



OMPHALINA

ISSN 1925-1858



Newsletter of



Vol. III, No 7
Jul. 14, 2012



FORAY NEWFOUNDLAND AND LABRADOR

is an amateur, volunteer-run, community, not-for-profit organization with a mission to organize enjoyable and informative amateur mushroom forays in Newfoundland and Labrador and disseminate the knowledge gained.

Webpage: www.nlmushrooms.ca

ADDRESS

Foray Newfoundland & Labrador
21 Pond Rd.
Rocky Harbour NL
A0K 4N0
CANADA

E-mail: [info AT nlmushrooms DOT ca](mailto:info@nlmushrooms.ca)

BOARD OF DIRECTORS

Michael Burzynski

PRESIDENT

Geoff Thurlow

TREASURER

Faye Murrin

SECRETARY

Andrus Voitk

Past PRESIDENT

Randy Batten

Jim Cornish

Jamie Graham

Tina Leonard

Anne Marceau

Maria Voitk

Marian Wissink

CONSULTANTS

MYCOLOGICAL
Dave Malloch
NB MUSEUM

AUDITOR
Rick Squire
ERNST & YOUNG

LEGAL COUNSEL
Andrew May
BROTHERS & BURDEN

OMPHALINA is the lackadaisical newsletter of Foray Newfoundland & Labrador. There is no schedule of publications, no promise to appear again. Its primary purpose is to serve as a conduit of information to registrants of the upcoming foray and secondarily as a communications tool with members.

Issues of **OMPHALINA** are archived in:

Library and Archives Canada's Electronic Collection <<http://epe.lac-bac.gc.ca/100/201/300/omphalina/index.html>>, and

Centre for Newfoundland Studies, Queen Elizabeth II Library, where a copy is also printed and archived <<http://collections.mun.ca/cdm4/description.php?phpReturn=typeListing.php&id=162>>.

The content is neither discussed nor approved by the Board of Directors. Therefore, opinions expressed do not represent the views of the Board, the Corporation, the partners, the sponsors, or the members. Opinions are solely those of the authors and uncredited opinions solely those of the Editor.

Please address comments, complaints and contributions to the largely self-appointed Editor, Andrus Voitk:

seened AT gmail DOT com,

*... who eagerly invites contributions to **OMPHALINA**, dealing with any aspect even remotely related to mushrooms. Authors are guaranteed instant fame—fortune to follow. Authors retain copyright to published material, and submission indicates permission to publish, subject to the usual editorial decisions. Issues are freely available to the public on the FNL website. Because content is protected by authors' copyright, editors of other publications wishing to use any material, should ask first.*

COVER

To celebrate Canada Day, *Lactarius lignyotus*, var. *canadensis*. At least possibly. This taxon has marginate gills (gill edges are pigmented). Margination is so light on the specimen gracing our cover that only very close examination will show it. Assessment of this feature shows a spectrum, such that the decision where to draw the line becomes subjective—not really a valid criterion for species separation in our eyes. This section of *Lactarius* needs formal study with DNA analysis, to sort out the taxa that grow in our province. Until then, the lead article provides a key for interim, albeit unsatisfactory, identification of your collections.

CONTENT

Editor's comments	2
Foray matters	3
<i>Lactarius</i> subgenus <i>Plinthogalus</i>	
<i>Andrus Voitk</i>	4
<i>Turbinellus floccosus</i> (<i>Trombetta canadensis</i> —Canadian trumpet)	
<i>Pat Handrigan</i>	8
The Bishop's sketchbook	11
<i>Puccinia caricis-shepherdiae</i>	
<i>Esteri Ohenoja</i>	12
<i>Lactarius scrobiculatus</i> var. <i>canadensis</i>	
<i>Renée Lebeuf</i>	14
Burn Morels	
<i>Inger Howse</i>	17
Morel & goat cheese canapés	
<i>Kaari Autry</i>	19
Mail basket	20
Partners	inside back cover
Notice	back cover



Message from the Editor

Happy Canada Day!

A celebration in the rest of the country, ironically in Newfoundland and Labrador it is Memorial Day, a solemn occasion. On July 1, 1916, the Newfoundland Regiment was wiped out at the Battle of the Somme, killing in one day an entire generation of Newfoundland and Labrador youth. Not unintentionally, the Canada Day issue ships on Bastille Day, another day of great symbolic significance.

To celebrate and commemorate, we bring together things Canadian in the fungal world, introducing to you both fungi and plants involved with fungi, named after our country.

Those of you who have suffered through our various attempts to deal with classifications will no doubt recognize that organisms can also be classified by the political or geographic entity to which they are nominally tied. Makes no triologic sense, perhaps, but since classification is for us, if it works, why not? And whatever else, this classification certainly produced a very colourful issue, a real joy to put together.

High among all the things that gave us joy in putting together this issue is the opportunity to reconfirm our existence as a bilingual country (and a bilingual journal), with a fine article in French on Canada Day. The French article is doubly fitting in this case, because the mushroom involved was first collected in Québec. A short English synopsis has been provided for both of our non-Canadian readers.

Another source of enjoyment is an article about the Canadian trumpet by an author, who started off by saying, "I am not a writer and do not know mushrooms ...". You be the judge. The highest praise for a journal is when its readers become its writers.

