

# NJMA NEWS

THE OFFICIAL NEWSLETTER OF THE NEW JERSEY MYCOLOGICAL ASSOCIATION  
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## NJMA OFFICERS

President - Lyla Meader  
Vice-President - Mike Haynes  
Secretary - Emily Rawlins  
Treasurer - Igor Safonov

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Igor Safonov  
115 E. Kings Hwy., Unit #348  
Maple Shade, NJ 08052-3478

## NJMA WEBSITE

[www.njmyco.org](http://www.njmyco.org)  
Sue McClary, coordinator

## NJMA NEWS

Interim Editor:  
Sue McClary  
[njmaeditor@njmyco.org](mailto:njmaeditor@njmyco.org)

Layout and graphic design:

Jim Barg  
[jimbargg5@mac.com](mailto:jimbargg5@mac.com)

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Emily Rawlins  
[secretary@njmyco.org](mailto:secretary@njmyco.org)

## NJMA EVENTS HOTLINE

908-227-0872 for information on  
event cancellations due to unduly-  
inclement weather. It is **NOT** for gen-  
eral inquiries or to contact officers!



## *Hypomyces lactifluorum* Lobster mushroom

In itself, it's not really a "mushroom" ... it's a parasitic ascomycete which attacks various species of *Lactarius*, *Lactifluus*, and *Russula*, transforming the flesh of the host mushroom into a firm, dense-textured consistency. While it is considered edible, there is a possibility that it could infect a poisonous or foul-tasting host mushroom. Though there are said to be no reports of poisonings from consuming it, caution is still advised.

PHOTO BY JIM BARG

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## PRESIDENT'S MESSAGE

Greetings NJMA members!

As I write this, I'm recovering from our Fungus Fest.

What a great time it was to visit with members and curious public visitors. The NJ "state of emergency" and the fact that it was held during the holiday weekend, no doubt, suppressed attendance, yet we still logged over 60 species. A huge thank you to everyone who made it a success, especially **Sue McClary** who organized and owned this largest event.

Once again, it has been a dry year – at least since I just gushed in mid-July about recent moisture. Argh! If you read the foray reports and tables that **John Burghardt** so carefully writes, you will see the ups and downs in the number of taxa found. What is interesting however, is that we continue to find new to NJMA species to add to the NJMA list. Unusual weather patterns bringing out unusual species? If enough of us go into the woods and look carefully, we are going to find a good deal of diversity, including some choice edibles. They are out there, but do be careful and know for sure what you are eating if you do decide to eat a foraged find. Be safe rather than sorry and, *when it doubt, throw it out!*

In August, **Dorothy Smullen** ran a small mushroom papermaking workshop on a weeknight evening that was well-received. **Christopher Simoes** held his second microscopy workshop, this time at Rutgers – thank you Dr. White. He was assisted by **Lisa Davies** who has also started to help with our social media efforts, specifically Instagram. Together they are trying to make our forays more welcoming and interesting for our novices who can become overwhelmed. (We've all been there!) Kudos to them for volunteering in a new way.

Looking ahead, our Photo Contest, organized by **Nicole Engel**, should be wrapping up by the time you read this. I hope you entered! We have an in-person General Membership meeting November 16<sup>th</sup> back at Frelinghuysen. This is the first one of those since pre-pandemic days. To celebrate, we'll have two presentations – one scientific and one artistic. Don't miss it! And finally, don't miss the annual Holiday Party on Saturday December 6<sup>th</sup> at the Unitarian Society in East Brunswick, being organized by **Virginia Tomat**. The photo contest entries and results will be the featured entertainment, and the food will be scrumptious potluck dishes contributed by all.

Congratulations to **John Dawson** for reaching a milestone of 100 installments of "Who's in a Name". This informative series began in *NJMA News* issue 37-2 March-April 2007. I thank him for this tremendous body of work shared with so many over the years. I must admit that not long after I started to receive *NJMA News*, John's feature became the first thing I read when

the new issue arrived. Well, okay, I scanned the photos on my way to his article. John's "Who's in a Name" has always been a draw because it is so well written and full of interesting things to learn.

