

Fungifama



The Newsletter of the South Vancouver Island Mycological Society
June 2009

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To broadcast a message to SVIMS members via email:

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SVIMS web site:

www.svims.ca

Dues: \$20.00 per year per household, payable in January by cheque made out to SVIMS or by cash at meeting.

Meetings: First Thursday of the month (no meetings December, January, July, and August), 7:00 p.m. sharp at the Pacific Forestry Centre, 506 Burnside Rd W, Victoria. Lots of free parking. The meeting room is near the main entrance door. Non-members welcome.

Caution: The South Vancouver Island Mycological Society (SVIMS) newsletter, Fungifama, is not intended as an (online) identification or medicinal guide to mushrooms. There are risks involved in eating and in using wild mushrooms. The possibility may exist that you are allergic to a specific mushroom, or that the mushroom may be anomalous. SVIMS, Fungifama and the authors on this site warn that the reader must accept full personal responsibility for deciding to use or consume any particular specimen.

Monthly Meetings:

SVIMS meets the first Thursday of the month, February – May and September - November. Please remember to bring your own coffee cup.

SVIMS Annual President's Picnic

Saturday, June 20th

3:00 - when the last person leaves

Hosted by Lee and Karen Rowe

Please bring a dish (e.g. salad, dessert, etc) to share and your own refreshments. A barbeque will be available, as will two ovens for re-heating. There will be some parking available in the driveway but most will be at the side of the road and cul-de-sac. Please pull off as far as you can and respect people's driveways. For those of you who are so inclined, we will make room in our driveway for campers and there is plenty of lawn to pitch tents, so you are welcome to stay.

Where - 2455 Tryon Road, North Saanich

1. Take the Pat Bay Highway to Lands End Road exit.
2. Turn right onto Kittiwake Place (if you turn left you'll be on Lands End Road)
3. Turn right onto Curteis Road
4. Turn left at the end of Curteis onto Tryon
5. Follow Tryon to the end - it becomes very narrow after passing a small totem pole on the left, and ends in a cul-de-sac.
6. Our driveway is on the left going into the cul-de-sac.

September 3 - Speaker TB A

Introduction to the Top 20 Edible Mushrooms

October 1 - Oluna Ceska - The miniature beauty of fungal microscopy through photos. Discover the fascinating beauty of fungal samples under the microscope.

November 5 - Richard Winder, Medicinal Mushrooms and their applications. SVIMS Elections

Prez Sez

My entire morel haul near home this year was a single solitary specimen. Which was delicious, but hardly enough to satisfy me. So when I traveled to southern Ontario during morel season, I kept my eyes peeled for morels on every woodland hike that I took. To no avail. Then, while celebrating my birthday with my brother and his family in Cambridge, Ontario, I went out into the back yard to harvest some rhubarb and tripped over a dozen or more big, beautiful morels (*Morchella esculenta*). My sister-in-law told me that they come up every year in the back yard and their neighbour always tells them they should eat them. After I fried them up and shared the bounty, I'm hoping that next year my family will harvest the morels and enjoy them. Otherwise, each spring I will be thinking of that morel crop falling prey to my brother's lawn mower...



After Ontario, I continued heading east and arrived in Nova Scotia for the Canadian Botanical Association meeting in Wolfville. On elm stumps there, I saw many, many fruitings of *Polyporus squamosus*,

commonly known as Dryad's saddle and pheasant's back mushroom. According to the blurb on this fungus in Wikipedia: "*While P. squamosus is certainly not poisonous, it is generally not prized as an edible unless the specimens are very young and tender. Cookery books dealing with preparation generally recommend gathering these while young, slicing them into small pieces, and cooking them over a low heat. Some people value the thick, stiff paper that can be made from this and many other mushrooms of the genus Polyporus. This mushroom's smell resembles watermelon rind and is very pleasing.*"

Given the large size of this fungus, (see below)



I'm surprised that I have never seen it here in BC. Specimens in the PFC herbarium have been collected from Scouler's willow in Saanich, black cottonwood in Merritt, horse chestnut in Vernon, and some unidentified hardwood north of Prince George. The UBC herbarium has specimens from a half dozen additional locations in the province.

Always something new to learn!

