APHIS) and the Mycology Committee of the American Phytopathological Society (APS) have embarked on a collaboration with state regulatory officials to compile a list of widely prevalent plant pathogenic fungi. The list is intended to help expedite the permit process for transport of prevalent fungi between states. An APS Fungi List Working Group has been formed to implement the project. The Prevalent Fungi List, analogous to the State Virus List currently maintained by APHIS (http://www.aphis.usda.gov/ ppq/virus/index.html), will be compiled on a state by state basis. All participation by states is voluntary. For each participating state, the list will encompass the plant pathogenic fungi that regulatory officials have agreed to designate as widely prevalent for their state. Fungi on the list would still require a PPQ 526 permit, but the permitting process will be considerably expedited.

The process of forming the list has started with the selection of the most common plant pathogenic fungi in the United States, as determined from Farr et al. (1989). This initial country-wide list of approximately 240 plant pathogenic species will be used to generate lists specific to each state. Regulatory officials for a given state will be asked to approve or disapprove entries or add species to the list, thereby controlling the content of the list for their state. The list is to be updated annually.

Several individuals have been involved with setting up the Prevalent Fungi List. APHIS initiated and is funding the project. Karel Jacobs of the Morton Arboretum (immediate past chair, APS Mycology Committee) and Frank Dugan (American Type Culture Collection) are providing administrative support for the project with the assistance of regional supervisors who will serve as liaisons for states in their region. Regional supervisors include Dave Appel (TX, AZ, NM), Lori Carris

CARVAJAL-ZAMORA, JUAN R.[1], and *NIEVES-RIVERA, ANGEL M.[2], [1]Department of Biology, Inter American University, Fajardo PR 00738 USA; [2]Department of Marine Sciences, University of Puerto Rico, Mayaguéz PR 00681 USA. Preliminary checklist of cave mycobiota of Puerto Rico with special reference to bat-guano enriched soil hyphomycetes.

One hundred and twenty-five bat-guano enriched soil samples from twenty five caves of the northern and southwestern limestone karst zones of Puerto Rico (including Mona Island) were collected and screened for the presence of soil hyphomycetes. A partial checklist of the previously known mycobiota from literature, isolated or collected from the caves is provided. Forty eight records for cave mycobiota of Puerto Rico are reported: *Alternaria* sp., *Aspergillus* cf. *candidus*, *A. flavus*, *A. fumigatus*, *A. japonicus*, *A. nidulans*, *A niger*, *A. parasitucus*, *A. vesicolor*, *Bipolaris* sp., *Botrytis* sp., *Chaetomium* cf. *globosum*, *Cladosporium cladosporoides*, *C. herbarum*, *C. oxysporum*, *Curvularia lunata*, *Dreschlera* sp., *Fusarium* sp., *Geothricum candidum*, *Gilmaniella* sp., *Giocladium* cf. *roseum*, *Hirssutella* sp., *Humicola* cf. *grisea*, *Isaria* sp., *Paecilomyces* sp., *Penicillium* cf. *crysogenum*, *P.* lilacinum, P. roqueforyi, P. variable, Pestalotia sp., Phoma sp., *Sepedonium* sp., *Trichoderma koeningii*, *T. viridae*, Mycelia sterilia; *Cunninghamella* sp., *Mucor* sp., *Neurospora crassa*, *Rhizopus nigricans*, *R. oryzae*; *Cordyceps* sp., *Phylacia* aff. *Bomba*, *Xylaria polymorpha*, *Xylaria* sp.; *Auricularia auricularia*, *Coprinus* sp., and *Lepiota* sp.

* CASTILLO, GABRIEL and DEMOULIN, VINCENT, Institut de Botanique (B22), Université de Liège, B-4000 Liège, Belgium, Correlation between the in vitro growth response to temperature and the habitat of some lignicolous fungi from a Papua New Guinea coastal forest.