On Canada Day, a departure from our practice, sort

of. We generally restrict our content to mycota of Newfoundland and Labrador. The motive is not so much insular jingoism; rather, there are many fine sources of general mycologic content, but no other place that a Newfoundlander and Labradorean can turn to for information about her own mycota. So, we like to keep it "pure". However, we were lucky to visit our sister and family in Alberta over the holiday, and experience our first-ever harvest of the burn morel. It is a true phenomenon! You have to actually see it to believe it, and even then... Thus, for Canada Day, an article about a phenomenon not seen here in Newfoundland and Labrador. Our burns produce the false morel, *Gyromitra esculenta*.

We asked our sister to write it up, because you might find it interesting to read the impression of somebody, who has never taken an interest in mushrooms and proudly states she knows nothing about them. Sure, it is a bit of a family myco-travelogue. But then, we lost two major articles intended for this issue at the last moment... And if you've not had a double shot latte in the Blackbird Café in Coleman, you have not tasted latte.

We hope that as you leaf these colourful pages from an eclectic group of authors, you feel a sense of awe, perhaps even pride, in this rich natural heritage left for us to enjoy, respect and protect. Possibly even get a sense of country, as we touch down in the Rockies, stampede country, la belle province, and home.

Happy mushrooming!

andrus

FORAY MATTERS...

The 2012 foray will be held in beautiful Terra Nova National Park, Sep 28-30. Information and Registration Forms are on our website

<www.nlmushrooms.ca>.

1. **TIMELY BIRD SPECIAL.** About one week left before the Timely Bird discount runs out. So...
2. **FRIDAY MYCOBLITZ.** This year's foray begins with a mycoblitz of Stockton Path Provincial Park (map below). Be at the Administrative Building before 12:00 noon, Friday, September 28, 2012, when teams disperse. If you come later, everybody will be gone. Bring your own drink and lunch to eat on the trail, because there are no stores nearby. If you cannot make it, we'll see you later at the reception!
3. **REGISTRATION.** Registration will be set up 4-6:00 PM at the Terra Nova Hospitality Home. If you arrive earlier, please be patient—the

Registrars are at the Lockston Park Mycoblitz.

4. **INFORMATION.** Please make sure that you read all the pertinent information about the Foray, both general and specific, on our website.
5. **WORKSHOP.** Please do not forget to sign up for the workshops of your choice. These are also first come, first-served, and this year assigned by signing up at the time of registration to the foray.
6. **MUSHROOMS.** Last year this was the driest of dry forays. Foragers came back early, the Database Team washed dishes instead of entering data, and identifiers napped. The likelihood of a similar year is normally very slim, BUT ... at least here on the west coast June was the dries in a decade. Plants suffered. Mycelia do their best growing in May and June and mycorrhizals benefit from heir partners after the latter have fruited and gathered most of the summer's growth. These conditions may be threatened by a dry spring. Guess we'll see...



THE PURPLE STAIN

Lactarius subgenus *Plinthogalus* in NL

Andrus Voitk

The Story

—Andrus, what did you do to our *Lactarius*? Did you put some chemicals on them?

I had won! All morning I was itching to ask Esteri what she had put on our *Lactarius*, but did not want to seem ignorant, so had boldly fought off the urge to ask. Now she asked me! As I said, and it bears repeating, I had won.

We were in Labrador, collecting mushrooms, and among the many good finds had collected some *Lactarius lignyotus*. This is not a very uncommon mushroom, but it is always rewarding because it just looks so beautiful and clean: dark brown velvety cap and stem, contrasted with very white gills, a sharp demarcation between the two colours. And, if you do not need it for science, it is also a good edible.

Anyway, we were up late at night preparing, sorting and identifying our finds and cataloging them into our database. In the course of this, to look at the flesh and internal morphology, as well as to aid the drying process, we cut most larger mushrooms in half lon-

gitudinally. I had cut our *L. lignyotus* and left it to dry along with the rest. When we were done for the night, we looked over our collections—nothing remarkable noted—and went to bed.

I got up early next morning and returned to the work area before breakfast. Amazing! All the *L. lignyotus* were stained a brilliant purple! I had never seen anything like it, very dramatic (Figure 1). I knew that Esteri is a very early riser, and immediately concluded that she had put some kind of chemical on the cut surfaces, some kind of secret Finnish test. Logical. I could not imagine any other explanation, so this must be it. Although curious, I went on with my work

quietly. I greeted her politely when we met, and she me with equal politesse. I saw her cast a glance in the direction of our *L. lignyotus* and studied her face for any tell-tale sign of recognition, curiosity or glee. Inscrutable. Then she gave me a gimlet-eyed stare. I strained to maintain similar equanimity. I was dying to ask what she had done, but didn't want to give her the satisfaction of seeing my ignorance. No way!



Figure 1. The purple surprise greeting us the next morning in Labrador. The marginate gills (dark gill edges) are readily evident, making this *L. lignyotus* var. *marginatus*.

And thus we passed the morning, tension mounting palpably, but ignored with studied carelessness, until she finally broke down and asked me. As you now understand, the victory was hollow: I had satisfied the requirement of my pride, but not of my curiosity. If she had to ask, Esteri, my source of knowledge, would not be able to explain this phenomenon to me.

