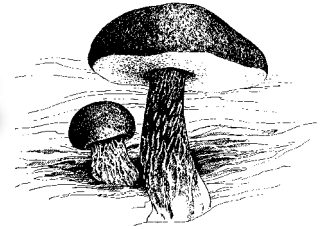

Mycena News



The Mycological Society of San Francisco November 2010, vol. 61:08

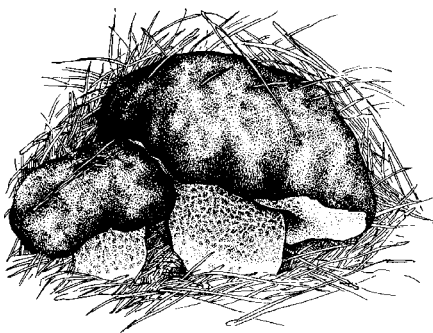
November 16th MSSF
Meeting Speaker



Dimitar Bojantchev

*The Making of an Informed
Collector: It's Fun, and
Science Needs it Too!*

Amateur mycologists and informed collectors have had a profound impact on mycology through the years and their role will likely grow in the future. They are particularly important in aiding and in some cases conducting scientific research in relatively new mycological grounds like California and North American where still a great portion of the macromycetes are poorly studied. Most people are naturally curious. Sometimes it doesn't take much to unleash that curiosity by empowering people to collect with open eyes towards the unexplored diversity around them.



MycoDigest: What's all the stink about?

Jennifer Kerekes

Stinkhorn fungi are known for their foul-smelling odors and remarkable morphologies. Taxonomically, the stinkhorns are currently placed in the gomphoid-phalloid clade in the new subclass Phallomycetidae (Hosaka et al, 2006), along with earthstars, cannonball fungi, coral fungi, club fungi, tooth fungi, false truffles and even some gilled fungi and resupinate fungi. This gomphoid-phalloid clade is both morphologically and ecologically diverse. Prior to the recent reclassification, two families of stinkhorns were recognized, the Phallaceae family, consisting of those with unbranched stems and including species of *Phallus*, *Mutinus* and *Dictyophora*, and the Clathraceae family, consisting of those with branched stems and latticed structures, such as *Clathrus*, *Lysurus*, *Colus* and *Laterna*.

However, in Hosaka et al., it appears that both families, Phallaceae and Clathraceae, hold up, except that *Lysurus* is in the family Lysuraceae. These three families and three other families, make up the order Phallales.

Stinkhorn fungi are most notable for their repugnant odors. This odor, which has been characterized as "obnoxious," "cadaverous," "putrid" and like "rotting carrion," helps attract flies and other insects and thus aids the fungus in spore dispersal.



A *Clathrus chrysomycelinus* stinkhorn collected in Panama.

Photo by Jennifer Kerekes.

The insects consume the fungal spores and the gleba, and the spores then germinate once they have passed through the digestive system of the insects. A chemical analysis performed on the gelatinous layer of *Clathrus* eggs revealed it to be rich in potassium, calcium, manganese and iron (Stijve, 1997). It appears that some stinkhorns concentrate manganese and have much higher concentrations of manganese and iron than other fungi. The author suggests that manganese plays a role in the enzymatic breakdown of the gleba and notes a release of carbon dioxide with the formation of the carrion-like odor. The increase in calcium appears to play a role in stabilizing the gelatinous layer that protects the fruiting body during the growth of the egg.

Sapromyophily – the attraction of flies through mimicry of their food and brood sites (Johnson and Jurgens, 2010) - also occurs, and perhaps is most well known, in angiosperms and certain mosses. *Amorphophallus*, *Rafflesia* and *Stapelia* are well known carrion flowers that attract flies and other insects to aid in pollen dispersal. A recent study by Marino, Raguso and Goffinet in 2009 reported that sapromyophily occurs in some species of mosses in the family Splachnaceae. Flies are attracted to the odors produced by the moss sporophyte and aid in spore dispersal.

