The Potomac Sporophore

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Listen up. Tree ear is more than a soup enhancer. Find out more on page 6.

In This Issue

It Looked Tasty: Forbidden Fruit

Willow Nero
Sporophore Editor

Nary a MAW meeting passes where bold mycologists don't report their favorite edible mushrooms are the American Caesar's mushroom, which shares a genus with the scary death cap (*Amanita phalloides*) and destroying angel (*Amanita bisporigera*); a blue-staining cep that defies the three tests of bolete edibility; or the jellied false coral (*Tremellodendron schweinitzii*), which tastes like rancid buttered popcorn according to *The National Audubon Society Field Guide to North American Mushrooms.* To each his own ... grave? Every mushroom is edible — at least once, right?

An informal poll of MAW members indicates that despite the warnings, mycologists remain an experimental yet cautious bunch. Somebody has to be the guinea pig, and who could resist a new mushroom rumored to taste just like king bolete?

Willow Nero

The dryad's saddle *(Polyporus squamosus),* while perfectly safe to eat, draws its share of debate. Large specimens can be tough as leather.

The first bite

Johnny Pantages has been hunting wild mushrooms for about four years now, and he characterizes his first few apprehensive bites as a "nibble."

"You start out at a place and you don't know anything," he says. His first experience identifying a potentially edible mushroom, a lion's mane (*Hericium erinaceus*), led him all over the Internet and left him unsure.

"It seemed like it was OK with all the information I could get," he says. "One source said you can't miss this one. Then the other article said never eat anything if you're unsure."

The lion's mane turned out to be delicious, as expected, and today Pantages eats other stuff "with greater abandon" but exercises due caution. He's turned down plenty of *Lactarius* species,

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Fungus Notebook: 'Judas' Ear' Has Lengthy History as a Medical Remedy

William Needham
MAW Vice President

Common Name: wood ear, tree ear, jelly ear, mu-erh or mo-er (Chinese), senji (Japanese) — The fungus grows from a single attachment and has the general bracket-cup shape and gelatinous texture of a human ear. It grows on trees, usually branches and not on the ground.

Scientific Name: *Auricularia auricula* — The Latin word for ear is *auriculus*; the use of this term for both the genus and the species would imply "ear-like" to express its appearance and "ear" to express its attachment at a single point. It is also frequently listed as and was originally called *A. auricula-judae* and has been accordingly called Jew's ear or Judas' ear due to this assignation.

Potpourri: The incongruous appearance of what looks to all intents and purposes to be an ear on a tree evidently caught the attention of hunter-gatherers throughout Eurasia at the dawn of human history. This is evident in the fact that *Auricularia auricula* and its hairier Asian cousin *A. polytricha* (Greek for many hairs) are listed in the earliest known general references on plants in both Europe and Asia. Global availability, facile recognition and pliable consistency apparently encouraged the adventurous (and probably chroni-

Jacob Whittaker

The wood ear or tree ear mushroom (*Auricularia auricula*) has the general shape and texture of a human ear.

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Mycophagy

Continued from page 1 which he's heard are "not all that good" anyway.

"Can you believe what you read, what you're interpreting?" he asks. Even at MAW events, an identifier can be so bogged down with queries that you might not get a straight answer — or you might think you've gotten the green light when it was another mushroom in question.

"For a new person, the real issue is a great deal of subtle information that's very hard to interpret," Pantages says.

Avoiding discomfort

Back in October 2014, Tanya and Andrew Nosek tried their first honey mushrooms. Tanya was naturally curious about the *Armillaria* genus and its mixed reviews from other club members; Andrew was focused on his fortuitous find. Why did he have to eat them? "Because we found them!"

Even after reassurance from MAW identifiers that the couple's honeys were safe to eat, notwithstanding any individual reactions or allergies, Tanya had her doubts. Honey mushrooms are notoriously difficult to identify, and many beginners will accidentally throw a *Galerina* (hopefully not a deadly galerina [*Galerina marginata*]) or the big laughing gym (*Gymnopilus junonius*) into their basket.