Scientific small print: The staining reaction appeared after

The Mushrooms

Brown velvety *Lactarius* species with light coloured spores and white milk were separated into the sub-



Figure 2. *Lactarius lignyotus* sl. Hardly anybody can resist photographing members of this attractive complex with its peaked velvety dark brown cap and stem. Most find it even more tempting to capture the clean contrast provided by the dark fuzzy cap and the white smooth gills, as on the cover picture.

several hours, because we had seen nothing unusual when we went to sleep, by which time the cut mushrooms must have been exposed over four hours. Not all *L. lignyotus* had this reaction: some turned pinkish or brownish. Furthermore, the reaction is prevented by drying, because parts of some purple stained mushrooms had been put in the dryer and these were white, with no sign of purple. Therefore it was quite possible that we had missed this reaction all our lives, because we usually do not observe mushrooms for several hours, and if we cut them, they go straight in the dryer.

genus *Plinthogalus*. A central complex in this group is made up of the species around *Lactarius lignyotus*. Because most texts treat only one species with this distinct appearance, most of us have been quite content to apply the name we find in our book, *Lactarius lignyotus*, to anything that looks like Figure 2.

However, several species and varieties have been described in this complex. The key on the next page uses two classical features, staining reaction and pigmentation of the gill edges (margination), to identify four varieties and two species of this group, all potential denizens of Newfoundland and Labrador. Lightness/darkness of the cap and the degree of its nipling has also been used, but my own experience suggests these are highly variable even within a presumed monoclonic group. As we have seen, the staining reaction may require more than four hours, so may often be missed. Equally problematic is margination. When examined critically, gill edges of the vast majority of specimens in the *L. lignyotus* complex in our province are pigmented, some more and others less. Rather than draw an arbitrary line, I have elected to consider margination either absent or present, no matter how weak (Figure 3). By this approach, most that we find in our province key out to the pink-staining (Figure 4) *L. lignyotus* var. *canadensis*. The truly amarginate pink-staining variety (var. *lignyotus*) is very uncommon.

The purple staining ones are less common, found in Labrador, or at high altitude on the Island. Of these we have encountered only marginate specimens, keying out as *L. lignyotus*, var. *marginatus*.

Summary

Known macroscopic criteria suggest that we have at least three taxa of the *L. lignyotus* complex in the province:

1. *L. lignyotus* var. *canadensis* throughout, common.
2. *L. lignyotus* var. *lignyotus* on the Island, uncommon.
3. *L. lignyotus* var. *marginatus* in Labrador and high altitude on the Island.



Figure 3. Margination of pink staining *L. lignyoti*. Clockwise from top left: amarginate gills. Thereafter, pigmentation increasing from light, to medium, to very dark and obvious. Where to draw the line? Future DNA analyses may have surprises or suggest other features to consider in identification.



Figure 4. Characteristic pink staining of *L. lignyotus* vars. *lignyotus* & *canadensis*, after 15-30 minutes.

KEY to species of THE LACTARIUS LIGNYOTUS GROUP that might be found in Newfoundland and Labrador

Stain blue-purple (may take many hours)

Gill edges white → *L. lignyotus* var. *nigroviolacens*

Gill edges brown → *L. lignyotus* var. *marginatus*

Stain pink within 15-30 minutes

Gill edges white → *L. lignyotus* var. *lignyotus*

Gill edges brown → *L. lignyotus* var. *canadensis*



No stain (or pink at base of stem only)

Small, gill edges brown → *Lactarius lignyotellus*

The rest

In addition to the velvety *L. lignyotus* complex, the subgenus *Plinthogalus* contained the velvety North American species *L. gerardii* and its consorts, as well as a lighter, smooth-capped mushroom, *L. fumosus*. Once their DNA was analyzed, it became evident that not all these *Lactarii* came along the same evolutionary path: *Plinthogalus* lost the velvety *L. gerardii*, while keeping the smooth-capped *L. fumosus*.

The smooth *L. fumosus* had never been identified at our foray, until Jorinde Nuytinck identified six collections of it, all from Cape St. Mary's (Figure 5)! *L. gerardii* differs from *L. lignyotus* by widely spaced (distant) gills (true for most species), stem length close to cap diameter, and a pure white sporeprint (that of *L. lignyotus* is cream, ivory or ochre). Spores also differ microscopically. Jorinde identified one collection in 2007 (Figure 6), and took it for her colleague Dirk Stubbe, at the University of Ghent, who is completing doctoral studies of the worldwide *L. gerardii* complex. Our Avalon mushroom was identified as *L. gerardii* var. *fagicola*.¹ As its varietal name suggests, it is usually a partner of beech or oak. Neither is native here. One of the identifying features of this variety is brown staining. Ours did not stain. Explaining these discrepancies should not be difficult, but it certainly does not make life any easier for the poor scientists...

Much of the material in this article comes from correspondence with Dirk (including material from which the key is drawn), and from his published and unpublished work. He studied the type specimens for these varieties and found them microscopically similar to each other. Therefore, identification is macroscopic, and we have reason to believe that current classical features are not reliable. Dirk did note, however, that microscopically the North American *Lactarius lignyotus* var. *lignyotus* looks like an entirely different species from what goes by that name in Europe. No surprise there for regular readers of **OMPHALINA**.