LOCAL EVENTS AND FORAYS

Camosun College Property Foray

April 19, 2009

By Adolf Ceska



Species list:

Agrocybe praecox group
Alnicola melinoides
Caloscypha fulgens
Clitocybe deceptiva
Clitocybe sinopica
Coprinellus domesticus
Discina perlata
Fomitopsis pinicola
Galerina heterocystis
Heterotextus luteus
Hygrophorus goetzii ?
Inocybe nitidiuscula
Lachnum virgineum
Mycena filopes
Mycena galericulata
Nolanea hirtipes
Omphalina ericetorum
Phaeolus schweinitzii
Polypore from alder
Polyporus badius
Psathyrella praetenuis
Pseudoplectania melaena
Psilocybe inquilina
Psilocybe rhombispora
pyrenomycete on a stick
Rhodocybe aureicystidiata
Sarcosphaera crassa
sclerotia on the leaves
Tarzetta cupularis

Xeromphalina fulvipipes
Xylaria hypoxylon



SVIMS Cowichan Foray

October 16 - 18

Accommodation at the Cowichan Lake Education Centre. Cost is approximately \$172 for the weekend.

To register contact Heather Leary at hleary@shaw.ca.

Swan Lake Mushroom Show

Sunday, October 25

Location: Swan Lake Nature Centre

We collect mushroom specimens on the days leading up to the mushroom show, spend Saturday afternoon and evening setting them out on display, identifying and labelling them, and then on Sunday we welcome the world to experience the glories of the fungi.

Cortez Island Foray

November 6 – 8

This unique foray opportunity is being organized by Lee and Karen Rowe. Please contact them at lskr@shaw.ca for more information or chat with them about it at the President's Picnic.

FAR AWAY EVENTS AND FORAYS:

2009 Mushroaming Tibetan Tours

Summer Fungal & Floral Foray: July 17-30
info@mushroaming.com

2009 Mycological Society of American AGM

July 25-29

Snowbird, Utah

<http://2009.botanyconference.org>

2009 Mexican Mushroom Tours

August 2009

State of Oaxaca, Mexico

www.mexmush.com/oaxaca.htm

2009 Eagle Hill Field Seminars

www.eaglehill.us

Steuben, Maine, USA

(a) Aug 2-8 Mushrooms & Other Fungi:
Rosalind Lowen and Lawrence Leonard

(b) Aug 2-8 Introduction to North American
Truffles: Hypogeous Fungi: Matthew E.
Smith

(c) Oct 10-15 Mushrooms of Coastal Maine
during the Fall Foliage Season: Gary
Lincloff

29th Telluride Mushroom Festival

August 27-30

www.tellurideinstitute.org

2nd Annual Fungus Festival of Haida Gwaii

September 2009

Fungus Festival in Skidegate:
Mushrooms of Haida Gwaii.

Sponsored by CHN-Forest
Guardians, Haida Heritage Centre, Gwaii
Forest Society, Gwaii Haanas National Park
Naikoon Provincial Park.

Haida Heritage and Forest Guardians tel:
(250) 626-6058

Foray Newfoundland & Labrador 2009

September 11-13, 2009

Lion Max Simms Camp

Central Newfoundland Forest Ecoregion

Please visit our website
www.nlmushrooms.ca to learn the latest
about our upcoming forays for 2009: Sept
11-13 in Central Newfoundland

Information (lots of it!) and down-
loadable Registration Forms are there.

Please join us! Registration is limited
and open to Foray Newfoundland &
Labrador 2009 (\$30 per year) members
only, so please register early. Once you do,
please keep in mind our Photo Contest.

Cain Foray

Sept 18-20

Mycological Society of Toronto

Location: Tally-Ho In, Lake Peninsula, east
of Huntsville in the District of Muskoka

<http://www.myctor.org/cainforay.html>

Annual Si-ca-mous and Shu-swap Lake Wild Mushroom and Food Festival

September 20-27, 2009 Sicamous

<http://www.fungifestival.com>

Phone: 250 836 2220 E-Mail:

narrows@sicamous.com

Bamfield Mushroom Festival

Saturday, October 3

By Jim Jones

We are looking for some volunteers
to lend a hand at this year's Bamfield
Mushroom Festival. The festival keeps
growing larger each year and now takes up
three venues in the village: community hall,
community school, and fire hall.