In the framework of a study of the ecology of wood-inhabiting fungi from a tropical coastal forest of Papua New Guinea, we have established the effect of temperature on growth in culture of several lignicolous fungi. The results show a good correlation between the behaviour in culture and the characteristics of the habitat. This is specially striking if one considers the species with the narrowest and broadest ecological amplitude. On the one hand a group of species (*Auricularia cf. mesenterica* (DICKS. : FR.) PERS., *Hexagonia tenuis* (HOOK.)FR., *Microporus affinis* (BLUME & NEES : FR.) KUNTZE and *Microporus xanthopus* (FR.) KUNTZE) is restricted to dense vegetation cover and thus grows in an environment buffered against the temperature variations. This group presents in culture a narrow spectrum with a well marked growth optimum at 30° C which is the average local temperature. The other group of species (*Flavodon flavus* (KLOTZSCH) RYV., *Lentinus squarrosulus* MONT., *Pycnoporus sanguineus* (L. : FR.) MURR. and *Trametes scabrosa* (PERS.) G.CUNN.) presents a very large ecological amplitude. Those species are encountered under dense vegetation as well as in open habitats and are thus exposed to large temperature variations. This group presents a growth optimum over a wide range of temperatures.

*CASTLEBURY, LISA A. Systematic Botany and Mycology Laboratory, USDA ARS, Beltsville, MD 20705 USA, Morphological comparisons within the *Tilletia (Neovossia) barclayana* complex.

Tilletia barclayana (Bref.) Sacc. & Syd. is a complex of several taxa, including *T. horrida* Tak. Recent studies suggest that *T. horrida*, the rice kernel smut pathogen, is not a member of this complex. In order to determine if teliospores of *T. horrida* can be morphologically distinguished from the other taxa, teliospores from type specimens of taxa in this complex were examined with scanning electron and light microscopy. All members of the complex produce brown, globose to subglobose teliospores with exospores of pointed to truncate curved spines, a gelatinous sheath, and occasionally a short apiculus. Exospore ornamentation of *T. ajrekari* and *T. horrida* is coarser and more widely spaced when compared with that of other taxa in this complex. *Tilletia horrida* teliospores range from 21.9–41.4 µm in diam. (mean=29.0 µm). Teliospores of *T. ajrekari* range from 15.9–25.4 µm (mean=20.1 µm). Teliospores of *T. barclayana* and *T. pennisetina* range from 20.0–28.5 µm and 23.6–33.4 µm (mean=24.2 and 28.7 µm), respectively. Teliospores of *T. pulcherrima* and *T. pulcherrima* var. *brachiariae* range from 21.1–29.5 µm and 19.7–25.8 µm (mean=25.1 and 22.5 µm), respectively. While morphological characters among these taxa intergrade, *T. ajrekari* and *T. horrida* can be distinguished from the other taxa in this complex. The issue of generic placement of these fungi also is discussed.

CAVENDER, NICOLE D and *CAVENDER, JAMES C., Department of Horticulture and Crop Science, Ohio State University, Columbus OH 43210 USA and Department of Environmental and Plant Biology, Ohio University, Athens OH 45701, Dictyostelid Cellular Slime Molds of St. John, V.I.

This research project was designed to study the diversity of cellular slime molds of St. John, V.I., an island of 31 sq. km., 65% of which is vegetationally intact as Virgin Islands National Park. Our interest is in determining what effects area and insular environment have on csm diversity by comparing our data with known csm diversities on Puerto Rico and at Tikal, Guatemala. Soils were collected during August (hot/moist) and December (warm/moist) and processed for csm at Ohio University using a soil dilution-bacterial enrichment technique. In addition to species presence, density and frequency of occurrence were also determined. A total of 1796 isolations, representing 16 species were made from 20 sites in five habitats: moist and thorn forest, agave-cactus and coastal scrub, and white mangrove. Moist forest and agave-cactus scrub had the greatest species richness (11) although densities were greater in moist forest. The number of csm species on St. John is about ½ that of Tikal but only somewhat less than Puerto Rico given data presently available.