Who will be our next standout writer? It need not be anyone looking to create a long series. In recent issues there's been some well-done pieces by **Faith Frankel** and **Aneta Rogoz**, for instance. I look forward to reading everything submitted. I encourage our members, new or seasoned, to write about their experiences with NJMA or some fascinating fungal connection, recipe or what have you.

This is my last official President's Message. It has been an honor to serve this amazing association of diverse and interesting people for two terms. Thanks to life getting in the way at times, not everything that I had hoped to help achieve has come to fruition, nor every foray attended. The Culinary Group, for instance, inexplicably isn't yet back to vibrancy – surprising, given the number of great cooks and food interest in general within NJMA. It is a long road back from the pandemic. There are always opportunities ahead! As a volunteer organization, it takes members (like those highlighted above), not just officers, stepping up to give of their time to plan and manage events that are of interest to fellow members. This is rewarding for all when it happens, and hopefully it will continue to happen quite often. May we each keep learning and sharing our love of mushrooms. Thank you.

See you in the woods!

– *Lyla R. Meader*

Join us this and every Tuesday!

### TAXONOMY TUESDAYS

Online every Tuesday evening at 7:00PM on ZOOM!

Download the ZOOM app to your phone, computer, or tablet and have digital photos of your mushrooms ready to present to the group.

Watch your email for details!

### NORTHEAST RARE FUNGI CHALLENGE!



**FUNGAL  
DIVERSITY  
SURVEY**

Calling all citizen scientists! FunDiS wants your help in recording rare, under-documented, and/or threatened species of the Northeast. This challenge runs from July 1, 2022 through December of 2027. For more information on how to participate, click [here](#).

Visit the NJMA  
Discussion Group



facebook

<http://tinyurl.com/jjualgz>



## EDITOR'S NOTES

As this is the final issue of the year, I would like to thank our content contributors: John Burghardt, Nina Burghardt, John Dawson, Faith Frankel, Jason Hafstad, Susan Hopkins, Sarah Hunt, Hunter Le Duc, Gary Makus, Dr. Svetlana McCoy-Rusanova, Lyla Meader, Bashira Muhammad, Emily Rawlins, Aneta Rogoz, Nicholas Shankin, Dorothy Smullen, Virginia Tomat. And of course, a big thank you to Jim Barg, who puts the collated material into an actual newsletter.

This final issue is full of foray reports. Despite the dry weather, and sometimes low participation at forays (sometimes  $\leq 15$  people), each foray always had interesting fungi to me. Often I may have thought the foray was a 'bust' while collecting, but then the identified fungi started appearing on the ID table. There were many fungi that were new to me this year, even if they were not new to NJMA. Sometimes you can learn more when only one table is full of fungi, rather than two overloaded tables. On at least one occasion, some of us lamented the lack of attendees out searching, because the conditions were really unexpectedly good.

We share each foray report, so everyone can see what they missed and perhaps learn more species that occur in NJ. For those who just want a peek at our forays' finds, I try to choose one picture to include for each so that the overall result is a mix of fungi and lichens, some new and some familiar to most of us, with a mix of different form groups. Enjoy!

– Sue McClary

### A NOTE ABOUT THE PDF SPECIES LISTS

The lists are arranged alphabetically within "form groups", which are defined by similarities in the structure of the spore bearing surface of the fungi. While this provides a straightforward way to group similar fungi, membership in the same form group does not reflect genetic relationships among the fungi. (See Timothy J. Baroni's *Mushrooms of the Northeastern United States and Eastern Canada*, Timber Field Press, 2017). The tables also show the frequency with which each taxon has been collected over the 40+ years NJMA has kept records of its finds. I find this useful for recognizing common and uncommon species.