"Honeys, I was a little scared to eat them," Tanya says, "because of all the stories I heard at Sequanota. Maybe people didn't cook them and had a strong reaction. I'm not really into getting sick from eating mushrooms."

Tanya took the extra precaution and boiled her honeys twice, changing the water each time, before adding them to a stew with hen-of-the-woods (*Grifola frondosa*) and chicken-of-the-woods (*Laetiporus sp.*). The result was serviceable. Andrew praised the meal, but Tanya admits the honeys "weren't all that awesome."

Alcohol inky caps (*Coprinopsis atramentaria*) still make longtime MAW member Dan Moffett a little nervous. They were one of the first species he learned to identify with the help of a field guide, and he later learned they can cause problems when eaten with alcohol. "I didn't find out until much later. … I never had a problem," Moffett reports.

He's also careful about the slight but potentially deadly resemblance between one of his favorite edible mushrooms, the shaggy mane (*Coprinus comatus*), and many members of the Amanita genus.

Mushroom Tasting Tips

☐ Use multiple identification criteria. Color or shape alone cannot predict edibility. Spore print color, gill attachment, partial veil remnants, and color reactions all tell a bigger picture. Pay attention to criteria in field guides.

☐ Only eat mushrooms identified to species. A new but similar species could affect individuals differently.

☐ Cook all wild mushrooms. Heat can be the difference between a bad meal and a delicious one! It helps remove potentially dangerous substances from some mushrooms.

☐ Pay attention to any special cooking or cleaning instructions. Some species need to be peeled or boiled. Most field guides will note this under edibility.

☐ Eat a small portion as a test. If no ill effects are observed after 24 hours, try some more.

☐ Sample one new species at a time.

☐ Save a few uncooked mushrooms separate from your meal. (You might be grateful for an identifier's help after a particularly troublesome meal.)

☐ Only serve professionally identified mushrooms at MAW events. Have one of MAW's identifiers examine all mushrooms before cooking them.

Another MAW member who preferred not to be identified says the closest he gets to danger is occasionally "grazing" on a novel "odd-ball" *Paneolus* species in the grass. Knowing no *Paneolus* is outright poisonous (though none Continued on page 3

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Volunteer to review mycology books, films, and events or submit your own original idea or recipe.

Correction:

On page 8 of the January issue, translations escaped us briefly. The word *mushroom* contains the word *room*. In Italian, *stanza* means "a little room." Get the connection? We thank poet Jay Millar for introducing MAW to this interesting link between mycology and the arts.

Our New Spring Taxonomy — ReJoyce!

John Harper
MAW Treasurer

No poem is more lovely (to me) than mycology,
but I find nothing more confusing in its taxonomy.

The first confusion begins with a well-known tree,
under which morels are sought by fools like me.

So I'll start with *L. tulipifera* — a "tulip poplar" to all of us.
Yet there is no such a tree listed under genus Populus.

Gyromitra we also call "false" — so unlike a morel, I'd laugh.
And also false, *Verpa bohemica* wears its hat too loosely (by half).

M. semilibra is all I'd take of the half-frees,
but for its spotted stipe, I now must call it *punctipes*.

Verpa conica under its peaked dunce cap remains
but *M. conica*'s defunct, split, with three new names.

They've found that our *M. esculenta* is not the same.
And worse, *M. deliciosa* has lost its pleasing name!

Well, at least *M. esculentoides* is still found everywhere!
(Ok, maybe it's *M. cryptica* — but I won't care.)

I can now call it *M. virginiana* where tulip trees stand tall
(even though it could be *M. dimunitiva*, if it's really small).

M. angusticeps has a ring around its neck (for ant races),
as does *M. septentrionalis* (in our northern places).

M. importuna could be in wood chips anywhere,
but in the east, I think it's still quite rare.

The burn-site *M. capitata*, and all the rest,
I will leave to another poet who lives out west.

Though, after a day's walk yields zip, zero, nada,
I wonder how it could be said that only the west has *M. frustrata*?

