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PSMS WILD MUSHROOM SHOW

Spore Prints

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CALENDAR

- Nov. 14 Membership Meeting, 7:30 pm, CUH
- Nov. 20 Board Meeting, 7:30 pm, CUH Board Room
- Nov. 21 Spore Prints deadline

BOARD NEWS

Luise Asif

Teddy Basladynski is stepping down from the board owing to personal conflicts. Alternate Carlos Cruz will fill the vacancy. We expect to see Teddy running for the board again. Kudos to James Nowak for a successful Ben Woo Memorial Foray the week of October 13–15. Plans are under way for the 2018 Ben Woo Memorial Foray. The same weekend Brian Luther and Wren Hudgins led a fun weekend field trip . Daniel Winkler has begun the fall surveys for the Bridle Trails State Park Study. Trips to Bridle Trails Park are planned every 2 weeks alternating Sunday and Mondays. Paul Hill is preparing articles for *Spore Prints* detailing the goal and purpose of being part of the national study. Marian Maxwell and Milt Tam have been busy with community outreach. A wonderful group of members stepped forward to make the Fall Show a success. THANK YOU!

PROGRAM

Tuesday, November 14, 2017, at 7:30 pm at the Center for Urban Horticulture, 3501 NE 4lst Street, Seattle

Our program for November features our own PSMS member Danny Miller, who will speak on "Mushroom Prejudice, or 'You would think that you're human!'"

Danny's talk will be an entertaining take on human bias in mushrooming, how wrong we've been when trying to figure out what's important about a mushroom, and how the things we dis-



about a mushroom, and how the things we dis- *Danny Miller* miss as irrelevant often turn out to be the most important features. It includes some of the strangest and most surprising results to come out of DNA studies lately and will piece together a bit of the history of the evolution of mushrooms shapes.

In addition to being PSMS Librarian, Education Chair, and member of the ID Committee, Danny is an emergency poisoning point person for King County, Washington, Poison Control. Danny also belongs to the Pacific Northwest Key Council, a group of amateur and professional mycologists, and, along with Ian Gibson, is a co-author of MatchMaker, the free PNW mushroom ID program for the PC and MAC. He has a big interest in taxonomy and figuring out where all of the mushrooms fit into the fungal tree of life.

Would people with last names starting with the letters A–L please bring refreshments to the meeting.

54th PSMS WILD MUSHROOM SHOW Milton Tam

It was blustery and stormy outside when our 54th annual Wild Mushroom Show opened at noon in the Bellevue College cafeteria. This year the show was on October 21 and 22, our third year on the Eastside in this great facility, with ample space for displays, activities, lectures, and vendors, all under cover and inside. About a thousand mushroom enthusiasts, in addition to our members, attended the show. The flow of visitors was steady so the exhibit floor never felt too crowded



or confining and made for a relaxed, laid-back weekend. This year Derek Hevel joined Kim Traverse and me as a co-chair. We welcomed his input and willingness to share the challenges and responsibilities of organizing and running the event.

To all our collectors: you did an amazing job, searching far and wide, high and low for specimens. You are our unsung heroes. The numbers and variety of fungi you collected were very respectable, considering our dry summer and the resulting lack of fungal diversity in our secret spots! Some excellent specimens were found, especially from Mt. Rainier and the coast, but there were fewer species found overall and some of our favorite mushrooms just did not cooperate this year. For example, we didn't see a single matsutake!

We thank our members who volunteered a couple of hours or even their entire weekend to make the show a success. We enjoyed working with you and we could not have put this show on without

Daniel Winkler

your hard work! We hope you enjoyed working with us. Thanks to our speakers—Denis Benjamin, Danny Miller, Marian Maxwell, Noah Siegel, Robert Rogers, and Daniel Winkler—who presented thoughtful, interesting, educational, and insightful lectures. We were especially fortunate to host and hear Robert Rogers, author of *The Fungal Pharmacy* and an authority on medicinal mushrooms. The talks were well attended and well received by the public.