Continued on page 5

PRESIDENT'S POST

MSSSF had a great October including our second culinary group gathering and the arrival of the rains in the bay area. Members travelling to the north and east reported excellent finds including boletes, chanterelles, and matsutake. Stay tuned to our mailing list to keep current on those and other updates as the season progresses.

At the general meeting in October members were again wowed by the hospitality committee's great snacks, including tempura-fried oyster mushrooms with saffron aioli before we learned about Lichens in a presentation by Derek Woods of British Columbia. Several members of the Lichen Society joined us that night for the special topic and a lively round of Q&A followed the presentation.

By the time of the last meeting, a number of our forays for the season had been confirmed. Presently there are three in November in addition to camp, several in early December to collect for the fair, two after the fair and one in January with more being as we move in to the new year.

Some of these look very interesting, see the calendar at

http://mms.mssf.org/members/calendar2.php?org_id=MSF&curMonth=11&curYear=2010 for details and to sign up.

As you know, Mendocino camp is nearly upon us. If you are attending we look forward to seeing you on November the 12th. Registration opens at 3 pm and will be staffed most of the evening. Please remember to bring a water bottle, we won't be using the disposable ones this year. MSSSF will offer logo stainless steel water bottles for sale at camp in case you forget yours or just want an official MSSSF one.

Following on the heels of Mendocino will be the Fungus Fair at the Lawrence Hall of science on December 4th and 5th. We are currently registering much-needed volunteers for the Fair. You can register from the Web site (link from the event on the calendar) or by emailing Stephanie, our volunteer coordinator for the fair at fungusfair@bytewright.com. If you would like to put up posters in your area please contact us to get posters. I'd appreciate at least a little help from every member hanging up a poster, putting the event on a community bulletin board, or talking it up online via blogs or mailing lists.

In closing, here's wishing you all a great time at Mendocino camp and a happy Thanksgiving with some nice edibles along side your turkey or tofurkey. If I don't see you in Mendocino I'll look forward to seeing you at our next general meeting on November 16th.

Thanks as always for your ongoing support.

-Lou president@mssf.org

CULINARY CORNER

The MSSSF Culinary Group has started the new mushrooming season with two great nights of good cheer and conviviality. Our annual potluck featured a long, long, table laden with unique and greatly appreciated offerings, most with some type of mushroom included. Our October dinner's volunteer cooks brought us an unusual array of appetizers, beer, a southwest style salad (thanks, Sandy Waks), New Mexico style pulled pork with bolete sauce (thanks, George Collier), a squash casserole flavored with candy caps (thanks, Carol Hellums), fragrant jasmine rice (thanks, David Eichorn), ice cream with dulce de leche sauce (thanks, George Willis) and, of course, good coffee, thanks to Remo Arancio. November's Culinary Group dinner will be French inspired with Cassoulet the main course.

Mushrooming has "kept on giving" as my friend, Irma, describes it. Beloved culinary mushrooms have shown up for longer periods of time and in more places than I can remember. Now, with a bit of rain, the "normal" season will soon be underway with many kinds of fall culinary fungi out there in the woods.

One of our favorites, the chanterelle, has been getting a lot of attention on the mushroom online forums lately. From a culinary standpoint, the posts about blanching chanterelles are particularly interesting. From the SOMA yahoo groups site Connie Green* writes "A dear friend sent me a post from a wine blog about a chanterelle cooking method. The writer had been taught in a French school to blanch the chanterelles in boiling water before sauteing. The instruction was to blanch the whole chanterelles in rapidly boiling water for 20 seconds, remove, drain, pat with a towel, slice if needed, and then proceed to saute them until caramelized. The result are chanterelles that have actually shed much of their excess moisture during the blanching process. The post-blanching chanterelles saute nicely without bleeding liquid into the saute pan."

Tom Cruckshank from SOMA followed up with his experiment "I took a serving of OR (Oregon) chanties this morning and stripped them as I usually would. I plopped them into boiling water for about 30 seconds. Then I sauteed them in garlic olive oil. I added a dash of sherry and s & p while sauteing. Observations: The volume of mushrooms appeared to be substantially reduced after the blanching. However, they did not much further reduce when sauteing. No or little off-watering observed. Chanties browned and finished cooking a little quickly IMO. They browned nicely. The appeared to be a little more toothsome; a little chewier than the longer, off-watering cooking method...I will say the finished product was excellent...I would use more water next time as the boiling stopped with the amount I used when the mushrooms were added; they were just starting to reboil at the 30 seconds where I removed them. Will definitely do again in future. My opinion is that the blanched, drained and patted dry chanterelles would freeze nicely just like that and could then be used in numerous ways when thawed; this is my next experiment".

