Mycena News



The Mycological Society of San Francisco • October 2013, vol. 65:02

October 15 General Meeting Speaker



Dennis Desjardin

A New Field Guide to California Mushrooms

Dennis Desjardin is Professor of Biology at San Francisco State University. He received a Master's Degree from that same institution in (1985) studying under the guidance of Dr. Harry D. Thiers and Dr. Ronald H. Petersen. He has published over 120 scientific papers on the taxonomy and evolution of mushroom-forming fungi in which he described 225 new species and 7 new genera.

He has active research projects around the world and is currently interested in the origin and evolution of bioluminescent fungi.

Born and raised in Crescent City, CA, he has been collecting and studying California mushrooms for nearly 60 years.

Dennis will be talking about the contents of new field guide, the melding of nomenclature and taxonomy, morphology, phylogeny and the problems encountered when writing such a tome. He will present some interesting name changes and show beautiful photographs representing the diversity included in the field guide.

MycoDigest:

'Shrooms in Rooms

Rachel Adams

Most people don't explore mushrooms and mycology in general because they want to spend more time inside their houses. Yet, there is a renewed focus in the research community to investigate the microorganisms of "The Great Indoors," and fungi are one of the main players. My research tackles identifying what fungi are found indoors and trying to figure out how they got there. We are finding curious things, some not much farther than our noses.

For example, I was part of a study that examined at fungi in different rooms across many units of a university housing complex. We laid out samplers and then came back one month later to collect whatever was passively deposited from the air onto the samplers.

Using new techniques based on DNA, we found several hundred different types of fungi. Where traditional reference books have shown several dozen species that are important fungal players indoors – fungi like Aspergillus, Penicillium, Cladosporium, Aureobasidium – we found many more besides those

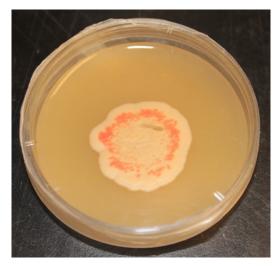


Fig. 1. Battling yeasts: pink *Rhodotorula sp.* consuming white *Malassezia sp.*

common molds and yeasts. For instance, we identified over two hundred types of *Agaricomycetes* indoors and taxa like *Amanita muscaria* and *Battarrea stevenii*. We concluded that in healthy buildings, without mold problems, in climates like the Bay Area where leaving windows open year-around is a real option, the types of fungi in air inside homes are practically identical to fungi in the air outside your home.

While we knew that the outdoors would be a major source of indoor fungi, we also wondered if people might directly affect the fungi indoors. The "mycobiota" of skin is not thought to be taxonomically rich; the main player seems to be *Malassezia*, a white yeast that thrives on oil, one species of which causes dandruff. I did an informal experiment in my lab, where I walked around and asked labmates

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MycoDigest is dedicated to the scientific review of mycological information.

President's Post

Greetings MSSF Members!

It is only October and many society members are already talking about spring morels in the sierra, especially due to the huge Rim Fire near Yosemite. Everyone seems to be hoping for a great spring morel season. Now all we need is a heavy snowfall this winter and enough showers in the spring to provide sufficent moisture for good fruiting. Now is a perfect time to write your representatives at the state capitol and Washington DC and advocate for the National Forest Service to permit sustainable mushroom harvesting on public lands and in fire zones for personal use.

At the September general meeting our own Ken Litchfield gave a lively and entertaining presentation to the MSSF membership and guests. The next general meeting is scheduled for October 15 at the Randall Museum. A social hour with appetizers and mushroom identification begins at 7 p.m. with the official meeting at 8 p.m.

The first ever MSSF Past Presidents Reunion was held September 8 at the Randall Museum. Several past presidents joined me and future MSSF president David Gardella for dinner and a round table discussion on the future of the MSSF as a non-profit Mycological Society. The event was very productive with many good ideas presented on how to improve the Society in the future. The minutes of the meeting have been made public to the membership in the archives section of the MSSF website.