We also appreciate the efforts of Brian Luther (ID Table); Dennis and Jamie Notman (Cooking/Tasting); Marilyn Droege (Arts and Crafts); Sweta Agrawal (Dyeing demonstration); James Ardena (Cultivation); Pacita Roberts (Kids' Table); Carlos Cruz (Security); Brenda Fong (Hospitality); Paul Hill (Photo Contest); Katherine Glew (Lichens); Wren Hudgins (ASK ME program); Alyssa Panning (Membership); Sherwood Stolt (Admissions); and Brady and Erin Raymond (Book sales). Thanks again to Daniel, Josh, Colin, and Wren (among others) for leading those informative tray tours, always a favorite with the public. Kudos to Lisa Page Ramey who once again designed our show poster and cards that we scattered all over town, and who also redesigned our yard sign. Thanks to Randy Richardson who rented the truck and drove all our stuff for the show across the lake. A huge thanks to Jill Bliss who let us use her colorful and fanciful design for our striking poster this year. Hugs to Luise Asif who once again ably coordinated our volunteers. A big tip of the hat to Donna Naruo who took over treasurer's duties this year (very important!), and Derek Hevel who found, dusted off the old UV light box, and got it working again so that we could put the spotlight on mushrooms that fluoresced, a very nice addition. Lastly, special thanks to Marian Maxwell, who seemed to be everywhere, coordinating the receiving, sorting, identifying, and arranging of the all the mushrooms on trays. Great work, everyone! Let's do it again next year!

WHITE TRUFFLE PRICES DOUBLE AFTER DRIEST AUTUMN FOR DECADES Nick Squires http://www.telegraph.co.uk/, Oct. 26, 2017

Gourmands of the world, despair—the price of prized white truffles in Italy has nearly doubled because of an unusually dry autumn. Prices are now as high as \notin 4,500 (\$5243) a kilo, compared to \notin 2,500 a kilo last year.

After a sweltering summer, Italy has experienced its driest October for 60 years, spelling disaster for the tubers. As truffle hunters start gathering what few tubers there are, they say the harvest could be down by 90 percent in some parts of the country.

Truffles are so expensive this year that one restaurant owner is giving his customers a written warning that they will pay a small fortune to sample the delicacy.

Alberto Bettini owns a restaurant in the village of Savigno in the northern region of Emilia-Romagna. Last year he offered a truffle-based menu for €35 but this year it will cost €55. He is warning diners of the expense they will incur if they opt for truffles.

"I felt obliged to do it so that they didn't think I was trying to rip them off," he told the Italian newspaper *Corriere della Sera* this week.

"We're buying fewer truffles this year because of the price," said Claudio Milani, head chef at L'Anima in London. "We bought 300 grams recently but it was for a private party."

FIELD TRIP REPORT, Sept. 23

Brian S. Luther

We had a delightful day on the Olympic Peninsula, with sunny and mild conditions for our first fall field trip. Our hosts were Carolina Kohler and James Rumbaugh, and they had a wonderful array of delicious breakfast snacks (including hard boiled eggs, yum) and hot coffee. James and Carolina, you really made a difference starting our day out right—thank you!

The Mason Co. campground host (Bernie) attended to any needs we had, like borrowing camp chairs and an ax. He had a lot of interest in the mushrooms, and we enjoyed his company all day.

Fifty members attended. Several field trip guides were able to take out a number of new members and others who came, and some found small but nice collections of chanterelles. Other than those, few good edibles came in. Only 31 species of fungi were displayed on the picnic table (even though conditions were moist in the woods), with nothing unusual being found.

Only a small group stayed for the potluck, and most everyone seemed to have a good day.



PSMS field trip hosts Carolina Kohler and James Rumbaugh, campground host Bernie, and PSMS Board member Paul Hill

FIELD TRIP REPORT, Sept. 30 Brian S. Luther

This was the second year we've gone to this location, and just as in 2016 it rained all day. The shelter, with its big fireplace which was kept going and warmed us all day, was much appreciated.