Dirk has since completed DNA studies of the *L. lignyotus* complex. As suspected, The North American *L. lignyotus* is genetically a different species from that in Europe. It awaits formal description and assignment of a new name. Dirk identified a total of five species in the complex in North America. Unfortunately at this stage we are not able to match DNA to the morphologic taxa. Until that is done, we have no alternative to macromorphologic keys, such as presented here, to fit names that have been in use so far, knowing that changes are around the corner. Do we really have three of the five North American taxa in Newfoundland and Labrador? Which ones are they? Hopefully the future will tell. What we do know, is that *Lactarius lignyotus* is not one of them!



Figure 5. *Lactarius fumosus*. Six collections of this small beige mushroom were identified from Cape St. Mary's and none from elsewhere during any foray. It must be a signature species of the hyperoceanic barrens, much like *Amanita wellsii*. This was only noticed during the compilation of this article, a tribute to the value of good databasing. Photo: Roger Smith.



Figure 6. *Lactarius gerardii* var. *fagicola* from the Avalon Peninsula in 2007. Photo: Roger Smith.

Remember, the mushroom doesn't care about the name we use for it or where we choose to lump it. It will please us with its beauty and good taste, and provide us the occasional stain surprise, no matter what we call it. "Correct" names are only for our benefit, so that we can speak to each other a little more accurately, both sides knowing exactly which organism is being discussed.

Reference

1. Stubbe D, Nuytinck J, Verbeke A: Critical assessment of the *Lactarius gerardii* species complex (Russulales). *Fungal Biology*, 114:271-283. 2010.



Trombetta **Pat Handrigan** *canadensis*

To find a mushroom that would honor Canada on its special day, there is any number to choose from, including *Cantharellus canadensis*, *Craterellus canadensis*, *Trombetta canadensis*, or *Gomphus canadensis*. Working on the name for the mushroom on my picture became an intriguing eye-opener: all these names have been given to the same mushroom!

The mushroom known to me as *Gomphus floccosus* has given the taxonomists a run for their money. From the mid 1700s to the late 1900s it has changed names twelve times, through genera *Cantharellus*, *Craterellus*, *Merulius*, *Trombetta*, *Turbinellus*, *Chaterel*, *Neurophyllum* and *Gomphus*, coupled to various combinations of species epithets *floccosus/-um*, *canadensis* and *princeps*. The choice of common names is the scaly, shaggy or woolly chanterelle, and the woolly gomphus. Mesmerizing. Why all these names? It seems the answer is due in some measure to the old adage “looks can be deceiving.”

A general description of this mushroom will easily demonstrate why: a vase or stake shaped mushroom with a strongly depressed center, the upper surface of the cap orange to orange-brown, covered in thick, darker orange to red-orange scales. The underside of the cap is white to cream, with strongly decurrent blunt ridges, superficially similar to the blunt ridges of the chanterelle group. Therefore, when many ordinary mushroom hunters see this similarly

colored, blunt ridged fungus, visions of a chanterelle feast dance in their heads. Not always a good idea, because unlike the most esteemed chanterelles, the Canadian trumpet is reputed to cause tummy upset to many people, not at all what we expect from our beloved chanterelles.

The taxonomists also saw the similarity in morphological features and placed it with the chanterelles, but genetically this fellow refused to behave himself and conform to the genus type, even if it had those funny ridge-like gills similar to the chanterelles. Michael Kuo noted that the taxonomic information about this species has been turned on its head in the past couple of years.¹ He states in “The Genus *Gomphus*” that DNA study is now suggesting that despite a morphological resemblance to chanterelles this genus is to more closely related to the stinkhorns, earthstars and corals. That’s right, you read correctly. Kuo believes that these genetically similar fungi are so very diverse looking because “ecological” conditions prompted each to select differing spore dispersal strategies.

Now, to the relatively late name *Gomphus*. According to Admir Giachini², although the name *Gomphus* was first introduced in 1797 by Persoon as a genus he assigned no species to it. Meanwhile, Gray (1821) noted Persoon’s terminology and accepted *Gomphus* as a monotypic genus with the species *Gomphus*



THE OLD FAMILY AND THE NEW

On the left are the traditional members of the group to which *Turbinellus floccosus* (i.e. our **Canadian trumpet** or *Trombetta canadiensis*) belonged: from the top—*Cantharellus roseocanus* (Pippy Park, 2011), *Craterellus cornucopioides* (Nova Scotia, 2011—not recorded in NL) and *Gomphus clavatus* (Stanleyville Trail, Gros Morne National Park, 2010; photo: Andrus Voitk). Of these, only the last remains a close relative. On the right is the new group to which it has been assigned: from the top—*Phallus ravenellii* (Indiana, 2011—not recorded in NL), *Geastrum pectinatum* (Kentucky, 2004—not recorded in NL), and *Ramaria* sp (Nova Scotia, 2011). A much more diverse looking group, where kinship is not obvious to the eye.

clavatus, who is now claiming to be the only true member of its genus in North America, giving the cold shoulder to *G. floccosus*. Giachini has suggested that species centered around *Gomphus floccosus* should be treated as a separate genus and proposes the older name *Turbinellus*. He has also suggested that the floccosus-like “species” are genetically so similar that they do not deserve separate species status. Therefore, *G. floccosus*, *G. canadensis*, *G. bonani* and *G. wilkinsae* should all be considered synonymous with *Turbinellus floccosus*. Good news for lumpers.

