**MUSHROOM OF THE MONTH: AURICULARIA**


Commonly known as Wood Ears or Tree Ears, *Auricularia* mushrooms are a centerpiece of Asian cooking. Asian mycophagists have used these mushrooms for centuries. They were traded extensively in the late 1800s from New Zealand to China and Hong Kong. They are not flavorful but rehydrate well and are used in soups and sauces for texture. *Auricularia polytricha* is the species prized in Asia. This mushroom is thought to be one of the first species cultivated according to records in China dating back to around 600 AD.

*Auricularia* species are Basidiomycetes and belong to the order of Tremellales, which are the jelly fungi. The name *Auricularia* comes from the Latin word for ear. *Auricularia auricula* - judaeas has been called the Jews Ear, as it grows on elder, the tree on which Judas Iscariot is said to have been hung.

There are several species, including *A. polytricha*, *A. auricular*, and *A. mesentica*. *A. polytricha* is common in the Americas through Mexico and on to Argentina. *A. auricularia* is a northern temperate species. It is not cultivated like *A. polytricha* but is collected in the wild. It has hairs on the underside which are shorter than those on *A. polytricha*. *A. fuscocinerea* is found in the southeastern U.S. on south to Argentina.

Often *A. auricularia* and *A. polytricha* are mistaken for each other. Though they are quite similar to the eye, closer examination shows differences in spores and hairs, and they grow on different types of trees.

The *A. auricula* fruit body is 6–10 cm (1–6 in.) and ear shaped, lacking a stalk but having a short peduncle. The outer surface is sterile and pubescent. The inner surface is fertile, reddish brown, at first smooth and then veenoce. It is pruinous because of the spores. The flesh is gelatinous, slightly elastic, and translucent. It has no particular odor or taste.

The spores are white, cylindrical, and smooth, measuring 12–17 × 4–5 μm. The season is between May and June as well as September through December. Its habitat is broadleaf wood, and it is especially present during the rainy season.

It is edible, but its value is in its texture, not its flavor. Upon drying it tends to turn violet and circumvolute. It is fragile when dry but readily revives with hydration.

*A. polytricha* is grown commercially in the orient, where it is called Mu Ehr among other names. It is used in soups and vegetable dishes. Used as a folk medicine, it is touted for smoothing coughs and for generally improving the physical condition. In Paul Stamets’ book *Growing Gourmet and Medicinal Mushrooms*, it is reported that this mushroom is 80% effective against Erlich carcinoma and 90% effective against sarcoma.

It was discovered to be an anticoagulant when the blood of a student who had eaten Chinese food the night before taking a blood clotting test wouldn’t clot. This led to the development of a new anticoagulant. *A. polytricha* may contribute to the low incidence of coronary artery disease in China.

Nutritionally, the *A. polytricha* is 8–10% protein, 0.8–1.2% fat, 84–87% carbohydrate, 9–14% fiber, 4–7% ash, and approximately 90% moisture.

I found that the dried *A. auricula* is better than fresh in texture. It seems to improve when reconstituted. To reconstitute, soak in warm water about 20 minutes. Wash thoroughly and cook well as they have a gelatinous texture. I use them in stir frys or in soups. A sauce can be made of onion, garlic, basil, and finely sliced Wood Ear thickened with a little cream.

**THANK YOU TO OUR GENEROUS MEMBERS**

Karin Mendell

We have an amazing membership! Not only do they give of their time and energy, they also donate generously to our Society. Since last October (2002), fourteen members have made contributions to PSMS. Donations were earmarked for either the Ben Woo Scholarship Fund or the General Fund. We would like to express our gratitude to the following members: Wade & Osa Sommermeyer, Edward & Patrice Benson, Johnny & Sharma Oliver, Dennis Oliver, John Floberg & Lisa Bellefond, Gary & Sherry Lundgren, Janice Humeniuk, Bonnie Hayford, and Keith Reher.

We appreciate the continued support of our members’ investments in our future.

**INVITATION TO NEW OFFICERS AND BOARD MEMBERS**

Karin Mendell

As a result of changes to our bylaws in 2002, newly elected officers and board members will be announced at the Survivor’s Banquet on March 15, but do not assume office until the April board meeting. In the meantime, all new electees are invited to attend the March board meeting as observers on Monday, March 17.

I note again that PSMS board meetings are open to our general membership, though only elected board members have voting rights on decisions concerning the business of running the society. Our revised bylaws will soon be posted on our website (http://www.psms.org) for member review.

We are, again, grateful to our members who step forward to take leadership roles as officers and board members. Your willingness to serve this organization makes all of our terrific activities possible!

**LAST NOTICE FOR DUES**

If your address label has an asterisk on it, this will be your last newsletter unless you renew as soon as possible. To continue your membership, send your dues ($25 full time, $15 students) to Bernice Valetegui, 2929 - 76th Ave. SE #504, Mercer Island WA 98040.
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MEMBERSHIP MEETING

This month is the Annual Meeting and Survivor’s Banquet,
Saturday, March 15, at the Center for Urban Horticulture.

Festivities begin at 6:30 PM. The theme is “Foods from Different Countries.” Members whose last names begin with the letters A–H should bring a dessert, I–R should bring appetizers/veggies/salads, and S–Z should bring a main entree. Remember to list the ingredients in your dish, and to turn in a recipe for the door prize!