Our hosts were new members Paolo Assandri & Masaki Jo, and they put out a fine spread of breakfast snacks and coffee, which were appreciated and rapidly consumed. Thank you, Paolo & Mao

One hundred and three members signed in, and we were fortunate to have several field trip guides who volunteered to lead new members out. Some chanterelles were found, but not in abundance; 62 species of fungi were brought in, displayed, and identified. Thanks to Danny Miller who helped with ID all day.

About 25 members stayed for the potluck. Those I spoke with had a good day out in the woods, regardless of the wet conditions.

FIELD TRIP REPORT, Oct. 13–15 Brian S. Luther

We had 20 members sign in. The smaller-than-average group may have been partially due to the PSMS Ben Woo Foray on the same weekend, but also because it was a long drive. Several were new members who had never been on a PSMS field trip.

The location was exceptionally beautiful and has always had great potential for good collecting. Everyone I spoke with who had not been there before loved the site. It was below freezing at night, but warmed up nicely during the days and was very pleasant, so we had great collecting conditions. We kept the campfire going constantly, and a number of members camped both nights.

Ben and Natalya Moore were our hosts, hauling all the supplies up into the mountains (with two cars) and providing us with a big spread of breakfast bagels, muffins, croissants, etc., and hot coffee. Special thanks, Natalya and Ben, for a wonderful way to start our morning! Ben also helped me cut firewood (he had a chain saw), both for this site and for the upcoming field trip the end of October. On his way home, he dropped off a whole pickup full at our property outside of Leavenworth so I can take it over to the next field trip in our utility trailer.



PSMS Host Ben Moore along with new member Dominik Iwanowski show off the breakfast goodies.

We were also fortunate that new member Dominik Iwanowski had a powerful portable generator with him, allowing us to have power (and make coffee, etc.) in this otherwise powerless location. It was a big help! Dominik lives in Michigan. He recently retired and decided to do some travelling in his RV, so he came out west and joined PSMS and has been on all the field trips this fall. Thanks, Dominik, and we've enjoyed your friendship and look forward to seeing you out in Washington State in the future whenever you can make it.

Wren Hudgins, Erin O Dell, Randy Richardson, Julia Benson, and Dave Weber were our field trip guides. We often have far more members attend than can be taken out, so it was a real luxury for each guide to have only a few members to lead. The groups went out a couple of times to different locations nearby with good success. *Specimen table.*



Fine collections of two delicious chanterelles were found—the Rainbow Chanterelle (*Cantharellus roseocanus*) and the White Chanterelle (*C. subalbidus*)—along with Bear's Head (*Hericium abietis*). Other good edibles included *Hypsizygus tessellatus*, *Pleurotus* sp., and Pig's Ears (*Gomphus clavatus*). All together 44 different species were brought in and displayed.

An exceptional potluck at the shelter and around the big campfire was a fitting end to a fun day out in the woods on Saturday.

CHINESE VILLAGER FINDS THE "KING OF MUSHROOMS" Laurie Chen

South China Morning Post http://www.scmp.com/, Oct. 23, 2017

Villagers in southwest China have discovered a clump of massive mushrooms reports news website Yn.yunnan.cn.

The fungi, some of which are 83.5 cm (32.8 in.) high, were found by a farmer foraging for mushrooms near a village in Tengchong in Yunnan province.



Macrocybe gigantea indeed.

"I'm 81 years old and have never seen such a big mushroom in my life," the farmer was quoted as saying.

Villagers hailed the find as the "king of mushrooms," the report said. The largest has a diameter of 40 cm (15.75 in.), leading villagers to call them "elephant foot."

Yang Zhuliang, a researcher at the Chinese Academy of Sciences' Institute of Botany in Kunming, identified the mushrooms as *Macrocybe gigantea*, an edible fungus commonly found in India and Pakistan.

30,000 tourists flocked to the village a day and threw coins and notes to the wild mushroom for good luck. Unfortunately, after three days the mushroom started to rot.

MISSING MUSHROOMERS

It looks like the Fall mushroom season, delayed so long, has finally arrived—as unfortunately evidenced not just by reports of mushrooms but by reports of lost and missing mushroom hunters. British Columbia was especially hard hit.

