SPORE PRINTS

BULLETIN OF THE PUGET SOUND MYCOLOGICAL SOCIETY Number 351 April 1999



RAVENOUS, WOOD-EATING FUNGUS Judy Richter The Spore Print, Los Angeles Myco. Soc., March 1999

February 14, 1999. As if termites and dry rot weren't enough for homeowners to worry about, a new threat has begun showing up in Northern California.

It's *Poria incrassala*, recently renamed *Meruliporia incrassala*, a decay fungus that can literally reduce your home to rotted wood.

It's different from all other types of fungi, said W. Wayne Wilcox, professor of forestry at the UC-Forest Products Laboratory in Richmond. Other fungi must have a direct water source or they go dormant. *Poria*, however, literally pumps in its own water through rhizomorphs, which are tough filaments that connect the wood in a house with a water source, such as an over-watered lawn or leaky faucet, somewhere else.

Even if the wood is dry, this source provides enough water to support decay, according to a report by the U.S. Department of Agriculture Forest Service and Department of Housing and Urban Development. Redwood, which normally is decay resistant, is subject to damage.

Poria rhizomorphs have a soil-colored rind similar to a root, but the interior has a white, wet texture that looks and smells like a mushroom. They're usually one-fourth to one-half inch wide but may reach 2 inches, the federal report said.

The rhizomorphs can make their way over the foundation or through cracks in mortar right into the substructure of a house, says David Roe, owner of Leading Edge Termite Treatment in Pleasant Hill. Moreover, he added, the filaments can be 30 to 40 feet long.

Poria was first isolated from the roots of redwood trees in the 1920s. It was a major problem in the Gulf States in the 1940s and '50s and began posing a problem in Southern California about two or three years ago, Wilcox said.

"It's a frightening problem in Southern California, because we done know why we're seeing more of it," he said. "Left unattended, it's very dangerous. It can bring down a whole house." Wilcox said he saw one instance in Southern California where *Poria* went from one house to another and climbed up the stucco. He discovered that the two houses shared landscaping and that the owners had brought in soil. He speculated that the soil was from a forest that had *Poria*.

In Northern California, Wilcox has seen *Poria* in Oakland, Fremont, Scotts Valley, Santa Cruz, Belvedere, Pleasant Hill, Atherton, Davis, Roseburg, and Philo.

No one has come up with any easy way to get rid of *Poria* except to cut the rhizomorphs and remove the wood it infests. *Poria* will die if it's cut off from its water source, but "you have to get all of its rhizomorphs. You can repair the leaks and the damage, but if you don't cut the roots, it will come back fast," Wilcox said.

The ways to prevent a *Poria* infestation are similar to those that guard against subterranean termites. "*Poria* seems to be attracted to already moist conditions. Its anathema is air," Wilcox said.

Fungicides applied by pest control operators are somewhat helpful, said Steve Quarles, a research assistant at the Forest Products Laboratory, as is getting rid of the exterior water source. ©1999 San Francisco Examiner

1998 TOXICOLOGY REPORT Jan Lindgren

MushRumors, Oregon Myco. Soc., March-April 1999

There appears to be a direct correlation between a poor fall mushroom season and the number of mushroom poisoning cases reported. Committee members worked on seven mushroom-related cases this past year, but several of them may not have even been caused by mushrooms. One death occurred after a dog ate *Amanita pantherina* mushrooms and was mistakenly treated for strychnine poisoning. An autopsy showed lots of mushroom pieces in the dog's stomach, and the owner found even more uneaten mushrooms at the site where the dog had been. Another dog recovered after vomiting a meal of Russulas.

Two cases involved a mother and son who had consumed purchased *Psilocybe* sp. along with marijuana. The mother suffered cardiac arrest and may also have had anaphylactic shock and other problems. She responded to extensive medical treatment. The son was just held for observation.

In Joseph, Oregon, a man and his wife got sick about 3 hours after eating sautéed morels for lunch. The wife suffered no symptoms, so did the man just eat too many, were they undercooked, or does he have an individual susceptibility to morels? We probably will never know unless he eats them again, in a controlled situation.

The other two cases also involved species that are usually considered safe for most people to eat. In one case a woman said she ate about a pound of yellow chanterelles for dinner and had three beers and a couple of vodkas. Her husband, who ate chanterelles with her, didn't get sick. So, was it the mushrooms or the drinks that made her ill? Connie Thorne identified the mushrooms, so it wasn't a problem of incorrect identification.