On Morels

"People who are quite nice suddenly become not nice, especially if the person next to them has found morels."
— *Gary Lincoff*

Morel Watch

It's nearly morel season. At least one MAW member has reported morels! Follow the action online with the morel tracking map at www.morelhunters.com and share your great finds with fellow MAW members at www.facebook.com/MycoDC.

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are recommended for consumption and several contain serotonin and other related substances), he sometimes takes a bite just for fun. *Caveat comedenti.*

Special rules

Most amateurs haven't even suffered GI upset as result of their buoyant hopes about a new bonanza, but from time to time gluttony or excitement gets the best of someone.

Rimas Cikotas learned the hard way to peel slippery jacks (*Suillus luteus*). The viscid cap on these boletes is known to some as a "slime coating."

"That was a big mistake," Cikotas says. "Wasn't even that much, but I shat my gut for hours. I advise that everyone peel those puppies."

Aside from that experience, the Cikotas family has been incident free even though Cikotas does sometimes succumb to mushroom greed.

"Often you see wondrous things you never saw before and often in quantity," he says. "It is tempting not to collect and take it home with the hopes of identifying it if you have time and then cleaning, cooking, or drying all the good stuff." But, as happens to many pickers, "the wishful thinking collections usually just rot in the fridge and get pitched at our house."

Whether tasted for fun or as a flirtation with death, any mushroom, wild or cultivated, can provoke unexpected reactions. Report any incidents to NAMA's Toxicology Committee, and call the National Capital Poison Center at (800) 222-1222 (or another poison control center) if you suspect a mushroom poisoning.

To read more about mushroom poisonings, near-poisonings, and strange reactions, check out NAMA's *McIlvainea* amateur journal at www.namyco.org. Each year, NAMA's Toxicology Committee publishes a report in *McIlvainea* of all reported incidents in North America. They range from the mundane (a bout of the *Suillus* shits) to the totally bizarre (a horse on shrooms).

Mushroom Essence

1 ounce dried mushrooms
20 ounces neutral cooking oil (olive or sunflower will work)

Choose an exotic mushroom species for a mushroom essence (oil) that really impresses guests. Porcinis, morels, chanterelles, and shiitakes all make nice oils.

Add the dried mushrooms to the cooking oil. Heat this mixture in a sauce pan over low heat until the oil takes on some of the color and flavor of the mushrooms. Turn off the heat, and allow the oil to cool completely. Bottle the oil for later enjoyment. Leaving the mushrooms in the oil will help with flavor development but will reduce shelf life.

Enjoy your mushroom essence on salads, pastas, pizzas, mashed potatoes, and more. It's like truffle oil without the fleeting quality! Salt the discarded mushrooms and call them "confit." They should keep for a few weeks.

Meeting File

Feb. 3 — Joyce Harman Demonstrates Mushroom Photography Techniques

Willow Nero
Sporophore Editor

To sum up photographer Joyce Harman's Feb. 3 lecture for MAW members: 1. Mushrooms don't move, so take advantage; 2. Use a good camera app (rather than a native camera offering) on your cellphone; 3. You need a tripod; 4. Stop using auto mode; 5. Consider your composition; 6. Leave no trace and do no harm; and 7. Mushrooms don't move, so photograph them!

Harman, a veterinarian and avid photographer who runs the website Harmany in Nature Photography at www.harmanyinnature.com, emphasized thoughtfulness and patience in nature photography and gave ample tips to create miniature mushroom landscapes.

"Sometimes you have to experiment," she said, describing the composition process. "You add a leaf and decide you don't like it. You get another leaf."

Harman typically shoots on a DSLR, but she also finds smartphones can take remarkable photos. She encouraged MAW members to download professional-grade photography apps rather than those that come standard with new phones. These apps allow the user to adjust focus and exposure and improve the quality of images.