The format is essentially unchanged
from when you saw it and, of course, we
are still learning! The mushroom display is
now set up in the school and the dance
takes place in the fire hall. During the day, I
have manned the display as well as taking
folks out for a walk in the forest. We now
have so many people attending that I am
swamped no matter where I go during the
day. People are sometimes 3 deep around
the displays and last year on the forest walk
I found myself yelling myself hoarse trying
to reach all who were crowded around.

It would be terrific to have two or
even four people to assist with picking
mushrooms for and setting up the display
on Friday - day and evening, and then on
Saturday answering questions at the
display as well as taking a portion of the
forest walk participants to look at local
mushrooms. This always results in

additions to the displays that need to be identified and put out on display as we go.

For our volunteers, we will provide free access to all festival activities including free pancake breakfast, free mushroom feast, free entry to the mushroom stomp and two drink tickets, as well as free accommodation for Friday and Saturday nights. There is also an informal potluck get-together of festival volunteers planned for the Friday evening to which they will be heartily welcomed.

As you can see, we need volunteers who are knowledgeable and not shy!

Please contact Jim Jones if you wish to volunteer (jtjones@uniserve.com) or go to <http://www.mushroomfestival.ca/index.html> for more information.

Fraser Valley Mushroom Club's Annual Mushroom Show

Sunday, October 4th, 2009
11 AM to 4 PM
St Andrews United Church,
7756 Grand Street,
Mission.

The show provides displays of identified mushrooms and other fungi, with their edible, poisonous or dubious status. Bring your own specimens for identification! Contact: juergenk@shaw.ca
www.fvmushroomclub.ca
Admission \$3.00, children under 12 free.

33rd Annual NEMF Foray

Oct 15-18
Eastham, Cape Codd, Mass.
www.nemf.org or ninarobertsrose@aol.com

2009 OPMS 2009 Wild Mushroom Show

October 18, from noon to 4:00 pm
Art Building at the Jefferson County
Fairgrounds in Port Townsend
<http://www.olyrmushrooms.org/>

The moss foray will be on Friday the 16th, and field trips to collect mushrooms for the show will be on Saturday, the 17th of October. Show setup will be Saturday from 11 am to 5 pm, with a potluck to follow from 5:30 to 7:30 pm. We can also set up on Sunday from 9 am to noon.

For information 360-477-4228

mycolowell@wavecable.com

VMS Annual Fall Foray

October 18-20

Manning Park, Manning B.C.

Info: info@vanmyco.com

Registration includes accommodation in dorm-style rooms at Manning resort, bedding & towels, all meals and forays from Friday to Sunday.

The Last Resort at Manning Park is a 3-story cabin that sleeps 50 friendly people in dorm-style rooms spread throughout the building. Bedding & towels are supplied by the lodge and meals are provided by the VMS including ingredients for a bag lunch on the Saturday & Sunday.

Edible Mushrooms at Breitenbush Hot Springs

October 22-26

www.mushroominc.org

telephone: 503-854-3320

for reservations: www.breitenbush.com

2009 NAMA Annual Foray

November 26-29

Lafayette, Louisiana

Hosted by Gulf States Mycological Society

www.namyco.org

MYCOLOGICAL WEBSITES

Taylor Lockwood web site

A trailer for The Good, the Bad and the Deadly has been posted at:

http://www.kingdomoffungi.com/a_page_s/qbd.dvd.trailer.php

<http://www.kingdomoffungi.com/>

<http://www.fungiphoto.com/>

<http://www.taylorlockwood.com/>

ARTICLES OF INTEREST

Toxic fungal triangle

Article by David Bradley

Abridged from Spectroscopynow.com

Proton NMR spectroscopy has been used to identify the lethal toxic culprit in a spate of recent food poisoning incidents

among Japanese people eating mushrooms including the species *Russula subnigricans*. The compound, cycloprop-2-ene carboxylic acid is well known to organic chemists as containing a highly strained, and so highly reactive, cyclopropene ring.

Russula subnigricans is a basidiomycete mushroom found in Asia named by Japanese mycologist Tsuguo Hongo in 1955 and shares characteristics of a North American fungus *R. eccentrica*. Ingestion of the mushroom has in recent years led to a spate of mushroom poisonings in Japan and elsewhere. Initial symptoms include nausea and diarrhoea, which can start within half an hour of eating the toxic mushrooms. Speech impairment, convulsions, pupil contraction, stiff shoulders, and backache, have also presented. However, it is the presence of myoglobin in urine that is the most worrying symptom.