Anyone interested in pursuing this fascinating topic of the various reincarnations of this genus can obtain a copy of Giachini’s doctoral thesis which makes for some—hurrump—light bedtime reading. Myself, I’ll stick to poking around in the woods trying to pho-

tograph these marvels of nature and let others better qualified untangle their relationships.

OK, just so that we don’t confuse anybody, what is the real deal on the correct name? For this Canada Day article only, we resuscitated *Trombetta canadensis* from the past. Most commonly you will encounter it as *Gomphus floccosus*. In the Foray Newfoundland & Labrador list it appears as *Turbinellus floccosus*, because we believe that Giachini has presented a good taxonomic argument for this combination².

References

1. Kuo M: The genus *Gomphus*. <<http://www.mushroomexpert.com/gomphus.html>>. (Last accessed March, 2012.) 2007.
2. Giachini AJ: . Systematics, phylogeny, and ecology of *Gomphus* sensu lato. Doctoral dissertation, Oregon State University. 2004.





The Bishop's Sketchbook





Soapberry rust

Esteri Ohenoja

Photo: Maria Voitk

Species in the genus *Shepherdia* (oleaster family Eleagnaceae) are shrubs and small trees with edible berrylike fruits. Soapberry, or Canadian buffaloberry (*Shepherdia canadensis* (L.) Nutt.), is a dense, bushy, dioecious (male & female flowers on different plants) shrub with opposite, oval, silvery, hairy leaves, which are speckled with brown scales below. The berries are yellowish red. It grows in dry to moist open woods, middle elevation forests, burned areas and on gravelly river terraces. This handsome North American plant is distributed throughout the continent except the deep south, extending up to the Arctic Circle. In Newfoundland and Labrador it is found in various habitats, most commonly in the western and northern parts of the island.¹

Canadian soapberry is host to a rust, *Puccinia caricis-shepherdiae*, with a very complicated life cycle, typical of rusts. After the rust infects the soapberry, it develops small orange fruit bodies, called aecia, on its leaves (photos, next page). These produce haploid aeciospores, carried by wind to infect sedges (*Carex eburnea*, *C. aquatilis* etc.). There they produce new fruit bodies, called

uredinia, which form diploid uredospores. These spread to infect more sedges, and by repeating the process, can create a huge reserve of the organism in the sedge population over the summer. Toward winter the rust on the sedge forms different fruit bodies, called telia, which produce teliospores, designed for overwintering. In the spring teliospores produce haploid basidiospores. These are carried from sedge to new soapberry bushes, to start the cycle anew.

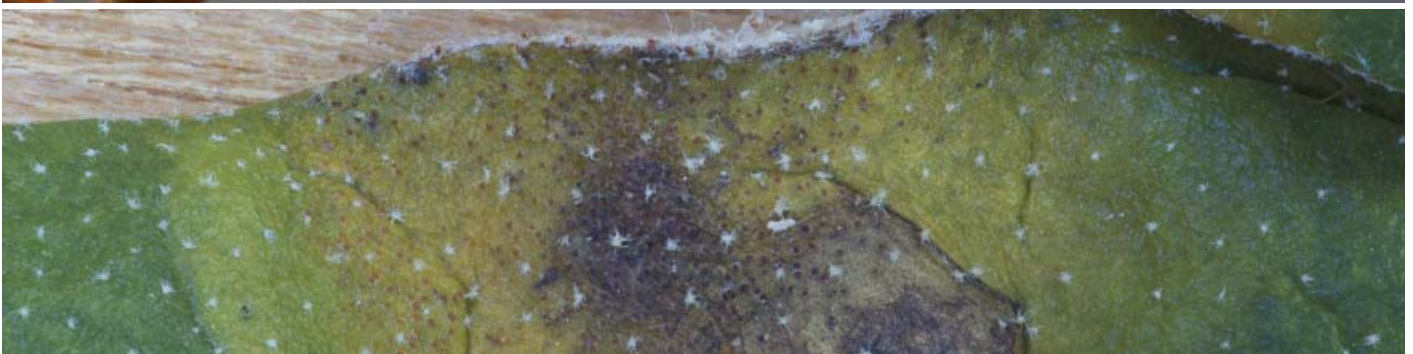
This rust was first described from Wisconsin by J.J. Davis in 1924.² It has been reported throughout the distribution area of the host, in Canada from the Yukon^{3,4}, British Columbia (on *S. canadensis*), Alberta (on *S. canadensis* and on *C. aquatilis*)⁵, Ontario (on *S. canadensis* and *C. eburnea*)⁶, Québec, to the Maritimes. It does not produce significant harm to the soapberry host and is not a very common soapberry pathogen in Newfoundland and Labrador. The depicted rust is the first report of it in Gros Morne National Park.