*Connie Green, an MSSSF member, has recently written and had published a book with Sarah Scott, *The Wild Table; Seasonal Foraged Food and Recipes*. It's bound to be a great addition to your culinary library. Connie is a renowned and well respected forager and purveyor of wild foods.

Here's a recipe using chanterelles. David Campbell made this treat for our MSSSF summer picnic. The recipe is from Ian Duncan or Corvallis, Ore.

Mushroom Mousse

1 cup chanterelles, chopped

1 small onion, chopped

saute in 3 T. butter/olive oil until soft

Add 1 cup cream, cook until slightly thickened and whirl in a blender

Add 2 eggs and 2 yolks and 1 t. salt

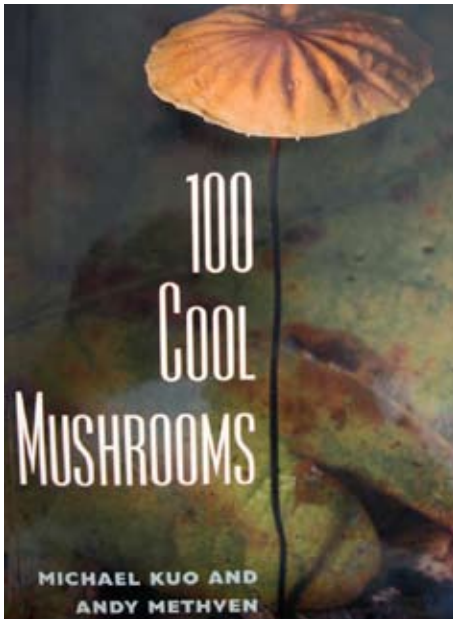
Whirl again, pour into butter coated ramekins and bake at 350°F in a hot bath for approximately 40 minutes.

Done when a knife comes out clean.

Happy Foraging ~Pat

What's Bookin'?

100 Cool Mushrooms by Micheal Kuo



All mushrooms are cool, but the ones discussed in *100 Cool Mushrooms* are especially cool. Authors Michael Kuo and Andy Methven cover a broad spectrum of notable North American mushrooms: from common fungi that are widely distributed and frequently found, to rare mushrooms that are not found in field guides; from the beautiful to the ugly (and even disgusting). Each mushroom in the book is described and shown, including its ecology and physical features.

Dr. Michael Kuo, the principal developer of MushroomExpert.Com, is an English teacher in Illinois and an amateur mycologist. He is also the author of *Morels* and *100 Edible Mushrooms*.

Dr. Andrew Methven is Professor of Mycology and chair of the Biology Department at Eastern Illinois University.

100 Cool Mushrooms (First Edition) ISBN 978-0-472-03417-8
Michael Kuo & Andy Methven 2010, The University of Michigan Press, Ann Arbor. Softback, 210 pages, 7 X 10 inches, Price: \$29.95

This book will be available for checkout from the MSSF library.

- Curt Haney

FUNGUS FAIR VOLUNTEERS

We need your help!

Mushroom collection forays

Friday, December 3rd, 10 am to 2 pm

Check the calendar on the MSSF website: www.mssf.org

Setup: small tasks for all levels of experience

Friday, December 3rd, 3:30 to 7:30 pm or 7:00 to 11 pm

Volunteers needed during the Fair

Saturday Dec. 4th and Sunday Dec 5th - 10 am to 5 pm

Dinner will be provided Friday evening; lunch will be provided Saturday and Sunday. Shift obligation is three and a half hours for free admission to the museum throughout the weekend.

