



The Arizona Fun-Gi



Newsletter of the Arizona Mushroom Club

Please Join Us for a Christmas Celebration and Potluck Meeting

The Annual Christmas Potluck of the Arizona Mushroom Club will be held on December 5, 2008 at the Maricopa County Extension Bldg. at 4341 East Broadway Road in Phoenix at 6:30 p.m. Please mark your calendars to reserve this date for the potluck meeting. Three free Christmas turkeys or hams will be awarded to the lucky individuals holding the winning tickets to be given out upon entering the building that evening. Additional door prizes will be provided to three other lucky winners holding other winning tickets.

Please bring one of the following dishes in accordance with the following assignment. If your last name begins with the letter A through I, bring a main dish; if J through P, bring a salad; if Q through Z, bring a dessert. If your dish requires a special serving utensil (spoon, ladle, tongs, warming plate or crockpot, etc.) please bring that with your dish, as well as an extension cord to plug in. Coffee and soft drinks, plus a cooked ham will be provided by the Arizona Mushroom Club, along with plates, hot and cold cups, knives, forks, spoons, napkins and ice.

A special Power Point presentation will be given following a short business meeting. If you have special photographic prints or other mushroom artwork to display, please bring that to the meeting as well. Display tables will be available.

From the Editor

Sometimes the forces of nature and timing meet to make for a wonderfully successful mushroom gathering (as opposed to hunting) foray. As the new editor of the Fun-gi newsletter, my "first foray" into publishing has been blessed by such a meeting of timing and natural forces and my basket runneth over with good news to share with Arizona Mushroom Club Members. The most exciting news for my first edition is another first: THE FIRST POSITIVELY IDENTIFIED OCCURANCE OF ANY SPECIES OTHER THAN A RUSSULA OR LACTARIUS PARASITIZED BY HYPOMYCES LACTIFLUORUM! So this edition includes some introductory information about the two species involved; the aforementioned Hypomyces lactifluorum (Lobster Mushroom) and the Cantharellus cibarius (Chanterelle). Credit for this first find goes to AMC member Ralph Reynolds and his daughter who found this specimen in the White Mountains and sent it on to our illustrious President and expert Mycologist Dr. Chester R. Leathers, PhD for identification.

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Chanterelle parasitized by *Hypomyces lactifluorum* as identified by Mycologist Dr. Chester Leathers, PhD

**FUNGI FIRST: POSITIVELY IDENTIFIED CHANTERELLE
BY HYPOMYCES LACTIFLUORUM!**

PARASITIZED

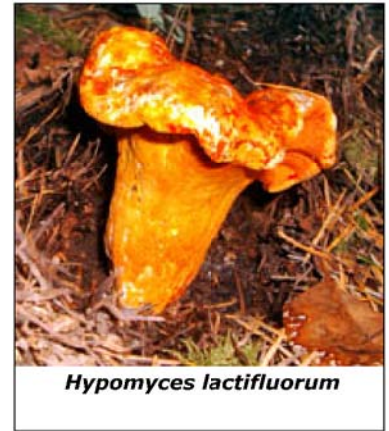
Dr. Chester Leathers, PhD reported that he recently received a parasitized specimen of a chanterelle which Ralph Reynolds and his daughter collected in the White Mountains of Arizona. Dr. Leathers determined that the chanterelle is parasitized by *Hypomyces lactifluorum*, the same species which causes the Lobster mushroom to be so common in the mountains of Arizona. According to Dr. Leathers, this apparently is the first time this has been positively identified on any species other than a *Russula* or *Lactarius*. The specimen was lemon yellow in color when fresh, and became as orange as the Lobster when dried. Microscopically, the specimen presents the same as the Lobster mushroom. Certainly there will be much discussion about this at the upcoming annual meeting and Christmas Potluck so be certain to check out the announcement in this issue and plan to attend. Also, please send any thoughts and comments about this exciting find to the editor for inclusion in a discussion log to be available at the meeting and be sure to congratulate Ralph Reynolds and his daughter!

***Hypomyces lactifluorum*, the Lobster Mushroom**

Technically the *Hypomyces lactifluorum* is a parasite of other mushrooms, turning them into lobster mushrooms. The red crust on the outside is the tissue of the ascomycete (*Hypomyces*), and the white flesh on the inside is the flesh of a basidiomycete mushroom, presumably a *Russula* or *Lactarius*

"It's almost like mycological cannibalism!"