While tripods are "a pain in the rear end," Harman pointed out their usefulness in allowing the photographer to relax and compose. "It gives you the time to pay attention because you set your camera up. You do your whole setup. You can move everything around, rest your back … get things the way you want them." Even a small bean bag can provide the stability needed to get a good photo at the lower shutter speeds that are essential for getting crisp photos in low light, which is common where mushrooms grow.

Lighting, she said, also makes a big difference. While a light box or true daylight is ideal, even a small LED flashlight can provide enough visual interest and texture to make a photo more exciting.

For the best composition, Harman recommended photographers avoid placing their subject in the center and instead think about the composition as a grid based on thirds, each of which need proper balance. Consider using vegetation to add interest and color. Perhaps move a leaf or stick as needed, but most important, stick to the leave no trace philosophy and avoid harming the habitat of your subject (mushrooms and their associates).

Willow Nero

Photographer Joyce Harman shares with MAW members camera techniques and tricks for macro photography.

March 3 — Johns Hopkins Doctor Explains Psilocybin Research Through the Years

William Needham
MAW Secretary

There has been a renaissance in the use of psilocybin for medicinal purposes after a 40-year hiatus precipitated by the passage of the Controlled Substances Act in 1970 as part of the "War on Drugs." Psilocybin (the chemical name is O-phosphoryl-4-hydroxy-N,N-dimethyltryptamine) is an active agent in over 100 species of mushrooms, most notably in the genus *Psilocybe*. In order to better understand this research,

Upcoming Events

May 5 — monthly meeting with Tim Geho, a morel experts who finds up to 77 pounds of morels in a good year.

June 2 — monthly meeting with Bob Blanchette, a professor at the University of Minnesota with special interests in biology and ecology of forest fungi, diseases of trees, wood microbiology, indigenous uses of *Ganoderma* (Lingzhi) in Asia, and fungi that attack historic structures.

July 7 — monthly meeting with a Michael Castellano, a research forester for the USDA, Forest Service. His presentation is *What are Truffles and How Do You Find Them?*

Aug. 4 — monthly meeting.

MAW's May and June meetings will be held at the Davis Library, 6400 Democracy Blvd., Bethesda, MD. Unless noted, meetings are held at 7 p.m. on the first Tuesday of the month at the Kensington Park Library in Kensington, Maryland. Attendees are encouraged to bring mushrooms for sharing and identification. Members of the public are welcome to drop in.

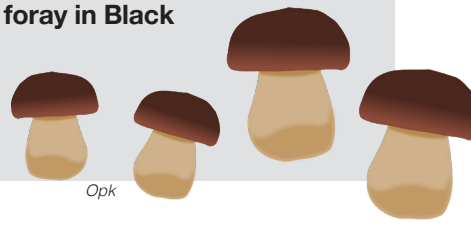
Save the Date. Don't miss these big events in 2015!

July 30–Aug. 2 — North East Mycological Federation (NEMF) foray at Connecticut College. More information: www.nemf.org/foraynext.htm

Aug. 28-30 — MAW's 4th Joint Appalachian Foray at Graves Mountain Lodge in Syria, Virginia.

Sept. 18-20 — MAW's Camp Sequanota weekend foray in Jennerstown, Pennsylvania.

Sept. 24-27 — NAMA 2015 foray in Black Mountain, North Carolina. More information: www.namyco.org/events



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Danny Barizo

Dr. Albert Garcia-Romeu reviews the history of psilocybin research and its more modern applications.

MAW invited Dr. Albert Garcia-Romeu, a postdoctoral fellow at the Johns Hopkins University (JHU) School of Medicine to discuss his work at the March 3 meeting. Garcia-Romeu's talk, entitled *A Systematic Research Program Examining Psilocybin, Mystical Experience, Personality Change, Adverse Effects, and Therapeutic Applications,* presented a brief summary of the history of psychedelic substances and an overview of recent research about their efficacy.