Two other rusts are known on *Shepherdia*. In some areas it is an alternate host of the oat and barley pathogen, *Puccinia coronata* Corda. In Ontario

the coelomycetous *Septoria shepherdiae* (Sacc.) Dearn., rare in Canada, has been described on soapberry.⁷

References

1. Glen Ryan A. 1995. Native trees and shrubs of Newfoundland and Labrador. Parks and Natural Areas Division, Government of Newfoundland and Labrador. St John's. 120 pp.
2. Davis J.J.: Notes on parasitic fungi in Wisconsin XI. Transactions of the Wisconsin Academy of Sciences, Arts and Letters 21: 287-302. 1924.
3. Conners I.L.: Annotated index of plant diseases in Canada. Agriculture Canada. Publ. 1251: 1-381. Queen's Printer, Ottawa. 1967.
4. Parmelee, J.A. & Ginns, J. 1986. Parasitic microfungi on vascular plants in the Yukon and environs. Int. J. Mycol. Lichenol. 2 (2-3): 293-347.
5. Parmelee, J.A. 1984. Microfungi parasitic on vascular plants in Waterton Lakes National Park, Alberta, and environs. Agriculture Canada, Research Branch, Technical Bulletin 1984/11E: 1-32.
6. Fraser WP, Ledingham GA: Studies of the sedge rust, *Puccinia caricis-shepherdiae*. Mycologia 21:86-89. 1929.
7. Parmelee, J.A. 1983. The fungi of Ontario III Parasitic microfungi on vascular plants in Northern Ontario. Agriculture Canada, Research Branch, Contribution 1983-9E: 1-87.



Top: Aecial fruit bodies of *Puccinia caricis-shepherdiae* on the underside of soapberry (*Shepherdia canadensis*) leaves. Middle: The leaves are gorgeous—moss green with rows of white hair tufts on top and orange-brown scales on the hairy underside. Among these, hide the yellowish-orange aecia of the rust, leaving orange dotted zones on top. Bottom: Later these become distinct yellow-orange rings around a centre of black dead leaf. Photos: Andrus Voitk.

Portrait d'un lactaire rare et mal connu à
Terre-Neuve-et-Labrador :



Lactarius scrobiculatus var.
canadensis

Renée Lebeuf

Abstract

This handsome mushroom was first collected in Québec in 1959 by Alexander Smith, who named it *Lactarius payettensis* var. *canadensis*. It was renamed *L. scrobiculatus* var. *canadensis* by Hesler and Smith, who recognized its closeness to the European *L. scrobiculatus*; they retained the variety *canadensis* to denote some differences from the European taxon. The mushroom is uncommon in Québec, and has only been identified once in our province, on the Green Gardens lower trail in Gros Morne National Park on Sept 18, 2004.

It is a large yellowish mushroom that darkens to an olivaceous tan shade with age, with a fibrillar cap, mucid in youth, and a distinctly scrobiculate stem of the same colours. The milk is white, turning yellow on exposure to air. The first two pictures are in situ from a known site in Québec and the one on the last page is our voucher photo from 2004.

Le présent article traite d'un beau lactaire qui n'a été recensé qu'une seule fois à Terre-Neuve-et-Labrador, en 2004 : *Lactarius scrobiculatus* variété *canadensis*. Il s'agit d'une espèce assez trapue qui pousse principalement en régions nordiques, dans les forêts de conifères, surtout d'épinettes. Elle possède un beau chapeau fibrilleux-laineux vers la marge dans des tons de beige olivâtre à jaune paille, un pied muni de fossettes (scrobiculé) et un lait blanc qui jaunit à l'air.

Alexander H. Smith a découvert ce champignon en 1959 lors d'un séjour au Québec, plus précisément à La Pocatière, au Bas-Saint-Laurent, et l'a nommé *L. payettensis* var. *canadensis*. Le champignon a ensuite été renommé *Lactarius scrobiculatus* var. *canadensis* par Hesler et Smith dans leur ouvrage *North American Species of Lactarius*, publié en 1979. Selon ces auteurs, la variété *canadensis* se distingue de la variété *scrobiculatus* (taxon européen qui n'a jamais été répertorié en Amérique du Nord) par sa sporée blanche à crème, son latex peu abondant, sa saveur faiblement âcre et sa taille moins robuste (jusqu'à 30 cm chez la var. *scrobiculatus*). Certains mycologues croient maintenant que *L. scrobiculatus* var. *canadensis* est une espèce à part entière, mais seules des études génétiques pourront le confirmer. En attendant, son nom actuel demeure.



Voici une description plus complète du champignon :

Chapeau 4-10(12) cm, viscidule au début, mais vite sec, d'abord blanchâtre puis devenant chamois olivâtre ou grisâtre, jaunissant lentement avec l'âge, à marge enroulée au début. Surface +/- fibrilleuse à squamuleuse, à marge barbue. **Lames** adnées à courtement décurrentes, très serrées, blanchâtres puis ocrées. **Latex** peu abondant, blanc au début et virant rapidement au jaune soufre au contact de l'air. **Pied** 3-11 x 1-3 cm, blanchâtre ou concolore au chapeau, orné de fossettes plus foncées. **Sporée** blanche à crème. **Odeur**

faiblement aromatique. Saveur douce ou un peu âcre. **Spores** 7-9 x 5,5-7 μm , ellipsoïdes, ornementation d'environ 0,5 μm de haut, composée de verrues et de courtes crêtes éparses parfois ramifiées, formant au plus un réticulum partiel. **Habitat**: solitaire à grégaire au sol, sous l'épinette. En été et automne. Non comestible.