Apparently *Hypomyces lactifluorum* is a pretty good taxonomist, only parasitizing *Russula* or *Lactarius* species. According to Clark Rogerson and Gary Samuels, "In large populations of *Hypomyces lactifluorum* where the host can be determined with some confidence, the host has proven to be *Russula brevipes*; but associated nonparasitized hosts often belong to the *Lactarius piperatus* complex." At maturity, *lactifluorum* thoroughly covers its host, often rendering it unidentifiable. Lobster mushrooms are widely eaten and enjoyed; they are commercially marketed and are commonly found in some large grocery stores. They have a seafood-like flavor and a firm, dense texture.¹



Hypomyces lactifluorum

Ascomycete: subdivision of mushroom that produce spores inside microscopic saclike mother cells called *asci*.

Basidiomycete: subdivision of mushroom that produce spores on the exterior of microscopic club-shaped cells called *basidia*.²

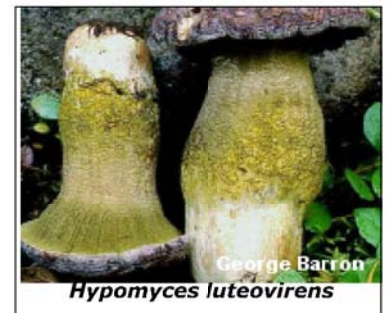
1. Volk, Thomas J. (2001, August) *Hypomyces lactifluorum*, the lobster mushroom, *Tom Volk's Fungus of the Month for August 2001*. Retrieved from Tom Volks Fungi Web site : <http://tomvolkfungi.net/> (2008, September)

2. Arora, David (1986). *Mushrooms Dymystified* (2nd ed.) Berkeley, CA Ten Speed Press.

***Hypomyces luteovirens*: Similar to the Lobster Mushroom**

This species of *Hypomyces* is a parasite on various species of *Russula*. It creates a powdery, mold-like covering that is easily identified by its yellow-green color. It seems less avid about its parasitism than some species of *Hypomyces*, and tends to cover only the upper stem and gills of the host mushroom, leaving it fairly recognizable. Despite the fact that it may parasitize some edible russulas, *Hypomyces luteovirens* should not be collected for consumption.¹

1. Kuo, M.. (2005, January) *Hypomyces luteovirens*. Retrieved from the MushroomExpert.Com Website: www.mushroomexpert.com/hypomyces_luteovires.html (2008, September)



Hypomyces luteovirens

***Cantharellus cibarius*, The Chanterelle**

(Editor's note: The genus *Cantharellus* contains many species known generally as chanterelles, though for the most part the name refers to the most famous species *C. cibarius*, which is discussed here).

The chanterelle is prized for cooking throughout Europe and North America. It is known for its' wonderful aroma, which most people describe as "fruity, much like apricots." In addition to the flavor and smell, the color and texture is also very appealing. Unlike the true gilled fungi (the Agaricales), the chanterelles have (at the most) blunt ridges or folds that bear the basidia. These ridges often fork dichotomously. *Cantharellus* is placed by most researchers in a separate order, the Cantharellales, along with the genus *Craterellus*. *Cantharellus* usually has clamp connections on the hyphae of the fruiting body, while in *Craterellus* clamps are usually lacking. In many areas, the chanterelles fruit in the middle of summer, usually late July, and occur under oaks or beech. In other areas chanterelles occur in the fall, and mostly under conifers. In any case they are mycorrhizal, which means the fungus has a symbiotic, mutualistic association with the roots of the tree, helping it grow, while receiving nutrients as "payment." Thus, both the tree and the fungus benefit

(Cont. pg 3)



***Cantharellus cibarius*
aka Chanterelle**

(Chanterelle cont.)

from this relationship.1 The Yellow or Golden Chanterelle (*Cantharellus cibarius*) is easy to find because of its bright color and it's not hard to identify with a careful inspection. Chanterelles are found in mixed woods, under conifers and oaks from Alaska to California and Nova Scotia to Florida! Because of their wide distribution timing their arrival will largely depend on area climate conditions. Chanterelles will fruit anytime from June to September depending on rainfall and temperature.