To sign up for Friday evening, Saturday or Sunday shifts go to the MSSF website:

www.mssf.org

Follow the link to volunteering for the Fungus Fair; contact Stephanie Wright at:

fungusfair@bytewright.com



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Dave Lubertoizzi & Max Garrone

Mycena News is the members' newsletter of the Mycological Society of San Francisco, published monthly from October to May.

Please e-mail photos, comments, corrections, and correspondence to mycenanews@mssf.org.

To subscribe, renew, or make address changes, please contact Alvaro Carvajal: alvaro.carvajal@sbcglobal.net or (415) 695-0466.

Past issues of *Mycena News* can be read online at www.mssf.org.

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A Celebration of
Wild Mushrooms
41st Annual Fungus Fair

Lawrence Hall of Science

Located on Centennial Drive
in the Berkeley hills
east of the main
UC Berkeley campus,
just above the
UC Botanical Gardens.

Saturday and Sunday
December 4 & 5, 2010
10:00 a.m.–5:00 p.m.

mssf.org
lawrencehallofscience.org

Exhibits, fresh wild
mushrooms, lectures,
mushroom experts,
vendors, and cooking
demonstrations.

*The Fungus Fair is presented by the
Mycological Society of San Francisco and
the Lawrence Hall of Science.*



LHS LAWRENCE HALL OF SCIENCE
UNIVERSITY OF CALIFORNIA, BERKELEY

MycoDigest continued



Clathrus archeri. Photo courtesy of Wikimedia.

In a study published this year, Johnson and Jurgens investigated how closely the scent chemistries of a stinkhorn fungus and a carrion flower compared with the scent chemistries of carrion and feces. They studied the scent chemistries of the stinkhorn fungus *Clathrus archeri*, the octopus stinkhorn, and seven fly-pollinated plant species and scent samples collected from rotting meat, a rat carcass and horse and dog feces. They found compounds typical of carrion, such as oligosulphides, and of feces, such as phenol, indole and p-cresol, present in the scents of the stinkhorn fungus and carrion flowers. Twenty-two compounds were found in *C. archeri* consisting of mostly aliphatic compounds and alcohols, along with benzenoids, phenylpropanoids, nitrogen-containing compounds and sulphur-containing compounds. The *C. archeri* scent profile fell between that of the carrion samples and the fecal samples. The similarity of the scent profiles confirms that both the fungus and the angiosperms are mimics of fly food sources. This study also showed that there is convergence across kingdoms of odorous fly attractants.



Unidentified stinkhorn collected in Thailand. Photo by Jennifer Kerekes.

Ecologically, stinkhorns are saprotrophs and are not as common as other types of fungi. Often, the fruiting bodies can be spontaneous and ephemeral. There are a number of reports of stinkhorns being introduced. A well-documented example of a stinkhorn that has been introduced and spread is *Clathrus archeri*. It was introduced to Europe around 1920, possibly from wool imports from Australia, and then spread throughout Europe (Daisie, 2009).



Dictyophora sp. collected in Thailand. Photo by Jennifer Kerekes.

Although repugnant in smell, stinkhorns are always a treasure and surprise to find in the field! Or, to others, collecting stinkhorns could be approached as a sport, like Aunt Eddy did in the book *Period Piece*: "Armed with a basket and a pointed stick, and wearing a special hunting cloak and gloves, she would sniff her way round the wood, pausing here and there, her nostrils twitching, when she caught a whiff of her prey; then at last, with a deadly pounce, she would fall upon her victim, and poke his putrid carcass into her basket."

Additional information:

Key to 25+ North American Stinkhorns, Michael Kuo
<http://www.mushroomexpert.com/phallaceae.html>

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Marino, P., Raguso, R., Goffinet, B. 2009. The ecology and evolution of fly dispersed dung mosses (Family Splachnaceae): Manipulating insect behaviour through odour and visual cues. *Symbiosis*. 47, 61-76.

Raverat, Gwen. *Period Piece*. W.W. Norton & Company, INC, New York. 1952.

Stijve, T. 1997. Close Encounters with *Clathrus Ruber*, the latticed stinkhorn. *Australasian Mycological Newsletter* 16, 11-15.