The use of mushrooms to enhance spirituality has been practiced in Mesoamerica for centuries; the Aztecs called them *teonanacatl* which translates as "god mushroom" or "flesh of the gods" to impart a numinous association. Psilocybin is what is known as a serotonin 2A (5-HT2A) agonist hallucinogen/psychedelic substance with properties similar to LSD and mescaline. Following the synthesis of psilocybin by Albert Hofmann, a Swiss chemist who worked for what is now a division of Novartis, classic hallucinogens were actively researched in humans as both pharmacological tools and potential therapeutics from the 1940s through the early 1970s. It was during this time that the term *psychedelic,* meaning "mind manifesting" or "mind revealing," was coined by Humphrey Osmond as he famously rhymed in a letter to the author Aldous Huxley (who was also interested in mind experiments): "To fathom Hell or soar angelic, just take a pinch of psychedelic."

The psilocybin studies at JHU began in 2006 as a broad assessment of the effects of a high dose of psilocybin in 36 highly functioning, spiritually involved people with no history of hallucinogen use. The drug sessions, which were closely monitored by trained specialists, were followed by administration of a questionnaire designed to qualitatively measure spiritual effects. The participants showed marked improvement in parameters that ranged from sacredness to intuitive knowledge. Follow-up tests taken two months after the sessions revealed that the spirituality and feeling of well-being persisted. A second study was commissioned in 2011 to confirm the initial findings using a similar demographic while varying the dosages with the inclusion of a placebo. This study found similar feelings of increased well-being and life satisfaction. Garcia-Romeu concluded his talk with a summary of his participation in a pilot study that evaluated the use of psilocybin in the treatment of nicotine addiction. The trial involved 15 participants who had a mean age of 50 years, smoked about 20 cigarettes a day, and had been smoking for about 30 years. The results were promising: 10 of the 15 participants were abstinent from tobacco after one year of treatment. Studies of psychedelic substances will continue at JHU; one study for cancer patient treatment is in active planning stages.

Connie Durman

Gary Lincoff, center, teaches MAW members about various fungi on a mid-morning foray before the April 7 meeting. Mushrooms were far from plentiful, but Lincoff still had plenty of discussion fodder.

April 7 – Gary Lincoff Heralds New Discoveries in Mycology, Encouraging Citizen Science

Willow Nero
Sporophore Editor

Gary Lincoff, an instructor at the New York Botanical Garden and the author of the widely used Audubon mushroom field guide, addressed MAW members at a special dinner meeting April 7, encouraging amateur mycologists to break away from the dominant thinking in biology and instead apply lessons learned from mycology.

"What we're trying to do is piece together this puzzle of life and make more sense of it than has been," he said, relating his broader theme of continued research back to the surprising discovery that fungal endophytes are conferring water and heat tolerance on their plant associates.

Lincoff explored with his audience many exciting developments in mycology, several of which are just being published. He lamented the years it will take for these studies to be broad textbook knowledge, but recognized progress, too. After all, fungi weren't even a kingdom when many members of his audience studied biology in high school or college.

Lincoff declared competitiveness as a dated way of thinking about ecology and demanded that MAW take an interest in the nation's mycological awakening.

"This is 2015," he said. "The fungi are a kingdom. We all know that. Who recognizes that? Is it recognized at the Museum of Natural History? ...

"Is it recognized at the White House? You have the White House in this town. Do they have a resident mycologist? Have you tried?"

Lincoff reminded MAW members that mycology is happening even in their backyards — and science can happen there, too. Researchers recently found that the diminutive *Conocybe lactea*, a common "decomposer" lawn mushroom that barely lasts a day before crumpling, has the ability to kill nematodes apparently for sport; the mushroom derives no nutrition from the roundworms).

Among his other revelations were unrelated species of trees helping one another via webs of mycelium ("mushroom roots"), nearly all plants have fungi in their cells or mycorrhizal relationships (among roots), fungi help some plants survive rough times, fungal diversity in New York's soil is just as rich as in the Amazon, and all plants might as well be lichens. Read Lincoff's main points at http://garylincoff.com/?page_id=5881

Aricularia auriculus (cont.)

William Needham

Tree ear is one of the oldest documented "plants" in both Europe and Asia.