SPRING FIELD TRIPS

The spring field trips have all been scheduled, and we can look forward to collecting mushrooms, swapping tales over our usual creatively delicious potluck dishes, and benefiting from the expertise of our intrepid identifier(s). Enjoy the fresh air as you hike, the learning, and the convivial company of fellow fungi seekers!

Note: This year Washington State parks will start enforcing a new rule calling for all state park visitors to pay a $5.00 fee for each car parked within the park.

March 29  
MacDonald County Park  
(30 miles east of Seattle)

To start off the season, we will visit MacDonald Park, on the Tolt River about ½ mile south of the town of Carnation in King County. Enter the park on N.E. 40th Street from State Highway 203. Watch for PSMS signs on the corner and use the day-use parking lot. We will meet at the main shelter across the suspension bridge for a general introduction to mushroom hunting. Then we will break into small groups and go out to gather specimens. Identifiers should be available around 10:30 AM. There should be Verpa bohemica under the cottonwoods in the surrounding area. We’ll meet rain or shine. You may want to bring lunch.

April 5  
Flaming Geyser State Park  
(elev. 300 ft, 35 miles southeast of Seattle)

From SR#405 take Highway #169 heading East(Black Diamond/Maple Valley Highway) drive thru Black Diamond. Drive 3 miles so.of Black Diamond and turn right on to Green Valley Rd.(should turn off before you reach Enumclaw.) Drive around 3.5 miles and turn left onto Flaming Geyser Road. The park runs along the Green River. Look for the PSMS signs at a picnic shelter close to this entrance.

May 10  
Twenty-Nine Pines

May 31  
Bridge Creek

June 7  
Swauk Creek

June 14  
TBA

FIELD TRIP TIPS

For those who joined PSMS at the Annual Exhibit in October, I thought it might be nice to review some basic mushrooming tips regarding the upcoming spring field trips.

Apparel: The Pacific Northwest is wet. Wear warm clothing, preferably in layers, and waterproof shoes or boots and bring your rain gear. Pacific Northwest vegetation is usually thick, and the sky is frequently overcast. Bring a compass and whistle and a map of the area—and remember to use them.
For your event:

hosts are asked to supply coffee, hot water for tea, and some type of pastrys.

members bring their own picnic supplies (plates, utensils, etc.).

important—marianne sakamoto will be holding the box of field trip supplies at her home. please call her at (425) 454-5396 to arrange pickup of the kit before your field trip.

plan to stay and host the potluck following the mushroom picking! (the first field trip is only a half day, so there will be no potluck.)

• have fun meeting other new and longtime members!

if you have not done so in the past, please consider hosting a field trip this season. it’s a great way to meet people and develop lasting psms relationships. e-mail marianne sakamoto, msakamoto@msn.com, or call the number given above to reserve your opportunity to host this spring!
Notice to *Mushroom, the Journal* subscribers

Leon Shernoff, the new co-editor of *Mushroom, the Journal of Wild Mushrooming*, reports that the Winter issue, which normally comes out in December, should have been mailed February 21 and should have reached North American subscribers some time the following week.

Leon would appreciate having e-mail addresses of *Mushroom* subscribers who are not NAMA members. His e-mail address is leon@mushroomthejournal.com.

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**ROZITES CAPERATA CRIPPLES HERPES, OTHER VIRUSES**  

Rain forests and other remote, undeveloped spots on the planet aren’t the sole source of medically useful plants. Researchers at the University of Wisconsin Medical School have discovered that *Rozites caperata*, a mushroom that thrives among the jack pines in northern Wisconsin, can cripple certain viruses. The researchers reported their findings in the August [2002] issue of *Antiviral Research*.

Extracts from the mushroom prevented herpes simplex virus types 1 and 2 from growing in test tubes and reduced the severity of herpes-related eye disease in mice. They blocked influenza A, chicken pox, and a respiratory virus. What’s more, the mushroom has unique characteristics that may help scientists unlock secrets about the way many viruses reproduce.

The active part of the mushroom, a compound they call RC-183, has been patented. “This is a novel compound, with a structure unlike anything that’s ever been described,” says Curtis Brandt, Medical School professor of ophthalmology and visual sciences and co-author of the article. “We’re hoping our studies of will reveal new information about the way viruses replicate.”

“It’s also possible RC-183 may become a lead compound for a drug to treat influenza A,” says Brandt’s co-author Frank Piraino, an associate scientist in the department of ophthalmology and visual sciences.

The Wisconsin scientists may be most excited about the lessons they hope *Rozites* can teach them about the inner workings of viruses. So far, they know that RC-183 contains ubiquitin, a substance that appears to play a central role in at least two cellular processes. Like a garbage/recycling truck that removes household trash, it removes proteins that have finished their jobs in cells. And it also helps the immune system recognize foreign antigens and mount a defense against them.

“Our challenge will be to learn exactly how RC-183 may block a ubiquitin-dependent step in virus replication,” says Brandt. “To start with, this project has shown us very clearly that concern over the disappearance of natural habitats as a source of new drugs applies universally, including to the United States, to right here in Wisconsin.”

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