The final case involved a man who ate just part of a large white chanterelle. I saw part of it that he didn't eat and his wife also ate part of it, so it is hard to believe he could have eaten enough to make him sick. White chanterelles can be large, but this one must have been huge. The wife had no symptoms, while the victim suffered chills, weakness, and vomiting. I suspect there was another cause for his illness, but the mushroom took the blame.

It is because of these strange cases that we advise people to always be sure of the correct identification, eat only a moderate amount of fully cooked mushrooms, and don't overdo on the alcohol. Be sure the mushrooms are fresh, not wormy, rotting, or moldy. Even following these rules, it is still possible to suffer some stomach upset from mushrooms, so save at least one good specimen, in the refrigerator, for at least 24 hours, so we will have something to analyze if you get sick.

Spore Prints

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PUGET SOUND MYCOLOGICAL SOCIETY

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Annual dues \$20: full-time students \$15				

CALENDAR

April 10	Field trip, MacDonald Park, Carnation
April 13	Membership meeting, 7:30 рм, CUH
April 17	Field trip, Steelhead State Park, Rockport
April 19	Board meeting, 7:30 PM, CUH Board Room
April 23	Spore Prints deadline
April 25	Field trip, St. Edward State Park (Sunday day outing only)
May 1	Field trip, Bullfrog Flats
May 8	Field trip, Swauk Creek Forest Camp

BOARD NEWS

Agnes Sieger

Education Chair Lisa Bellefond has contacted Judy Roger regarding a microscopy class for this spring. Colin Meyer is working on a password page, search engine, and other improvements to the PSMS web site. Feedback on the 1999 Survivors' Banquet has been very positive. Mr. Harry Chalekianhas donated a laptop computer to PSMS. The board voted that Mr. Chalekian be given a honorary membership in appreciation. Lynne Elwell reports that the booth at the Flower and Garden Show went well and provided good publicity for PSMS.

GOLDEN MUSHROOM AWARD

Congratulations to Sara Clark, winner of the 1999 PSMS Golden Mushroom Award for outstanding service. A member of PSMS since 1979, Sara is one of the club's primary mushroom identifiers and participates in almost all the PSMS fields trips. The award was presented to Sara at the 1999 Survivors' Banquet in March. Well done, Sara.

MEMBERSHIP MEETING

Tuesday, April 13, at 7:30 PM at the Center for Urban Horticulture, 3501 NE 41st Street, Seattle

Our speaker for April is Dr. Michael W. Beug. His topic is "Poisonous and Hallucinogenic Mushrooms." Dr. Beug teaches chem-

istry and mushroom identification at The Evergreen State College. He is a member of the Pacific Northwest Key Council, and is on the education committee of the North American Mycological Association (NAMA). Also a well-known mushroom photographer, Mike has written eight slide-tape programs for NAMA, and his photographs have been published in over 20 books.



Dr. Beug first became interested in mushrooms in the late '60s. While doing his doctorate in chemistry at the University of Washington, he took an introductory course from Dr. Stuntz. Afterwards, he studied informally with Dr. Stuntz and Dr. Alexander Smith, whom he described as being generous with their time and expertise. Mike is a gifted teacher, taxonomist, and photographer whose programs are always popular.

Would persons with last names beginning with the letters T–Z please bring refreshments for the social hour?

SPRING FORAY, MAY 21-23

Joanne Young

Reserve space now for the PSMS Spring Foray, May 21–23 at Meany Lodge (east of Snoqualmie Pass). Our foray mycologist will be Brian Luther, well known to PSMS members as an extraordinary mushroom identifier, teacher, and ardent naturalist. Foray activities will include mushroom hunting, identification, slide presentation, nature walks, social activities, good food, and more.

Meany Lodge is located off the Stampede Pass road (exit #62 from I-90). More directions will come in the registration packet. Accommodations are rustic, but include indoor plumbing, heat, hot water, and a few showers. There are four large dormitories. You'll need to bring a sleeping bag, pillow, towel, and other personal items (long-time forayers also like to bring a bottom sheet). Sorry, no pets and no smoking are allowed.

Cost for Saturday afternoon arrival is \$33.00 per person. Price includes one night's lodging, foray programs, Saturday dinner, Sunday breakfast, and Sunday lunch. (You'll need to pack your own lunch for Saturday.)