The location and format for this year's Fungus Fair will be new to many of you, but also old to some of our long-time society members. The Fungus Fair this year will be held at the San Francisco County Fair Building in Golden Gate Park, and it will be in a new, one-day format, open to the public on Sunday, December 8, from 10:00-5:00 p.m. The forays to collect for the fair will be on the Friday and Saturday prior to the fair, and the fair set-up will be on December 7. The fair has been held in this location before, but it was many years ago. Moving the fair to a new location will require that the MSSF membership take on additional responsibilities of promoting the fair and collecting the entrance fee. That said, we will need many more volunteers this year to make this annual event a success. I implore everyone to become involved in one way or another so we can keep the fair at this location for years to come.

Fair organizers JR Blair and Stephanie Wright are requesting assistance from members who would like to be on the organizing committee for the fair this year. This is your chance to get involved and make a substantial contribution to the fair and the society. Contact JR Blair at jrblair@mssf.org and/or Stephanie Wright at FungusFair@ByteWright.com to make a difference!

I hope to see many of you in the forest soon or at a future MSSF event, getting more involved with the society as a volunteer!

-- Curt Haney, President@MSSF.org

CULINARY CORNER

As I write, fires are causing us lots of worry out here in the western states. The heartbreaking Rim Fire in the Yosemite area has some mushroomers dreaming of extraordinary flushes of fire morels next spring, but I'm still grieving the loss of so much of the beautiful landscape and wildlife that I had enjoyed when I was a child.

Local greengrocers, *Berkeley Bowl* and *Monterey Market*, have small chanterelles from California as well as some morels and the very overrated lobster mushrooms for sale. I usually see fruitings of Chicken of the Woods in October on snags and stumps but I wonder what will come out this year with the dry, dry weather prevailing. If you find one and decide to eat it, be sure to cook it well; raw or undercooked material makes some people, including me, ill.

People used to believe that mushrooms were only for flavoring but had little nutritional value. Studies show that to be untrue. Mushrooms have valuable mineral content, are high in vitamins, especially B, have cholesterol regulating properties (shiitake, Pleurotus), are high in fiber and have no fat or cholesterol.

The October Culinary Group dinner meeting will be October 7th at the S.F. County Fair Building at 9th and Lincoln, Golden Gate Park. The dinner will feature a seafood and mushroom pasta from George Collier, sides, and dessert. And, of course, the appetizers diners bring to contribute to the feast. Don't miss it. There will also be a vegetarian entrée offered at this and all dinners. The dinners are open only to active MSSF members who are also members of the Culinary Group. Guests of members are welcome but also should join if they want to continue coming to the dinners. Reservations for the dinners are required and must be made no later than the Wednesday before the dinner. The number of diners is kept to 60 or less. Signup and more information can be found on the calendar of the MSSF website. Dinners cost \$16 per person, \$15 for seniors. Diners bring an appetizer to share, tableware and a dinner beverage. The County of S.F. does not provide dishes, etc.

The dinners are always cooked with imagination, care and love. The participants love to cook and contribute to at least one dinner a season. They are great social and gustatory experiences.

Fresh mushrooms are really a cook's best friend for creating good food. Here are a few very simple suggestions for preparing them:

Sauteing – for each 8 ounces of mushrooms, melt 1 tablespoon butter or oil in a skillet, add mushrooms and cook and stir until golden and the released juices have evaporated, about 5 minutes. Don't overcrowd the skillet or the mushrooms will steam rather than brown.

Microwaving – Put 8 ounces of thickly sliced mushrooms in a microwaveable bowl; cover and cook on HIGH for 2 or 3

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MycoDigest continued

if I could swab their foreheads with basically a Q-tip. I ran each swab over a petri dish filled with media containing garlic-infused olive oil. In the first "personal offense", the petri dish from my own forehead was the only one which grew anything—some nice white and pink yeasts, most likely *Malassezia* along with some *Rhodoturula*, a pink yeast that commonly grows in bathrooms. When I tried to isolate each of these types, I saw something curious: the pink yeast appeared to be eating the white yeast. I couldn't help but wonder; was *Rhodotorula* eating *Malassezia*—on my face?!



Fig. 2. Ergot (*Claviceps purpurea*) growing on ryegrass (*Lolium sp.*).

Back at the university's housing units, I implemented a more rigorous scientific design that went beyond just asking my labmates for a swab of their forehead. In one housing area, we specifically swabbed foreheads to see if they might be potential sources of fungi in the air. Overall, we found many, many fungal types on people's foreheads, in fact, just we found just as many fungi on foreheads as we did on windowsills. But no taxa we found was more curious than *Claviceps purpurea*.