Continued from page 1

cally hungry) hominid to try it, perhaps judiciously at first. The taste and texture evidently encouraged some experimentation, resulting in what was undoubtedly a watershed moment in history when it became the first fungus in the historical record to be cultivated; this occurred about 600 CE during the Tang dynasty of China, preceding the first European discovery of mushroom cultivation of the *Agaricus bisporus* (or, more appropriately, the champignon) in the caves around Paris in the 18th century.

Auricularia auriculus is a member of order Tremellales — more commonly known as the jelly fungi on account of the texture which can range from gelatinous to rubbery. Fruiting body shapes include everything from an amorphous mass like witches' butter (*Tremella mesenterica*) to the rigidly lobed tree ear. Jelly fungi are basidiomycetes in spite of their verisimilitude to the ascomycetes or cup fungi. The common brown cup (*Peziza badio-confusa*) is an ascomycete that is very similar in appearance to *A. auriculus*; however, it only grows on the ground and has brittle flesh in contrast to the arboreal habitat and pliability of tree ear. The two main subphyla of the kingdom Fungi — Basidiomycota and Ascomycota — are distinguished according to their spore-bearing structure, the former having a club-like four-spored basidia and the latter having a sac-like eight-spored ascus (from Greek *askos* meaning bladder). It is in the structure of the basidia that the jelly fungi are distinguished. Where other basidiomycetes (all of the "mushrooms" except morels) have simple, tubular basidia, the Tremellales are either partitioned or forked.

It is not known when the anthropomorphic name Judas' ear and its mildly pejorative derivative Jew's ear were used for *A. auriculus-judae*, but its appearance in early European accounts suggests an ancient lineage. It is widely attested that the provenance of the name is the biblical account of Judas in Mathew 27:5; after hearing of the condemnation of Jesus due to his betrayal, Judas "threw down the [30] pieces of silver in the temple and departed, and went and hanged himself." There is no indication of a specific tree involved, though numerous derivative sources identify the tree as an elder, one of the numerous trees that hosts the tree ear. Neither is the Judas association sui generis; the redbud tree (*Cercis canadensis*) is also known as the Judas tree because of its purported association with Dante's most evil of villains — its white flowers changed to red buds as a sanguine reminder of this the penultimate betrayal of a friend. It should be noted that the elder is normally a mid-sized shrub known for its elderberries and not a full-sized tree from which anything might be hung. In my view, the name Judas' ear and the condemnation of the elder tree for its complicit role is a matter of popular folk etiology in medieval Europe, which was replete with religiosity and superstition before the advent of cultural sensitivities. The name stuck, though it is mercifully succumbing to desuetude.

More surprising than the Judean scriptural association of the wood ear was its accepted use as one of the earliest medicinal treatments. John Gerard is probably the most well-known of the European herbalists; his seminal work *Herball* or the *Generall Historie of Plantes* was a general botanical reference for the hundred years following its publication in 1597. The book is almost entirely devoted to plants with only passing reference to fungi, which were considered a type of plant (in the subkingdom Thallophyta until about 1980). Gerard's overall view of mushrooms was in keeping with traditional Anglo-Saxon mycophobia: " … few of them are good to be eaten, and most of them do suffocate and strangle the eater. Therefore, I give my advice unto those that love strange and newfangled meats, to beware of licking honey among thorns, lest the sweetness of the one do not countervail the sharpness and pricking of the other." However, he found that the wood ear was an exception and noted, "The fungus excrescence of the elder, commonly called a Jewes eare, is much used against the inflammations and all other soreness of the throat being boyled in milke, steeped in beere, vinegar, or any other convenient liquor." This apparently was of such common knowledge that it appears in the text of one of the earliest English plays, *The Three Laws of Nature, Moses and Christ, Corrupted by the Sodomytes, Pharises and Papystes Most Wicked*, written by John Bale in 1562: "For the coughs take Judas's eare with a parynge of a peare." This acceptance of an execrable fungus by an English herbalist may be due to the doctrine of signatures, a theory popularized as a Christian theology by Jacob Boehme in *Signatura Reru,m* which translates as "the signature of all things." Boehme claimed that plants of God's kingdom were given a characteristic appearance as a sign that was intentionally provided as a revelation. While one would think that a wood ear would be good for something like earaches, it is not implausible that its folded lobes looked something like a throat, a view proffered by Tom Volk, the noted University of Wisconsin mycologist (he also compares the texture to gummy bears). As it turns out, it is actually good for a variety of things, perhaps even the throat (and ear).