Cost for Friday evening arrival is \$39.00 per person. Price includes everything mentioned above and two nights accommodations, Saturday breakfast, and Saturday sack lunch. Be sure to bring something for a Friday dinner potluck. (Sorry if the price seems unfair to the Saturday arrivals. We're being charged the same amount for each person, whether they stay one night or two.)

Registration Information: To request a registration packet, call (206) 633-0752 or e-mail jd2young@aol.com. Leave your name, address, zip code, e-mail address, and phone number. Space is limited to 60 people, so call now.

Foray Volunteers Needed: Most of the organizing is already done, but we still don't have an official chairperson. Qualifications are friendly people skills and willingness to keep track of a few details. We will be doing our own meals, so a cooking team is also needed. Phone Joanne, (206) 633-0752, to volunteer.

SPRING FIELD TRIPS

Doug Ward

The complete schedule for PSMS field trips this spring is given

below, and their locations are marked on the accompanying map. Detailed instructions for each month's field trips will be included in that month's Spore Prints.

Warning: Because of the heavy snowpack this year, some trips may have to cancelled. Please check the PSMS voice mail, (206) 522-6031, for last-minute changes.

April 10

April 17

Steelhead Park, Rockport

MacDonald Park

(elev. 300 ft, 95 miles NE of Seattle)

There are two possible routes, both lined with cottonwood trees under which you can look for Verpa bohemica. Either take exit #208 from I-5 at Arlington and go east on State Hwy. 520 through Darrington and north to Rockport or continue north on I-5 to exit #230 at Burlington and go east on State Hwy. 20 to Rockport. Steelhead Park is on the river bank and is frequented by bald eagles.

April 25

8 St. Edward State Park

(5.5 miles northeast of Seattle)

St. Edward State Park lies between the northeast shore of Lake Washington and Juanita Drive N.E. just south of Kenmore. This is a Sunday day trip only.

May 1

O Bullfrog Flats

(elev. 2000 ft, 80 miles east of Seattle)

This site is at the northwest corner where I-90 crosses the Cle Elum River. Take I-5 over Snoqualmie Pass to exit #80. Go left at the stop for about 500 ft, take the first right, and follow the PSMS signs.

May 8

Swauk Creek Forest Camp

(elev. 2500 ft, 110 miles east of Seattle)

Take I-5 over Snoqualmie Pass to exit #85. Follow the signs to Wenatchee. Turn left onto Hwy. 970. After 7 miles stay left on US Hwy. 97 (north) and continue another 16 miles. The camp is on the right. Swauk Pass is 4 miles beyond the camp.

May 15

O Crystal Springs Forest Camp (elev. 2400 ft, 60 miles east of Seattle)

Drive east on I-90 over Snoqualmie Pass. Continue east for 8 miles and take Stampede Pass exit #62. Turn right at the stop sign. After 1/4 mile, before the bridge, turn right to enter the camp.

May 29 Twenty-Nine Pines Forest Camp (elev. 2500 ft, 102 miles east of Seattle)

Take I-90 over Snogualmie Pass to exit #85 east of Cle Elum. Follow the road toward Wenatchee for 21/2 miles. Turn left on Hwy. 970 and go 41/2 miles. Turn left onto Teanaway River Road. Continue 6 miles to the Bible Rock Children's Camp. Bear right on the Teanaway North Fork Road and continue to Twenty-Nine Pines on the left, just past Jack Creek Road. There is no shelter.





June 5

Δ

Bridge Creek Forest Camp (elev. 2400 ft, 150 miles east of Seattle)

Take Hwy. 2 over Stevens Pass and proceed 34 miles to Leavenworth. (You can also take I-90 over Snoqualmie Pass to exit #85, go over Swauk Pass to Hwy. 2, and proceed left for 6 miles to Leavenworth.) Take Icicle Creek Road on the north edge of town and go 61/2 miles to Bridge Creek Forest Camp.