"Ergot" was extremely common on foreheads, particularly in the sampling we took in August. It seems that our foreheads collect fungal fragments and spores as we walk through the microbial soup that is outdoor air.

We know that when people walk into the room, the amount of fungi and bacteria in the air increases, so our next research questions will be focused on asking whether that increase is due to direct human shedding (picture Pig-Pen from the

comic strip Peanuts) or from our movements re-suspending particles that have collected on the ground (like wildebeests raising dust on the Serengeti). I imagine our research and exploration of the fungi close to home will continue to yeild interesting surprises.



Rachel Adams is a postdoctoral researcher working with Tom Bruns and John Taylor at U. C. Berkeley. Tell her about the interesting fungi in your house at adamsri@berkeley.edu

FAR EAST FUNGI

By Eric Multhaup

I recently spent some quality time in Hong Kong, and my wife and I did our best to explore the current role of mushrooms in Cantonese cooking. In a nutshell, mushrooms are everywhere and are enjoyed in a wide range of preparations. Many restaurants offer a seasonal mushroom tasting menu, or at least a separate menu section that features mushroom dishes. Here are some of the more distinctive items I discovered:

Tofu sheets with featured mushrooms and sauce – This dish is composed of very thin and light tofu sheets topped with a mushroom preparation. The tofu sheets function much the same way that pasta does in many Italian mushroom dishes, but here they are lighter and serve as a neutral vehicle to distribute the mushroom flavor. Our particular dish was made with mushrooms called miyaki(??) from China's interior and morels from Perigord- thanks to Air France.

Bitter melon soup with selected mushrooms – Bitter melon soup is a standard showpiece in Cantonese restaurants and it has countless variations. Our Hong Kong Continued on page 4



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

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Past issues of *Mycena News* can be read online at <u>www.mssf.org</u>

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FAR EAST FUNGI continued



Witch's butter (*Tremella mesenterica*) Photo: Wikimedia Commons

version of this soup was restrained and subtle in comparison to others we've tried in California, but we found it addictive nonetheless. It's made by double boiling the bitter melon and cooking it down to a light broth, and then adding accent items, mushroom-based or otherwise. Ours featured matsutake mushrooms from Yunnan. In addition, there was a supporting role played by a yellow *Tremella* that strongly resembled our *Tremella mesenterica*, the "witch's butter" seen growing on downed wood. This Hong Kong *Tremella* was added for some color and texture and was itself fairly low-key. This soup, while served at a high-end restaurant, was deceptively simple. But it was so addictively delicious that we could barely restrain ourselves from ordering additional servings.

As an aside, we discovered that there is extensive use of *Tremella* here in a wide variety of dishes. One in particular was "morning conge" (con-gee), a rice broth served warm like oatmeal--but without the oats, brown sugar or raisins. Most Hong Kong hotels offer two or three types of

morning conge. I was stumped by one that had a sign clearly printed in English describing it as "conge with Tremella". To my California palate, this *Tremella* was so unassuming (dare I say insipid?) that I could detect no identifiable texture, color or flavor that it might have added to the broth. I'm willing to be educated, but this concoction had all the pizzazz of sipping weak tea. Except without the tea. Or lemon. Or sugar. No offense. Once I got home, I cross-checked my *Tremella*-eating experience with that of David Arora in his book, "Mushrooms Demystified"; his was not all that different.

Superior vegetables – Most menus had a dish described in English as wok-fried "superior vegetables", but the dominant ingredient was mushrooms, often a kind that grows on trees. They were gathered from Taiwan, the Hong Kong area and from the mainland. These dishes were very healthy and pleasing, but they lacked any specifically identifiable flavor profile and could be more accurately described as a "mushroom medley" than "superior vegetables".

Sago palm pudding dessert with chestnuts and black truffles – Better quality Hong Kong restaurants offer a dessert pudding that straddles the line between sweet and savory. Sago is a starchy product, kind of like tapioca. It is extracted from the pith of certain palm trees and had been a staple in China's interior before that region developed a rice culture. It is still used throughout southeast Asia. Our first version of this dish was enriched with chestnut puree. It was delicious, warm and inviting. For those of us who grew up on Death by Chocolate, Apple Pie a la Mode, and other hecka-sweet desserts, many Chinese desserts seem underwhelming by comparison (how fired up can you get about "dumplings with red bean paste"?). This sago pudding however, was much more accessible.