In the species list .pdf, there may be "I-Nat" and/or "MO" observation numbers next to a species name. To view these observations, simply copy the appropriate URL ([www.inaturalist.org/observations/xxxx](http://www.inaturalist.org/observations/xxxx) or [www.mushroomobserver.org/obs/xxxx](http://www.mushroomobserver.org/obs/xxxx)) into your browser, substituting the observation # for the xxxx. (No login is required for either site.)

## foray reports

### HACKLEBARNEY STATE PARK AUGUST 2, 2025

by John Burghardt, NJMA Foray Recorder

Hacklebarney is a well-used park. Our sorting and ID area was near the entrance to the trails, so many curious passersby stopped to look at the fungi and ask questions. Fortunately, we had found an interesting mix of fungi.

The .pdf file at <https://tinyurl.com/ysdryu87> contains a list of our identified collections. A note in the left column explains the layout of the table. Our list this week includes 91 fungi and 14 lichens. Thanks to Jason Hafstad for making the lichen list.

We had an interesting "two fer" (two for one) among this week's collections. We collected a *Pseudoboletus parasitica*, which was growing on a *Scleroderma citrinum*. The bolete is believed to be parasitizing the *Scleroderma*. However, both *Boletaceae* and *Scleroderma* are normally mycorrhizal. That is, each species group encases the roots of plants with their mycelium and receives food energy from the plant, while helping the plant to absorb minerals and water from the soil. It's not clear how the bolete becomes a parasite of the *Scleroderma*. I found some photos of this relationship on the [Mushroom Observer](http://MushroomObserver.com) website. If you use the MO search function to search for *Pseudoboletus parasiticus*, you can see what this looks like in the field. If you prefer to use [iNaturalist](http://iNaturalist.org), you can very likely find it using the [iNaturalist.org](http://iNaturalist.org) search feature.



*Fomes fomentarius* at Hacklebarney State Park

(foray reports continue on [next page](#))

## GREEN TURTLE POND AUGUST 10, 2025

by John Burghardt, NJMA Foray Recorder

I have looked forward to our trip to Green Turtle Pond in each of the six years we have collected there. The forest has a mix of oak, hemlock, birch and other deciduous tree species. I especially enjoyed seeing beech trees that did not appear to have been affected by the nematodes defoliating our beech trees in central New Jersey. I also enjoyed exploring the wet areas at the edge of the lake and the occasional tributary stream that still had some moisture.

The .pdf file at <https://tinyurl.com/atw8822w> contains a list of our identified collections. A note on [page 3](#) explains the layout of the table. Our list this week includes 46 fungi and two lichens. The small number of gilled mushrooms and boletes reflects the dry conditions. That we found as many *Entoloma*, *Russula*, *Mycena*, *Lactarius* and *Laccaria* as we found is a tribute to their toughness and your careful searching.



PHOTO BY SUE McCLARY

*Mycena leaiana* at Green Turtle Pond

## SHARK RIVER PARK AUGUST 16, 2025

by John Burghardt, NJMA Foray Recorder

In looking at the map of Shark River Park before our visit, I noted that the park has a stand of Atlantic White Cedars along the Shark River. I decided that seeing the stand of white cedars would be my project for the day and set out on the green trail to find them. Fortunately, I met up with Elliot, who joined me on the walk. We found a lot of fungi along the very interesting path that we followed. Seeing the huge, healthy white cedars was