Jennifer Kerekes is a PhD candidate studying the ecology and diversity of saprotrophic fungal communities with Dr. Tom Bruns at the University of California, Berkeley
 See more of her work at:
<http://plantbio.berkeley.edu/~bruns/people/jk2.html>.

Mycological Society of San Francisco
c/o The Randall Museum
199 Museum Way
San Francisco, CA 94114

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November 2010, vol. 61:08

MSSF Calendar November 2010

Tuesday, November 16th, 7 pm - MSSF General Meeting

Randall Museum, 199 Museum Way, San Francisco.
7 pm, mushroom identification and refreshments.
8 pm, Dimitar Bojantchev: *An Informed Collector*

Saturday – Sunday, December 4th–5th 41st Annual MSSF Fungus Fair

Lawrence Hall of Science, Berkeley, CA
Full details on p. 4 of this issue. We need volunteers!
See p. 3 for ways to get involved.

Saturday, December 11th, 7 pm - Holiday Dinner

Albany Community Center, 1249 Marin Avenue, Albany
Entree choices will be: grilled salmon, roast beef or stuffed portobello mushroom (menu details forthcoming). Curt Haney will hold his world famous raffle with numerous prizes for the folks who contribute appetizers to the event.

Reservations & payment can be made through the Event Registration section of the website (member's only area).

Sunday, January 9th, 2011 at 10:00 am MYCOPHILES OF THE MSSF

The popular Annual Beginners' Fungus exploration at the entrance to the Phleger Estate watershed area at the western end of Edgewood Road is planned for. We usually finish about noon. We begin by introducing some illustrated general information and proceed to explore to discover this year's fungi

along the road side. This is not a collecting trip. We will be more or less locked in. No water is available. Wear sturdy boots, the road might be wet. Heavy rain cancels.

Attendance is limited. You must reserve early in order to get a place. You may sign up at the General Meeting at Randall Museum on Tuesday, November 16th, 2009. Or please call Bill Freedman for details and reservations at 650-344-7774 or loufreed650@yahoo.com.

The submission deadline for the December, 2010 issue of *Mycena News* is Sunday, November 14th. Please send your articles, calendar items, and other information to: mycenanews@mssf.org

GUIDED FORAYS AND WORKSHOPS (NON-MSSF)

Friday–Sunday, November 26th–28th – David Arora's Thanksgiving Weekend Mendocino Mushroom Foray

Join David Arora and special guests William Rubel (chef and culinary historian, author of *The Magic of Fire*) and Langdon Cook (author of *Fat of the Land: Adventures of a 21st Century Forager*) for a three-day weekend of mushroom foraging, identification, discussion, lectures, stories and feasts. All levels of experience welcome; registration limited. See www.davidarora.com for details.

**2010 41st ANNUAL
MSSF FUNGUS FAIR
at the LAWRENCE HALL OF SCIENCE**

Saturday, December 4th and Sunday, December 5th

We need your help!

Mushroom collection forays

Friday, December 3, 10 am to 2 pm

Check the calendar on the MSSF website: www.mssf.org

Set up: small tasks for all levels of experience

Friday, December 3, 3:30 to 7:30 pm or 7:00 to 11 pm

Volunteers needed during the Fair

Saturday and Sunday 10 am to 5 pm

Dinner will be provided Friday evening; lunch will be provided Saturday and Sunday. Shift obligation is three and a half hours for free admission to the museum throughout the weekend.

To sign up for Friday evening, Saturday or Sunday shifts go to the MSSF website:

www.mssf.org

Follow the link to volunteering for the Fungus Fair; if you have difficulty contact Stephanie Wright at

FungusFair@ByteWright.com

**ANNUAL MILLS CANYON INTRODUCTORY FORAY
WITH JR BLAIR, JANUARY 8, 2011**

Time to hit the phone for a lucid introduction to the world of wonder at your feet. JR BLAIR will lead his popular fact-filled study foray down Mills Canyon, Burlingame on SATURDAY, January 8. Due to overattendance in the past, this outing, cosponsored with the Friends of Mills Canyon, will be limited to 25 guests by reservation only.