We had another version of sago pudding that included black truffles, again thanks to Air France. I was initially dubious about truffle dishes in Hong Kong because truffles are not a part of indigenous Chinese cooking. I was concerned that restaurants might fleece tourists like me by shaving some truffles over a basic fried rice dish, and adding \$100 to the tab. With some trepidation, we tried the sago and chestnut pudding with black truffles at the iconic Hong Kong restaurant, Lung King Heen ("View of the Dragon"); the only Michelin 3-star restaurant in the world serving Cantonese food (or any kind of Chinese food for that matter). Apart from the flagrantly excellent preparation, the ingenious addition of the black truffles was fantastic, with the truffle flavor keeping the dish right on the intriguing cusp of sweet and savory. Not surprisingly, we paid a princely sum for this dessert, and enjoyed it, royally.

QUICK START FORAY - NOVEMBER 9TH

The Quick Start foray for November will be held at McLaren Park in San Francisco on Saturday November 9th. Quick Start forays are intended to familiarize fungal foragers with field characteristics useful for identifying mushrooms and other fungi. We will meet at 9:30 a.m. for an orientation to go over local collecting policies, practices and etiquette. We also point out locations where fungi are likely to be found.

After the orientation, if the group is large, we will break into smaller groups and hunt for fresh fungi for one to two hours. On returning, we plan to display our collected fungi and discuss key identifying characteristics.

New and prospective MSSF members, as well as guests and non-members, are welcome. It's our goal that this foray provide information about local fungi and stir one's interest to learn more.

Email Paul Koski at: pkoski04@yahoo.com or Enrique Sanchez at eingew@yahoo.com for details about these forays and to be put on the foray list.

Culinary Corner continued

minutes, stirring once. Note: I microwaved frozen Pleurotus once with great results.

Roasting – place the mushrooms in a shallow roasting pan, toss with a little oil and roast in a 450 degree oven, stirring occasionally, until brown, about 20 minutes. Use a tablespoon of oil for each 8 ounces of mushrooms.

Grilling or Broiling – the best way for larger-capped mushrooms like big shiitake or portabellas (big, commercial mushrooms) or field *Agaricus*. Slice stems so caps can lie flat. Brush caps with oil and season with salt and pepper. Grill or broil 4 to 6 inches from the heat source for 4 to 6 minutes per side, brushing with oil again a couple of times. I like to flavor the oil a bit with garlic. Connie Green, author of "The Wild Table" cookbook, grills morels in a basket on the barbeque, shaking the mushrooms occasionally.

As few local mushrooms are available in early October. Here's a recipe you can make with "store-bought" fungi. It's still warm in October and there are still good tomatoes to be had. This recipe them to good use. Yes, I still disdain the name "portabella" but marketing makes its own rules.

PORTABELLA SLIDERS WITH ROASTED TOMATOES

Ingredients:

12 small portabellas (or shiitake)

1 tablespoon oil

1 crushed garlic clove

Salt and Pepper

4 ounces Fontina or some other cheese that melts well

12 slider rolls

For the Roasted Tomato Sauce:
1 pint cherry tomatoes
1 tablespoon olive oil
Salt and Pepper
1 clove garlic

1 tablespoon red wine vinegar

To make the sauce: Mix and roast the ingredients until tomatoes become caramelized.

Trim the stems from cleaned mushrooms and toss the caps with the olive oil, garlic, salt and pepper. Grill the mushrooms until they're just cooked. Top with cheese, place on the rolls and serve with the tomato sauce added like a kind of ketchup.

Now, go do a rain dance or whatever you think will get us some good wet earth. See you in the woods or at the Culinary Group dinners. --Pat

2013 44th ANNUAL MSSF FUNGUS FAIR

S.F. County Fair Building next to the Botanical Gardens in Golden Gate Park

Sunday, December 8th

WE NEED YOUR HELP during October & November

Help with advertising & event promotion - flyer & poster distribution, and more...