The mushroom apparently causes rhabdomyolysis, the breakdown of muscle fibres, which releases myoglobin into the bloodstream. Myoglobin is a globular protein and has to be filtered out by the kidneys but it can cause blockages, kidney failure and fluid build up leading to shock, heart failure, and in extreme cases death.

The potential toxicity of these mushrooms has been known in Japan since 1954 and Japanese researchers have previously isolated and identified several physiologically active agents in *R. subnigricans*. Russuphelin A was identified as a cytotoxic compound in 1992.

Cycloprop-2-ene carboxylic acid is fairly well known to synthetic organic chemists, but has never before been observed in a biological system. Laboratory tests, however, showed that the compound causes the same severe symptoms as rhabdomyolysis in mushroom poisoning. "This compound is responsible for fatal rhabdomyolysis, a new type of mushroom poisoning that is indicated by an increase in serum creatine phosphokinase activity in mice," the team explains.

The researchers explain that the toxin causes severe rhabdomyolysis, not by

direct interaction with muscle cells, but probably by a trigger for some other biochemical reaction. They suggest that their discovery will allow biomedical researchers to determine precisely how these and other mushrooms such as *Tricholoma equestre*, which has killed people in France and Poland, cause fatalities and perhaps develop an antidote to the toxin.

Diversity, ecology, and conservation of truffle fungi in forests of the Pacific Northwest

By Trappe, James M.; Molina, Randy; Luoma, Daniel L.; Cazares, Efren; Pilz, David; Smith, Jane E.; Castellano, Michael A.; Miller, Steven L.; Trappe, Matthew J.

Gen. Tech. Rep. PNW-GTR-772. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 194 p.

<http://www.treearch.fs.fed.us/pubs/32697>

Forests of the Pacific Northwest have been an epicenter for the evolution of truffle fungi with over 350 truffle species and 55 genera currently identified. Truffle fungi develop their reproductive fruit-bodies typically belowground, so they are harder to find and study than mushrooms that fruit aboveground. Nevertheless, over the last five decades, the Corvallis Forest Mycology program of the Pacific Northwest Research Station has amassed unprecedented knowledge on the diversity and ecology of truffles in the region.

Truffle fungi form mycorrhizal symbioses that benefit the growth and survival of many tree and understory plants. Truffle fruit-bodies serve as a major food source for many forest-dwelling mammals. A few truffle species are commercially harvested for gourmet consumption in regional restaurants.

This publication explores the biology and ecology of truffle fungi in the Pacific Northwest, their importance in forest ecosystems, and effects of various silvicultural practices on sustaining truffle populations. General management principles and considerations to sustain this valuable fungal resource are provided.

Morchella tomentosa*, a new species from western North America, and notes on *M. rufobrunnea

by Michael Kuo

Mycotaxon 105: 441–446, July–September 2008

http://www.mushroomexpert.com/Kuo_M_2008_Morchella_tomentosa.pdf

“Over 500 North American collections of *Morchella* were solicited from amateur collectors or made by the author from 2002 to 2007 as part of an effort known as the Morel Data Collection Project (MDCP). Preliminary molecular results (see Kuo 2005, 2006) revealed over a dozen genetically distinct morels among the collections. While several of these putative species are morphologically cryptic, as yet poorly documented, or otherwise insufficiently understood, two morels from western North America are easily distinguished morphologically and ecologically.

The densely tomentose (and frequently black) surfaces of young specimens of *Morchella tomentosa* separate it easily from other species of *Morchella*—though older specimens (especially those that have been exposed to prolonged sunlight) may have eroded ridges and paler colors that approximate the colors of *M. esculenta*-like yellow morels, leading to confusion.

Morchella rufobrunnea is quite distinct and well characterized by its ecology, its abruptly conical young cap with pale ridges and nearly black pits, and its rufescence.”

(exerpts from the article with minor alteration; Editor)

References:

Kuo M. 2005. Morels. Ann Arbor, University of Michigan Press.

Kuo M. 2006. MDCP morel taxa.

www.mushroomexpert.com/mdcp/results_legend.html

Amanita aprica

By Adolf Ceska

We were in the Cowichan River area while ago, where we found a lot of *Amanita aprica* that grew on road cuts and along the road. It was in the Skutz Falls area.