Some keys to proper identification:

(A) The cap is bright orange to yellow, smooth and hairless, becoming wavy at the edge of the cap when mature. (B) The flesh is firm and white, tinged with yellow and smelling slightly fruity, like apricots. The stem is not hollow. (C) The gills are thick and similarly colored or lighter than the cap, often forking towards the edge of the cap. (D) Make sure the gills run part way down the stem.

There are two mushrooms that could be considered **dangerous look alike**s though neither is deadly, The Jack O'Lantern (*Omphalotus illudens*) has thinner more crowded gills and does not have white flesh, and the False Chanterelle (*Hygrophoropsis aurantiaca*) which also has thinner gills which are more orange in color and a cap which tends to be darker towards brown. As always if you aren't sure consult a field guide or a trusted expert. Bottom line as always: when in doubt throw it out!2

1.Volk, Thomas J. (1997, July) *Cantharellus Cibarius*, the Chanterelle. *Tom Volk's Fungus of the Month for July 1997*. Retrieved from Tom Volks Fungi Website : <http://tomvolkfungi.net/> (2008, September)

2. (2007) The Forager's Virtual Wild Food Field Guide. July's Wild Food, Golden Chanterelles. Retrieved from Forager Press, LLC Website: <http://theforagerpress.com/fieldguide/julyfd.htm>

Meet New Editor, Shelley Watanabe

Howdy and Hello. I am delighted to be the new editor of the Arizona Mushroom Club Fun-gi. I hope I will be able to meet the quality and standards of the previous editor, Larry Morehouse.

It was suggested that I "introduce" myself for my first edition, so...

Qualifications:

1. Willing to volunteer for position
2. Basic Computer Literacy (very basic)
3. Nice Camera/basic photography skills
4. Graduate School Research Skills (rusty but serviceable)

Personal Data

- Age: Old enough to know better but....
- 3rd Generation Japanese American, raised in Princeton, Indiana.
- BS from Indiana University, Avid IU Basketball Fan – esp. the Bobby Knight Era
- MEd from University of Texas at Austin – Special Education
- Currently retired and living in Lakeside, Arizona enjoying interests in MUSHROOMS, woodworking/carving, horseback riding and fishing in the White Mountains of AZ. (thankful daily for such a life)

2007 AMC Forays

On the weekend of August 16, the AMC held a gathering and foray in the Apache-Sitgreaves National Forest. Members gathered in Springerville and caravanned to Hannagan meadow for a forest foray. AMC "scouts" had checked out the area in previous days and found the area to be abundant with chanterelles other species. Over 40 members participated, with all being successful in gathering a large number and variety of mushrooms. As always, Club President and Mycologist Dr. Chester Leathers was on hand to educate members about mushrooms and identify finds by species and edibility.



"First timers from Phoenix"
(ringleader Jason Sator center)



A second foray was held on September 13, 2008 at the Mogollon Rim. AMC members were joined by a number of "first-timers" – in fact, members were outnumbered by the new hunters. Jason Sator of Phoenix found the AMC on the internet and brought 8 friends along for the hunt. The group all reported having a great time and finding many mushrooms. The club also enjoyed the company of two young fungi fans. The two kids were accompanied by their mom on the their first outing with grandma, grandpa (aka Rose Mary & Chester Leathers). Judging by the cheers that accompanied each fungi find, the kids were very successful on their hunt.



It's not a mushroom but it's sure more fun than fungi!

The kids catch and release a horned frog along the rim.

Additionally, the club was accompanied by Arizona Republic reporter John Stanley who interviewed foray participants for an article for the Az Living section of the paper, scheduled to be run the middle of November - be on the look out!





**Newsletter of the
Arizona Mushroom Club**



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The Arizona Fun-Gi



Newsletter of the Arizona Mushroom Club

**Looking for a great gift for any
mushroom enthusiast?**

How about a polo shirt, hat or patch displaying the AMC club logo for yourself, a loved one or friend?

Use the form on the right to order from Rose Mary or Chester Leathers.

A minimum number of orders must be placed, so you may have to wait for until enough requests have been given.

But Hey - It's worth the wait!



ARIZONA MUSHROOM CLUB (AMC)
Order Form~~Please Print

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Chester Leathers: Tel. 480-832-6709

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