VERPA BISQUE

Spores & Stipes, March 1999

North	Idano	wycoło	gical	Association	1

4–8 oz. Verpa bohemica	2 egg yolks
1/3 cup finely chopped onion	1 cup light cream (half & half)
1 TBs butter or margarine	1 TBs chopped parsley
2 to 3 cups chicken broth	Generous dash Tabasco
1/2 tsp Worcestershire sauce	or cayenne
1 tsp. chopped fresh dill	Fresh lemon (for garnish)
(or 1/4 tsp dried dill leaves)	Salt to taste

Drain mushrooms, if reconstituted or if parboiled. Reserve soaking liquid, unless you are sensitive to it. In a 3 quart saucepan, sauté onion in butter for 2 minutes or until softened. Measure reserved mushroom liquid, if any, add chicken broth or use all chicken broth for total of 3 cups liquid. Add to pan with mushrooms, Worcestershire, dill, and Tabasco or cayenne. Bring barely to boil and reduce to simmer. Stir egg yolks and cream together and stir into soup. Cook and stir until mixture thickens slightly; DO NOT ALLOW TO BOIL! Stir in parsley. Garnish with a thin lemon slice. Makes 3 to 4 appetizer or first course servings.

Note: Some individuals do not tolerate Verpa mushrooms well, just as some do not tolerate morels. Boiling the Verpa briefly in water, which is then discarded, may resolve the problem.

Mycelium, Mycological Society of Toronto, Jan.-March 1999

Strictly speaking, white is not a color, but rather every part of the visible spectrum rolled into one. However, being myco-etymologists and not physicists, we won't let such a minor technicality stand in our way.

White has long had a symbolic association with purity, and this has not been lost on the mycologists who give mushrooms their names. Tyromyces chioneus, the White Cheese Polypore, is a prime example. Its species name comes from the Greek chion, meaning "snow," alluding to its untainted whiteness. In Leucopaxillus albissimus, we encounter the Latin albus (white), plus the suffix issimus (the superlative). Combining this with leuco, the Latinized form of leukos, the Greek word for white, we have "the whitest white Paxillus," a real mycological mouthful. The opposite side of purity can be seen in the Spotted Collybia, Collybia maculata, whose species name means "spotted," stained," or "marked." From the Latin root macula we get the word "immaculate," one of whose meanings is "spotlessly clean." In several instances, mushrooms namers have carried the purity theme a bit too far. Consider Dasyscyphus virgineus, also known as the Stalked Hairy Fairy Cup. Its specific epithet, virgineus, means "pure white." Not so, says the Audubon guide, which describes this cup fungus as cream-colored. Then there is the Common Gel Bird's Nest, Nidula candida, whose species name comes from candidus, meaning "shining white." The Audubon guide, however, describes the cup and its "eggs" as ranging from gray to light brown. It's hard enough learning the mushrooms without also having to contend with inappropriate nomenclature.

The Latin *candidus* is the source of the words "candid" and "candidate." The latter's pedigree harks back to ancient Rome, when those seeking public office wore white togas to symbolize to voters their honorable intentions. The Romans used the word *candidate* to signify "a man clothed in white," but later this word took on the added meaning of "office seeker." By the time it entered the English language in the early 17th century, only this latter meaning survived. Imagine if today's politicians upheld the noble origins of this word.

GATHERING DATA? TRY A PALMPILOT!

MushRumors, Oregon Myco. Soc., March-April 1999

One of our Idaho members is ready for the year 2000. He'll gather his fungal data by using a pocket-sized "PalmPilot" computer and a Global Positioning System (GPS) receiver!

We've dreamed about such a tactic for years. Now computer wiz Warren Rakow will be field testing it. A former professional database designer and developer, Warren moved to Idaho to live a real life, and is working with Dr. Cathy Cripps, of Montana State University, to design software elements to capture information for what he's calling "A Shroomer's Log" application. It sounds like a wonderful dream for those who hate the combination of pencils, paper, and rain. If you have ideas to share, he's at rekow@mci.net

COORDINATOR WANTED

Patrice Benson

We still need a coordinator for the 1999 Wild Mushroom Exhibit. It is a wonderful opportunity to get to know lots about people and mushrooms. There are very willing assistants and lots of advice available from experienced coordinators to assist the willing chairperson for this exhibit. It is the one thing which draws us all together. In my participatory experience for the last 14 years, I have always felt good about contributing to the exhibit. Please step forward to help anchor our main work of the year.

FIRST OF APRIL STUDY

Dick Sieger

Phase one of the First of April Study (FAST-1) is an attempt to catalog prime mushroom hunting sites. The committee will collect information about your favorite places, test their productivity, and publish the results on the Internet. We are interested in areas where abundant quantities of edible mushrooms are found. Tell us what kind of mushrooms you find and where they are. Be explicit—"delicious mushrooms east of the mountains" isn't help-ful. Don't forget to miss participation in this project.

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