Modern scientific research of the medicinal properties of both *Auricularia auriculus* and its close cousin *A. polytricha* has revealed some significant potential for the treatment of a variety of ailments ranging from diabetes to cancer. Even the sore throat prescriptions of Gerard and Bale are to some extent vindicated; the Wood ear's polysaccharides have an anti-inflammatory effect. A

Hiker's Notebook Website
MAW Secretary William Needham publishes www.hikersnotebook.net, a wiki site full of articles like this one, focused on things hikers often will see on the trail. The articles are organized into several categories such as fungi, plants, trees and shrubs, creatures great and small, and geology and earth sciences.

paper published in the journal *Carbohydrate Research* reported that the beta-glucans and other branched polysaccharides of *A. auricula-judae* "exhibited potent, inhibitory activity against implanted sarcoma 180 solid tumors in mice." The hypoglycemic benefits are also well documented in a study published in the journal *Bioscience, Biotechnology and Biochemistry* showing that mice fed 30 grams of *A. auricula-judae* per kilogram of overall food ingested "had a significant effect on lowering plasma glucose, insulin, urinary glucose, and food intake." Perhaps the most profound effect is as an anticoagulant. The journal *Thrombosis Research* published a paper in 2003 on *A. auricula* that concluded, "The polysaccharides from these mushrooms may constitute a new source of compounds with action on coagulation, platelet aggregation, and, perhaps, on thrombosis." According to Paul Stamets in *Growing Gourmet and Medicinal Mushrooms*, the empirical evidence for the blood-thinning properties of wood ear have been clear for decades: "In the United States during the 1970s, when Chinese restaurants started serving wood ear mushrooms, some patrons noted the emergence of blotchy hemorrhages on their faces the day after consumption. Caucasian women were particularly susceptible. This phenomenon was later dubbed Szechwan restaurant syndrome, later becoming known as Szechwan purpura." This rather curious assertion would certainly justify some dubiety as there has been no similar reported effect among Asians, though this could legitimately be an epidermal reaction that is pigment related. The overall effect of an aspirin-like platelet reduction, however, is well established. It was first documented in *The New England Journal of Medicine* in 1980 based on the report of a scientific researcher who found that "his platelets would not agglutinate or release serotonin on exposure to epinephrine," which he attributed to the consumption of wood ear mushrooms; this was confirmed experimentally on observation of the platelet diminution effect which ranged from three to 24 days on several volunteers. One may conclude that, while the claims of its carcinogenic and glycemic benefits to mice may not apply to humans, eating tree ear can do no harm and probably can do some good, particularly as a part of the balanced diet, as Mo-er is consumed in Asia.