Il existe quelques espèces avec lesquelles *L. scrobiculatus* var. *canadensis* peut être confondu. Parmi les espèces à lait jaunissant et à marge fibrilleuse ou laineuse, du moins dans le jeune âge, citons *Lactarius leonis*, espèce décrite de Suède, mais répertoriée à Terre-

Neuve-et-Labrador, qui est associée à l'épinette et dont le chapeau a plutôt des teintes jaunes, et ce, dès le jeune âge (à noter que les spécimens trouvés à Terre-Neuve sont petits [chapeau de 4,5-6 cm] comparativement aux descriptions européennes [5-15 cm]); *Lactarius resimus*, espèce au chapeau blanc qui peut jaunir légèrement avec l'âge et à marge finement méchuleuse (sous bouleau, peuplier faux-tremble et pin); et *Lactarius aquizonatus*, similaire à *L. resimus*, mais au chapeau zoné (sous bouleau, pin, saule et peuplier). Chez les autres espèces analogues, le lait ne jaunit pas : *L. repraesentaneus*, à chapeau et pied jaunes et à lait blanc tachant les lames de violet (sous sapin et peuplier); *L. torminosus*, à chapeau rosé et à lait blanc immuable, mais tachant les lames de jaunâtre en séchant (sous bouleau); et *L. controversus*, à chapeau blanc, à lait blanc immuable, à lames devenant rosées avec l'âge et à pied non scrobiculé (sous peuplier et saule). Au Québec, ce champignon est rarement observé. Nous en connaissons personnellement une seule station, dans une plantation d'épinettes, et nous le voyons en général deux ou trois fois par saison lors de rencontres mycologiques, où le grand nombre de cueilleurs favorise sa découverte.

Nous espérons que cet article incitera les lecteurs à rechercher cette très belle et rare

espèce afin de mieux documenter sa présence à Terre-Neuve-et-Labrador.

Références

Bessette, Alan, David Harris, Arleen R. Bessette. *Milk Mushrooms of North America : A field Identification Guide to the Genus Lactarius*, Syracuse, Syracuse University Press, 2009, 297 p.

Heilmann-Clausen, Jacob, Annemieke Verbeken, Jan Vesterholt. *The Genus Lactarius*, Fungi of Northern Europe, vol. 2, Danemark, The Danish Mycological Society, 1998, 287 p.

Hesler, L. R., Alexander H. Smith. *North American species of Lactarius*, Ann Harbor, The University of Michigan Press, 1979, 841 p.

Kränzlin, Fred. *Champignons de Suisse, Tome 6 : Russulaceae – Lactaires et russules*, Lucerne, Edition Mykologia Lucerne, 2004, 319 p.

Kuo, M. (mars 2011). *Lactarius scrobiculatus* var. *canadensis*. Tiré du site Web MushroomExpert.Com : http://www.mushroomexpert.com/lactarius_scrobiculatus_canadensis.html

Landry, Jacques, *MycoQuebec.org*, site Web : <http://www.mycoquebec.org>



Photo: Roger Smith

Morelling on Canada Day

INGER HOWSE
PHOTOS: MARIA VOITK

Well may you ask how I spent Canada Day.

Perhaps it was an unusual way to spend it. This all happened in Alberta, the province of black gold, as dark and valuable as our haul. The net result was five soot covered people and fifty pounds of morels. Considering the current market price of morels I have now become pretty close to a millionaire—not at all a bad loot bag on Canada’s birthday!

Having heard about the excitement and magical energy of hundreds of morels covering the ground a year after a forest fire, we decided to try our luck. Not expecting too much, mind, having learned to take such reports with a generous dose of salt. Great bonanzas are not for the likes of us... Just in case, we stuffed a few plastic bags in our pockets, but took no baskets or proper containers.

Well, off to Kananaskis Country, high in the Rocky Mountains. A good guide helps. Ours earns his daily bread by aerial mapping of hot spots after forest fires. He also knows the Rockies on a first name basis, having hiked, camped, climbed, lived

and breathed them since childhood. People had told him the season was over. “Let’s substitute elevation for latitude,” he said. “I’ll take you where it snowed last week.” Higher and higher into the back country we went, without going over the cliff-edge into the valleys far below. Our eyes were peeled for signs of burnt-out forest high above the road.

Yes! There it was. Burnt trees—a black field of





charred trunks. See both sides of the title banner: sooo high, and sooo far from the road, and sooo surrounded by brush and living forest. How would we ever be able to reach it? Then again, pictures of hundreds of morels danced in our heads and we knew we could do it! Had to.

And so we did, without encountering bears or other forest critters that might threaten us. We reached the edge of the burn, out of breath from the climb, leaning against the nearest tree, black soot all over everything. Where were the promised millions of morels? Breathing under control, we spread out, striding boldly forth, eyes focused on the black ground, each eager to raise the first cry. Silence.