Searchers Rush To Find Missing Hikers With One-Year-Old Child Terrace Standard, Oct. 18, 2017

Terrace, B.C., Search and Rescue (SAR) teams have found and extracted a family lost in the Watson Lake area October 12. RCMP requested SAR assistance when the family, which included a one-year-old daughter, failed to return as planned from a hike and mushroom pick. They were due back the same day but had spent most of the night lost in the woods.

Immediate concerns over the welfare of the young child propelled SAR to ensure the search was conducted immediately, and teams were sent out to the area as soon as possible.

Lighting the area with headlamps and flashlights, two SAR teams and an RCMP dog search team hurried to conduct a trail groundsweep using whistle blasts and other sound-attracting techniques.

As daylight approached, additional searchers, a SAR Mobile Command Post and air support joined the search effort.

Air support was utilized to transport SAR teams further into the wilderness if necessary to start searching for the missing family and also conduct an aerial search of the lakes and open areas.

A team arriving at Watson Lake saw two individuals at the far west end of the lake and contacted air support to return to the lake to identify the two individuals.

The sound of the helicopter drew the family of three to the edge of the lake where they were spotted.

The helicopter was able to land near the lake and picked up the family to take them back to the highway and their vehicle.

The family was assessed to be in good condition and returned home to receive medical care and further assessment.

Search for Missing B.C. Mushroom Hunter Called Off CBC News, Oct. 23, 2017

The official search for missing mushroom hunter Frances Brown, 53, was suspended eight days after it began. Nineteen search and rescue teams from across B.C. were involved in the effort, the largest in northern B.C. in many years.

Brown became lost on October 14 in heavy forest between Smithers and Hazelton in northwestern B.C. after she was separated from her picking companion. Brown had some back country experience, and was equipped with hiking and rain gear, as well as a lighter.

Evidence of a campfire was discovered early on in the search, but rain and snow hampered the effort.

Family and friends said they would continue to look for Brown, despite the official search being called off.

"Frances is out there and we need closure for the family," said grandnephew David de Wit.

Searchers Out Looking For Missing Mushroom Picker Near Nanaimo

Nanaimo News Staff

http://www.ladysmithchronicle.com/, Oct. 24, 2017

Searchers have found no sign of a senior who went out to pick mushrooms and didn't return.

According to Nanaimo RCMP, 35–40 search and rescue personnel from all over the Island are looking for 73-year-old Faye Hanson. She left to pick mushrooms on Sunday, October 22, at about noon and her vehicle was discovered near Timberlands and Ninatti roads on Monday, October 23, at about 10:30 a.m.

An RCMP police dog and search dogs are out looking, helicopter search support has been requested for a second day, and a mounted unit is covering the more hilly terrain.

"If somebody wants to help out they're more than welcome to help out, but first and foremost they have to check in," said Const.

Gary O'Brien, Nanaimo RCMP spokesman. "Secondly they have to be prepared for the environment, which includes food, proper clothing, footwear, and preferably a hand-held GPS device. If you don't have that stuff, don't come down."

Police are asking hunters to be aware that search personnel and dogs are in the area.

Food Forager Spent Night Lost Near Cougar Hot Springs, Oregon, Before Being Found Friday Afternoon Chelsea Deffenbacher

The Register-Guard, Oct. 14, 2017

A holistic health and wellness conference scheduled for Saturday at Lane Community College has been postponed after one of its organizers became lost on a food foraging expedition in the forest near Cougar Hot Springs on Thursday and was found Friday.

Connie Sahlin, 52, was found "alive and oriented" Friday afternoon, Lane County sheriff's Sgt. Carrie Carver said.

Details about the discovery were not immediately known.

The hot springs are about 50 miles east of Eugene, off Highway 126.

Sahlin was on a mushroom and food foraging trip for the Zaniyan Center conference, titled "Decolonizing Natural Medicine: Increasing Access to Holistic Heath for All," near the hot springs Thursday when she became separated from her group around 3 p.m., Zaniyan project manager Ahavah Oblak said.