We meet at the Adeline Drive entrance at 10:00 A.M.. Heavy rain cancels. Wear durable shoes, the 1-1/2 mile trail with little elevation could be wet. We usually finish about 12:30 P.M

Adeline Drive crosses Hillside Drive. which turns east off Skyline Boulevard just south of the Trousdale Ave. exit from Route 280. Parking is on the left of the second arterial stop at Adeline as you come down Hillside.

For reservations please call Bill Freedman @650-344-7774, or <loufreed650@yahoo.com>.

MSSF Holiday Dinner - Saturday, December 11th, 7 pm

Albany Community Center, 1249 Marin Avenue, Albany

MENU

Mixed greens with pears & persimmons, toasted almonds & pomegranate vinaigrette.
Point Reyes blue cheese (optional)
Wild mushroom consommé with melted leeks

Your choice of entree:

Roast filet of beef with Morels in a Cognac Demi-Glace
Seared wild Alaska salmon with Oyster Mushrooms, white wine, lemon, and tarragon
Portabella Stuffed with Chanterelles and Quinoa topped with a Wild Mushroom Ragout.
Goat cheese garnish (optional)

Side dishes*

Smashed Yukon gold potatoes with sunchokes
Garlic Tossed Wilted Greens
Roast Baby Carrots and Parsnips scented with Black Truffle Oil

Desserts: assorted pastries, sweets and tortes

Curt Haney will be running his fabulous raffle.
(Each person who brings an appetizer gets a raffle ticket; they cannot be purchased.)

This location is very easy to get to and there is ample parking in the lot behind the building and street parking immediately adjacent. Please do not park in the residential neighborhood.

You can make a reservation and pay for this event online at our website. <http://www.mssf.org>
Login to the members-only area --> Event Registration.

For more information, contact Stephanie Wright, lioness@ByteWright.com, 510-654-6279
or visit <http://mssf.org/holidaydinner10>

* Note: all side dishes and some dessert choices will be vegan and gluten free.

Guided Forays and Workshops (non-MSSF)

David Arora's Thanksgiving Weekend Mendocino Mushroom Foray Friday–Sunday, November 26th–28th

Join David Arora and special guests William Rubel (chef and culinary historian, author of *The Magic of Fire*) and Langdon Cook (author of *Fat of the Land: Adventures of a 21st Century Forager*) for a three-day weekend of mushroom foraging, identification, discussion, lectures, stories and feasts. All levels of experience welcome; registration is limited.

See www.davidarora.com for details and registration.

2010 Fungus Fair Forays - Friday, Dec. 3, 2010

COME ALL YE FAITHFUL--help us collect fungi from San Mateo County for the MSSF Fungus Fair. Come and behold what nature has prepared for us now that the rain has fallen. Some of the forays are limited and by reservation. Call the leaders so that they can anticipate how many will be in their group. Here is the schedule for Friday, Dec. 3, 2010:

1. Fred Stevens will go to Memorial/Sam MacDonald Parks, call 650-994-1374 <fstev@sonic.net>
2. Wayne Leschyn leads the group in Huddart Park, Woodside, call 650-591-6616 <wade@belmateo.net>
3. Chris Schoenstein will lead the collecting trip into San Mateo County's Wunderlich Park, phone 408-674-3834 or <conroy777@hotmail.com>.
4. Bill Freedman will conduct the annual outing from the Pulgas Temple entrance into the S.F. Watershed along Canada Road, Woodside. Call 650-344-7774 or <loufreed650@yahoo.com> (Note address change).

Details are the same for all groups. Seek directions from the leaders. Meet at 10:00 AM. Prepare to leave no later than 3:00 PM. Prepare for wet road conditions. Bring lunch and beverages.

Heavy rain does NOT cancel. Wear warm and waterproof clothing. Baskets and boxes for storage are needed to return specimens to the Fair in good condition. Bring waxed wrapping paper for large specimens and small waxed paper sacks for smaller ones. A knife or other instrument is useful to pop the fungi out of the ground to preserve the bases. You must sign our volunteer list to grant you free admission to the Fair. Any questions call your leader. Bless you for your contributions. --Bill Freedman