The incredulous morellers, shortly before starting back downhill. L to R: Maria Voitk, photographer, Jason Howse, guide, Morley Howse (used profits for haircut next day), Andrus Voitk, editor, Inger Howse, author.



Morels on toast with hot Italian sausage earned us free accommodation at the Raging Elk Hostel in Fernie, BC. The smiling proprietors, Sadie and Joe Howse, below, suggested that morels + filial ties work every time!

- I see one!
- I see a whole colony!
- Over here!
- Here!
- Here's a giant!
- Wow! Look over here!

And so our happy voices echoed through the burn. Morels, morels everywhere, the large ones over seven inches high. Morley, our youngest mushroom hunter at eight (years, not inches), gleefully filled his large shopping bag to overflowing, as did the rest of us. Bags stretched to the max, in danger of ripping, it seemed time to head home. But rallying the troops to return to the car presented a dilemma: is it immoral to leave ALL THOSE MORELS on the mountainside? Can one just blithely step over them on the way down? The mushrooms were screaming, "Pick me ... pick me", and some of the pickers were also screaming, "We can't just leave them!"

Eventually, with over fifty pounds bagged in two hours, leave them we did. Sooty and content, we discussed recipes all the way back to Calgary.

That is how I spent Canada Day.

Love to all on the Rock.





The empty skillet

María Voité

Canapés de Morilles et Brie de Chèvre

Kaari Autry

INGREDIENTS

4-6 oz morels	1 tomato
1/2 cup white wine	1/2 section puff pastry
2 shallots	olive oil or butter
4 oz goat Brie	seasoning to taste

PROCEDURE

Sauté morels in olive oil or butter.
Add white wine and reduce.
Toward end, add shallots.
Spoon the sauté into blender and add goat Brie.
Blend with 1-2 swirls only—mix and chop, but maintain coarse texture.

Thaw puff pastry; roll out form into circle.
Cover pastry with thin slices of tomato.
Scoop morel/Brie/shallot mixture on top.
Spread, then fold edges in 0.5-1 cm.

Follow baking instructions for puff pastry.

Cut into 1 x 2 inch strips.
Serve hot.

Enjoy—like my uncle and aunty did!



La cheffe, Kaari Autry, presenting her canapés for cutting to brother Jason Howse, in thanks for his guiding services to procure the burn morels—the right peak at peak fruiting!

THE MAIL BAG

OR WHY THE PASSENGER PIGEONS ASSIGNED TO SERVE THE
LAVISH CORPORATE AND EDITORIAL OFFICES OF OMPHALINA GET HERNIAS

You never know what catches people's fancy. Always great fun, when it is unexpected. Last year the alder tongues generated the most fan mail. This year, only two comments about the alder tongues, but the slug story unleashed a storm. Here are a few examples:

I would love to publish the slug/mushroom study.

Dianna Smith, Ed. *Mycophile*

YAY, SLUGS!

Nina Zitani

The slug article was great.

Dave Malloch

I loved the "freudian" slip, when you describe slugs as having "evLOVED" with *Amanita*. The cover photo seems to reinforce this beautiful neologism!

Thanks Ian

Terrific publication! I especially liked the slug story and the *Taphrina* story. But then again, I am biased toward mycologists who go into the field and ask contextual questions, rather than those umbilically affixed to a barcoding table...

Larry Millman

Dear Editor,

Noted in your otherwise fine production an extra E in Memorial University of Newfoundland on your partners' page. Please do not credit me with its discovery.

Best wishes,

Name Withheld (at author's request)

OUR PARTNER ORGANIZATIONS

PEOPLE OF NEWFOUNDLAND AND LABRADOR, THROUGH
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
PARKS AND NATURAL AREAS DIVISION
WILDLIFE DIVISION
DEPARTMENT OF NATURAL RESOURCES
CENTER FOR FOREST SCIENCE AND INNOVATION

PEOPLE OF CANADA, THROUGH
PARKS CANADA
TERRA NOVA NATIONAL PARK
GROS MORNE NATIONAL PARK

MODEL FOREST OF NEWFOUNDLAND AND LABRADOR
FOREST COMMUNITIES PROGRAM

RED OCHRE DEVELOPMENT BOARD

MEMORIAL UNIVERSITY OF NEWFOUNDLAND
GRENFELL CAMPUS
ST. JOHN'S CAMPUS

TUCKAMORE LODGE

QUIDI VIDI BREWING COMPANY

RODRIGUES WINERY

LICHENS added!



FORAY

NEWFOUNDLAND AND LABRADOR

2012 2012 2012
2012 2012
2012 2012 2012
2012 2012
2012 2012 2012
2012 2012
2012 2012 2012

Terra Nova National Park

Headquarters: *Terra Nova Hospitality Home*

September 28-30, 2012

GUEST FACULTY

Gro Gulden
Nils Hallenberg
Renée Lebeuf
Faye Murrin
Todd Osmundson
Michele Piercy-Normore
Roger Smith
Greg Thom
Steve Trudell

TIMELY BIRD SPECIAL BEFORE JULY 31

Registration Forms & Information on our website:

www.nlmushrooms.ca