The Lane County Sheriff's Search and Rescue team searched Thursday night and Friday morning. They were helped by Sahlin's friends and co-workers who organized a Facebook page called Connie Sahlin Rescue and Support.

After 24 hours in the woods alone, Sahlin was found.

Oblak said Sahlin was involved in organizing and preparing all the food for the conference. Her spouse, Michael Vasquez, is one of the key conference presenters and organizers, Oblak said.

MUSHROOM POISONINGS

In addition to mushroom hunters missing locally, there were worldwide reports of hunters who found things best avoided.

Danish Family Poisoned, Two Children Die

http://news.xinhuanet.com/, Oct. 19, 2017

COPENHAGEN - Two children in Denmark died after treatment for mushroom poisoning failed, local media reported Thursday.

The children are among 11 out of 12 family members who were hospitalized at Rigshospitalet hospital in Copenhagen, the capital city. They were believed to be poisoned after eating collected mushrooms, according to the Danish news agency Ritzau.

"We have just been informed that two of the children have died and we cannot say anything about the condition of the others, who are still being treated," Soeren Ravn-Nielsen, deputy police *cont. on page 6*

Danish Poisoning, cont. from page 5

inspector with the South Sealand and Lolland Falster Police, was quoted as saying at a press conference.

Doctor Trine Lilleng told the press conference that both children, one was 15 year-old while the other younger, died very quickly after the ambulance arrived at their home in Haslev, some 70 km south of Copenhagen.

Rise In Cases of Mushroom Poisoning This Season In France

www.connexionfrance.com/, Oct. 21, 2017

One person has died and two more have needed liver transplants after eating poisonous mushrooms since July, it has been revealed.

In total, 32 people have been treated for severe fungal infection at the 10 poison centers in France since the start of the annual surveillance period. The annual average number of people treated for severe poisoning during the season is 20, the Direction générale de la santé (DGS) reported.

The DGS said that it had received 1,179 reports of mushroom poisoning in the three months to October.

Of the 32 who required specialist treatment, 20 were suffering phalloidin poisoning, which causes severe digestive disorders and can lead to liver failure if it is not quickly diagnosed.

The DGS reminded wild mushroom pickers to take their mushrooms to a pharmacist for identification before eating them and urged anyone who suffers shaking, vision problems, nausea, or vomiting within 12 hours of eating wild mushrooms to immediately call emergency services—either the Service d'aide médical urgente by dialling 15 or one of 10 anti-poison centers across France.

Taking photographs of any wild mushroom before it is used in cooking can help poison control staff identify the fungus and adapt necessary medical treatment accordingly, a spokesperson said.

Seven People Hospitalized in Bulgaria

http://www.novinite.com/, Oct. 24, 2017

Seven people have been admitted in the district hospital in Haskovo, Bulgaria, in recent days with poisoning from wild mushrooms, announced the medical institution.

Two of them, a man and a woman from Harmanli, are in the intensive care unit, Dr. Georgi Gelov, executive director of MHAT-Haskovo, said. The other five are men from the town of Madzharovo, who consumed a mushroom soup.

PSMS MEMBERS FIND HUMAN SKULL NEAR GREENWATER

Closer to home, on Sunday during the Ben Woo Foray, PSMS members found half a skull near Greenwater. The skull appeared to have been there for some time.

Sheriff's deputies went to collect it Monday afternoon. Pierce County medical examiners confirmed that it was human, and deputies returned Monday and Tuesday to continue investigating the area.

MORE THAN 1,000 POISONOUS DEATH CAP MUSHROOMS FOUND IN OAK BAY

The Canadian Press, Oct. 13, 2017



Amanita phalloides, also known as "Death Cap" mushrooms, found in the Uplands area of Oak Bay. The mushrooms are often found under ornamental European hardwoods such as mature English oaks, chestnuts, lindens, and hornbeams.

The Death Cap mushroom—which killed a three-year-old who consumed the fungi in Victoria, B.C., last year—is sprouting up around the region.