Auricularia auriculus that are gathered and *A. polytricha* that are cultivated for harvest taken together are among the most popular of edible fungi in the world, comprising about 8 percent of all mushroom production and ranking fourth among all species in 1997. This is almost entirely due to Asian market factors; the wood ear is a key ingredient in Chinese soups. They can readily be found in Asian markets in the desiccated state, which renders them dark brown as rather unappetizing looking chips. According to David Aurora in *Mushrooms Demystified*, they "billow up like clouds when soaked in water, showing off their delicate curves and convolutions to great effect." This is the key to their place in the Asian cuisine; their profuse absorption of water includes the complex broth flavors that are imparted on rehydration. It is the texture of the tree ear fungi that beguiles, giving body to the otherwise fluid flavor. However, even the least discerning of Western gourmands would only afford them faint praise. Charles McIlvaine may well qualify for that distinction; his prolific mycophagy extends to eating the jack-o'-lantern mushroom (*Omphalotus olearius*) that sickens others and is usually listed as poisonous. Of the wood ear, McIlvaine writes in *One Thousand American Fungi* that "the writer has found and eaten several specimens of it. It is not as tender as other gelatinous species, but it is an oddity that pleases." Paul Stamets provides probably the most balanced characterization in noting that "for many, this mushroom is not remarkably flavorful. Nevertheless this mushroom adds another dimension to the culinary experience … a most appealing brittle-gelatinous texture, potentiating the flavors of foods cooked with it." It is worth noting that the wood ear, like most fungi, is quite nutritious: 100 grams of dried fungus yields about 10 grams of protein and an equal amount of fiber. The balance primarily comprises carbohydrates, for a total caloric intake of 370 calories. It should be noted that the wood ear is about 90 percent water, so 100 grams dry would be almost 2 pounds of harvested wood ear — enough to fill a good sized paper bag. One must conclude that the wood ear has compelling attributes: It offers health advancing compounds that suppress tumorous growth and impede stroke-inducing blood clots, it is high in fiber to promote intestinal composure, it is high in protein to support cell growth, and it is an interesting textural additive to almost anything. Soup is just the beginning.


stanze

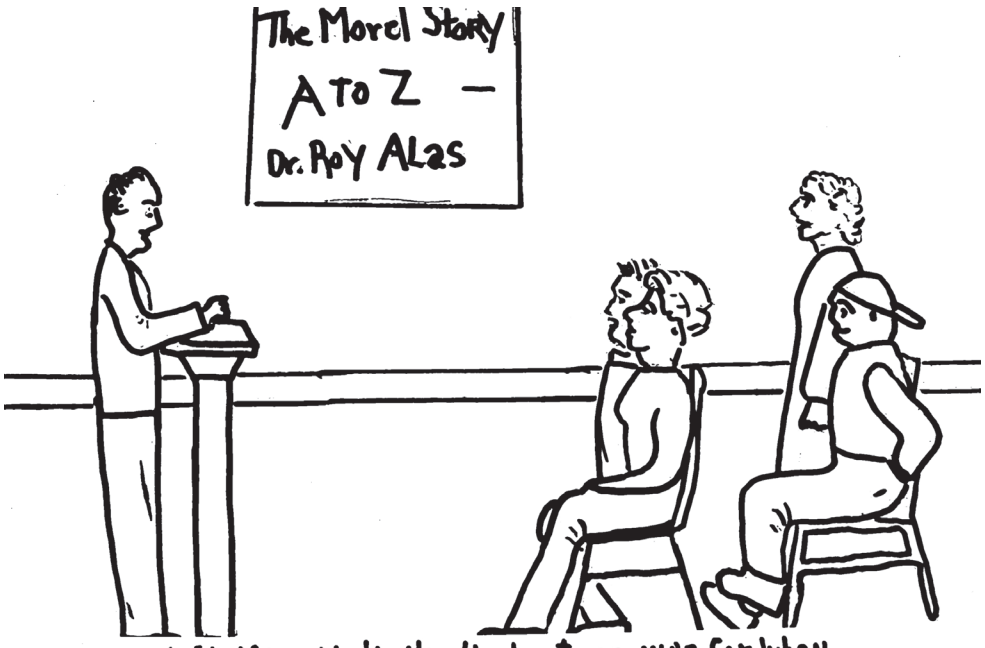
Seattle.roamer

Young specimens of wood ear (top) look remarkably similar to the ears of many mammals. Once fully grown (above), they become more wrinkled.

Get Social

MAW members are sharing their recent finds via Facebook, Meetup, and Yahoo. In early April, MAW Member Heather

Felsen shared this photo of a false morel she found near North Germantown, Md. Nice find, Heather!



Well Miss, the 'W' in the Lecture WAS for when,
the Where IS for me to KNOW AND you To FIND out.
Jim Sherry