This species was described just recently and you can get more information about it at the following web pages:

http://www.mushroomexpert.com/amanita_aprica.html

<http://pluto.njcc.com/~ret/amanita/species/aprica.html>

Oluna and I would greatly appreciate if you could report your sightings of this species to us. We are interested in knowing its distribution better. Our interest in *Amanita aprica* is just "scientific", this fungus IS POISONOUS. DO NOT EAT IT!

If you find it, please, let us know.

(In the map below are sightings reported to Adolf by SVIMS members. Thanks to Aaron McMillan for mapping the locations. Editor)



Photo by Adolf Ceska

SVIMS welcomes new members!

Jerry Tudor

Alexander Lavdovsky

Tables for the Mushroom (a play on Mushrooms for the Table)

by Ian Gibson

This is the first of a series of articles that will consist of tables that will differentiate characters of some groups of mushrooms that are difficult or confusing to separate in the Pacific Northwest.

RED RUSSULAS IN THE PACIFIC NORTHWEST

	CAP	STEM COLOR	TASTE	HABITAT	SPORE DEPOSIT	SPORES, ORNAMENTATION	PILEO-CYSTIDIA	OTHER
sanguinaria (= rosacea)	Red ± cream areas near margin, barely viscid	White to usually pink, bruising yellow	Acrid	Ground under pine	Deep cream to pale orange	7-9 x 6-7 µm, isolated warts up to 1 µm	Sparse to abundant, most aseptate, contents banded	
americana	Bright red, viscid	White to usually pink	Acrid	Ground under <i>Abies</i> and <i>Tsuga</i>	Buff	8.5-11.5 x 7-10.8 µm, warts mostly isolated, 0.6-1.0 µm high	Numerous, mostly aseptate, contents banded	
emetica	Red, occasional orange patches	White tending to yellow	Acrid	Mossy, swampy forest, usually on Sphagnum, rarely on wood	White	8.0-11.3 x 6.7-9.0 µm, reticulate, warts up to 1.7 µm high	Frequent, multiseptate	
silvicola	Red +/- orange, yellow	White, unchanging	Slightly to strongly acrid	On wood	White to yellowish white	6.0-10.7 x 5.3-9.0 µm, reticulate, warts 0.8-1.4 µm high	Abundant, 0-2-septate	
bicolor	Red mottled with yellow	White	Acrid	Ground, rotten wood	White	8-9.5 x (5.5) 7-8 µm, warts mostly isolated, under 1 µm	A few, inconspicuous	
xerampelina (red variant)	Red, 5-30 cm	White or pink-tinged, then yellow to brown	Mild	Ground	Yellow	8.2-11 x 7-9 µm, isolated warts up to 1 µm	Rare to scattered	Common odor often fishy
cessans (crimson red variant)	Crimson red, 2-9.5 cm	White	Mild, rarely slightly bitter	Ground	Ocher	7-9.5 x 6.4-7.8 µm, warts up to 1 µm often partial or complete reticulum	Scattered typically long with several septa	Uncommon
lepidiformis	Pink to deep red, up to 6.8 cm	White	Bitter, but not strongly so, otherwise mild to faintly peppery	Ground	Pale cream	8.0-10.2 x 6.8-8.6 µm, warts isolated to fine reticulum, 0.4-0.8(1.0) µm high	0-2-septate	Rare
praetenuis	Pink to deep red, 2-7 cm	White to pink	Mild (Murrill), mild to faintly peppery (Thiers)	Ground	White	7-9 x 5.5-7 µm, warts mostly isolated with scattered ridges, 0.2-0.7 µm high	Absent, incrusting primordial hyphae and inflated cells in epicutis	Rare

These species fall into three groups, 1) *R. sanguinaria* and *R. americana* with acrid taste, usually pink stem, and yellowish spore deposit (differentiated from each other by spore size), 2) *R. emetica*, *R. silvicola*, and *R. bicolor* with acrid taste, white stem, and whitish spore deposit (differentiated by habitat, spore ornamentation, and pileocystidia), and 3) *R. xerampelina*, *R. cessans*, *R. lepidiformis*, and *R. praetenuis* with non-acrid taste (differentiated by spore deposit - and often cap size, fishy odor, or pink-tinged or brown-bruising stem).