Brenda Callan with the Canadian Forest Service said officials in Oak Bay have found more than 1,000 mushrooms since August— and that's just on public property.

She said the deadly mushroom tends to grow near the roots of trees, and seems more likely to grow near exotic and ornamental tree species.

Various agencies have teamed up to post warning signs about the mushrooms in areas where the Death Caps may grow.

Although 90 percent of worldwide mushroom deaths have been attributed to Death Caps, also known as *Amanita phalloides*, last year's death was the first documented fatality in B.C., Island Health said.

The mushrooms in that case were found near a sidewalk in a residential area of downtown Victoria.

When young, the mushroom has a domed cap, which flattens out and cracks as it matures. It is mostly white, with a colored cap that has been described as a brassy yellowish-green. With heavy rains, it can fade to a pale beige. As it matures, it will either brown or fade.

Death Cap mushrooms have a distinctive, bulbous cup at the base of the stem underground and a "skirt" below the cap.

ITALY'S "LSD ISLAND"

Patrick Knox news.com.au, Oct. 21, 2017

The idyllic Italian island of Alicudi north of Sicily looks like the perfect spot to escape. But the remote getaway has a very trippy secret—a hallucinogenic past which saw locals getting so high 24/7 that they had visions of flying witches.

For centuries villagers were fed on "crazy rye"—bread baked by local housewives which was unknowingly contaminated by a mind-blowing fungus called "ergot" fostered by the humid weather conditions.

Ergot is the base element of the hallucinogenic drug LSD. Up until as recently as the 1950s, oblivious island dwellers were getting high without even knowing it.

"It was a diet mistake, a bad eating habit triggered by poverty, isolation, and ignorance of hygiene," local historian Pino La Greca told CNN.

"The first harvests were scarce and food was precious so nothing was thrown away, even rotten bread and pasta covered in mold were eaten.

"Scarcity of other alternative food sources and humidity produced this nasty fungus that when ingested caused mass hallucinations, hysteria, hypnosis, and autosuggestion."

Because of their daily trips, legends then evolved of flying women, dubbed "maiara," meaning "sorceress" in Aeolian dialect.

There are ancient stories of these wicked sorceresses straddling the bows of fishing boats to make them sink or casting evil spells on enemies. Tales of men being turned into donkeys, cows, and pigs were shared among the villagers.

"These people were on a LSD-induced trip 24/7; they spoke to each other and shared their visions, making real what was only in their minds," La Greca said.

But whether you believe it or not, the island embraces its mascot of sorts. There are painted murals of flying ladies dressed in long black robes with their hair blowing in the wind, and tourists can buy T-shirts with the "maiara" logo.



Former village gristmill where hallucinogenic bread was made every morning by local housewives.

A \$1,000 BAGEL TOPPED WITH GOLD FLAKES, TRUFFLE CREAM CHEESE, AND WINE JELLY IS ABOUT TO GO ON SALE IN NEW YORK CITY Melia Robinson

http://www.businessinsider.com/, Oct. 23, 2017

In the bagel mecca that is New York City, you will soon be able to buy a bedazzled bagel.

The Westin New York Hotel in Times Square will begin selling a \$1,000 bagel topped with Alba white truffle cream cheese, goji berry-infused Riesling jelly, and gold leaf flakes, for a limited time starting November 1. It will be available via room service and at the hotel's restaurant during breakfast hours, though diners must place their order 24 hours in advance. The \$1,000 bagel appeared on the menu for a brief run in the fall of 2007, and requests for the blingy bagel have "come in yearly without fail," according to a press release from the Westin.

Ten years later, the bagel has returned, feeding the local lust for frivolous foods.

The hotel insists that customers who order the bagel are getting "more than just over-priced carbs." The white truffle grows almost exclusively in the Alba region of Italy, and most truffle hunters use trained dogs or pigs to find them buried next to tree roots. It commands as much as \$2,000 per pound. The high-end fungus tastes "slightly garlicky with a deep musky aroma," according to Executive Chef Craig Reid at The Westin New York.

The chef added that the goji berry-infused Riesling jelly offers a blended fruit aroma of cranberries, sour plums, cherries, and

orchard fruits like honey-crisp apples and pears.