Mushroom collection forays will primarily be on Saturday, December 7th, 10 a.m. to 2 p.m. Some folks may also go out on Friday, December 6th. Check the calendar on the MSSF website: www.mssf.org Set up: small tasks for all levels of experience. Saturday, December 7th, 3 to 8 p.m. or 7 to 12 a.m.

Volunteers needed during the Fair Sunday 8 a.m. to 6:30 p.m. Plus, many hands are needed to help during takedown and cleanup at the end of Sunday, 5 - 6:30 p.m. Dinner will be provided Saturday evening; lunch will be provided Sunday. Shift obligation is a minimum of three hours for free admission to the fair. More details will be posted in coming weeks.

If you have questions, email Stephanie Wright at: <u>FungusFair@ByteWright.com</u> or talk with her during the social hour preceding the General Meetings.

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



"A World of Wonder at Your Feet"

October 2013, vol. 65:02

MSSF Calendar October

Tuesday, October 1, 7:30 p.m. - MSSF Council and Fungus Fair Organizing Committee Meeting
Randall Museum (Buckley Room) 199 Museum Way, S.F.

Monday, October 7, 7 p.m. - Culinary Group Dinner County Fair Building, Golden Gate Pk, 9th & Lincoln, S.F. "George's Invention" - Seafood Pasta Risotto w/ Mushrooms Bring your tableware and a beverage. The SFCFB does not provide dishes, etc. The next dinner is November 4th.

Sunday, October 13, 9:30 a.m. - Beginners Quick Start Foray Golden Gate Park, S.F. Meet at the southwest end of the Polo Field. For more information, email Paul Koski at pkoski04@yahoo.com

Tuesday, October 15, 7 p.m. - MSSF General Meeting Randall Museum (Buckley Room) 199 Museum Way, S.F. 7 p.m. - Mushroom identification and refreshments 8 p.m. - Speaker: Dennis Desjardin

Saturday, November 9, 9:30 a.m. - Quick Start Foray McLaren Park, S.F. Info: Paul Koski at pkoski04@yahoo.com

Fri.-Sun., November 15-17, - Mendocino Woodlands Foray/Camp

Tuesday, November 19, 7 p.m. - MSSF General Meeting Randall Museum, 199 Museum Way, San Francisco.

Saturday, December 7, - Fungus Fair Forays and Fair Set-Up S.F. County Fair Building.

Sunday, December 8, - 44th Annual MSSF Fungus Fair S.F. County Fair Building. Open to the public 10 a.m-5 p.m.

Check the MSSF online calendar at: http://www.mssf.org/calendar/index.php for full details, latest updates and schedule changes.

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Announcements

MSSF Volunteers Needed

Join the Council leadership, learn the inner workings of the MSSF and help make decisions that shape the future of the society. Do your part by contributing your time to a 100% volunteer organization!

Mycena News Editor: Let creativity be your guide. Bring out your inner artist. Knowlege of Adobe InDesign CS5.5 helpful. Current editor happy to coach. Email to: mycenanews@mssf.org.

Librarian Co-Chair: Volunteer to assist the head librarian catalog and check library books in and out of the "Bill & Louise MSSF Library" during monthly general meetings at the Randall Museum.

To learn more about volunteering for these or other council and committee positions, go to: www.mssf.org, members-only area, file archives, council member position descriptions. Or email: President@MSSF.org Remember, our great, ALL-VOLUNTEER organization would not survive without volunteers!

The NATS 2013 Henry Pavelek Sr. Memorial Scholarship

Henry Pavelek Sr. joined the North American Truffling Society in 1982 and soon was elected President. His energy and enthusiasm for truffles and truffling provided much of the driving force that established NATS as a sustainable organization. A scholarship fund has been established in his memory. Applicants should be graduate students or outstanding undergraduates conducting research on physiology, taxonomy, phylogeny, ecology, animal interactions, commercial harvest, or culinary attributes and uses of hypogeous fungi. The scholarship for 2013 is for \$1500. The recipient will be announced at the NATS December 7 meeting & potluck in Corvallis. The application form can be accessed by clicking on its link at www.natruffling.org. The application deadline has been extended to Oct. 31.

The submission deadline for the November 2013 issue of Mycena News is October 15th.

Send all articles, calendar items and other information to: mycenanews@mssf.org.