Tax and tip are included in the bagel's four-digit price tag. The hotel will donate 100 percent of the proceeds to Holy Apostles Soup Kitchen, the largest emergency food program in the city.



\$1,000 bagel.

COMPUTER GAMERS TACKLE A SILENT KILLER IN OUR FOOD Howard-Yana Shapiro

http://www.dnaindia.com/, Oct. 22, 2017

Aflatoxin is an invisible substance produced by a genus of fungi called *Aspergillus* that contaminates staple foods and cash crops, mainly in the developing world. As you read this, billions of people around the world are eating foods contaminated with aflatoxin.

Aflatoxin B1 is the most potent naturally occurring liver carcinogen that we know. Aflatoxin-contaminated food is also associated with stunting in children, and childhood cirrhosis in India. The harm doesn't stop at human health. It's also a massive trade and economic issue. India is the second largest producer of groundnuts [peanuts] for human consumption. However, in 2015, over 20 percent of groundnuts produced in India was unfit for human consumption due to aflatoxin contamination. Another study conducted by The International Crops Research Institute for the Semi-Arid Tropics revealed that the level of aflatoxin in Indian groundnut is 40 times more than permissible limits elsewhere in the world, making key export markets inaccessible to Indian farmers.

Science alone has not been able to provide a solution to aflatoxin yet. Unexpectedly, one solution to this growing public health crisis may come from an unlikely source: An army of global computer gamers!

Mars, Inc. is launching a series of aflatoxin puzzles on its Foldit platform led by computer scientists from Northeastern University and the University of Washington. Foldit is a revolutionary crowd-sourcing computer game that allows anyone with a computer and imagination—but not necessarily any scientific training—to help solve scientific puzzles. Foldit has already had great success by solving a riddle involving a virus similar to HIV that had troubled scientists for decades.

MATSUTAKE GELATO Chef Kaleb Michael's Seafood and Steakhouse Port Angeles, WA

Ingredients

- 1 ea. Vanilla bean, split in half, seeds scraped (reserve both)
- 2 qt Heavy cream
- 8 ea Egg yolks
- 1 ea Lemon, juiced and strained
- 16 oz. Sugar
- ¹/₂ tsp Salt
- 2¹/₂ lb Matsutake mushrooms, minced fine

Preparation

Combine heavy cream, vanilla bean husk, and matsutake mushrooms. Simmer mixture for 10–15 minutes (DO NOT BOIL).

While cream, vanilla, and mushroom mixture is simmering, combine lemon juice, vanilla bean seeds, egg yolks, and sugar in a large stainless steel mixing bowl.

Mix in kitchen mixer for 5 minutes on medium speed until yolk mixture has almost doubled in size.

Once cream, mushroom, and vanilla husk mixture is done simmering, strain through a VERY FINE sieve or strainer and press through as much liquid as you can get. Add strained mixture to egg yolk mixture and refrigerate until it has reached 41°F.

While ice cream base is cooling, pre-chill your ice cream machine. Once ice cream base is chilled, pour ¼ of base into ice cream machine while it is spinning. Put lid on and spin base until blade can no longer spin. Remove ice cream, Place in freezer and repeat process until ice cream base has all been spun.

Yield: Approx. 3 qt.

Gamers Tackle Aflatoxin, cont. from page 7

With respect to aflatoxin, the aim of the Foldit puzzle is to figure out how amino acids are folded together to create proteins, the workhorses of our bodies. Gamers don't need to know science, they just need to create an increasingly perfect folded form that might mimic the one that exists in nature. This game taps on the innate skills in human beings to provide solutions to 3-D puzzles even better than computers.

The best designs will be developed using the latest synthetic biology techniques and materials donated by Thermo Fisher Scientific. The souped-up enzymes will be tested in real life by the Siegel lab at the University of California, Davis, to see how they can recognize and neutralize aflatoxins. All the discoveries of players will be kept in the public domain, free of patents.

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ΚΕΤURN SERVICE REQUESTED



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