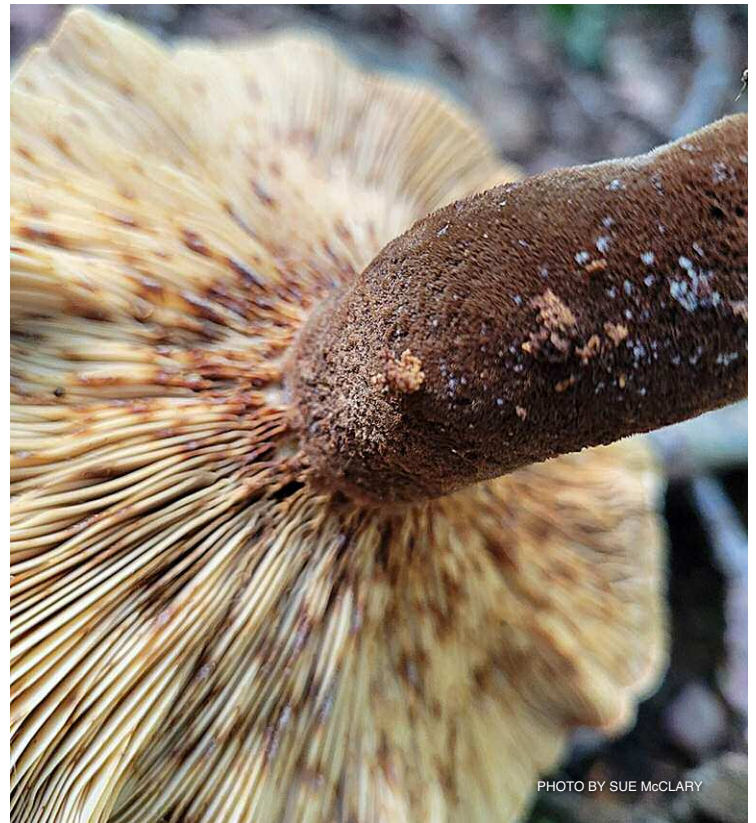


PHOTO BY SUE McCLARY

*Tapinella atrotomentosa* at Shark River Park

worth the long walk, but we didn't find a lot of fungi. I hope to return in the future and spend more time in the white cedar swamp.

The .pdf file at <https://tinyurl.com/bdfk89ft> contains a list of our identified collections. A note on [page 3](#) explains the layout of the table. Our list this week includes 98 taxa of fungi and slime molds. The gilled mushrooms and boletes were plentiful, as were the various other form groups and slime molds. We also found two taxa that I believe are new to our NJMA cumulative list. One was on the collection table with the name *Russula rosacea*. This collection by Elliot had two small deep red fruiting bodies that each had vivid pink coloration on the lower two thirds of the stipe. I was skeptical of the name, but after measuring spores and looking at the literature I am pretty sure this is a correct ID. The current name according to *Index Fungorum* is *Russula sanguinaria*. The second first time collection, *Gleophyllum striatum*, was made and named by Brandon. Based on the observations of it on [Mushroom Observer](#), this species has a wide distribution to our south (Texas, Virginia, Puerto Rico, Colombia, etc.)

(foray reports continue on [next page](#))

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# STOKES STATE FOREST KITTLE FIELD AUGUST 24, 2025

by John Burghardt, NJMA Foray Recorder

Our 2025 Greta Turchick Foray and Picnic was great fun as always. Dry conditions kept our species count lower than usual for this location in late August. But, a walk in these woods is always fun, and we spent a productive afternoon examining our finds.

The .pdf file at <https://tinyurl.com/ry9vuznu> contains a list of our identified collections. A note on [page 3](#) explains the layout of the table. Thanks to Emily Rawlins and Dave Wasilewski for posting some of our finds on [Mushroom Observer](#). You can access all of their photos by using the website search function to search for all observations at “Stokes State Forest Kittle Field”. Material from our foray will be at the beginning of the MO observations returned.



PHOTO BY DAVE WASILEWSKI

*Fomitopsis rosea* at Stokes Kittle Field

# SWARTSWOOD STATE PARK SEPTEMBER 7, 2025

by John Burghardt, NJMA Foray Recorder

Our foray at Swartswood State Park on September 7, 2025 was only the second foray NJMA has held at that location. Our first foray at Swartswood was on September 15, 2024. Both forays were from early to mid-September in very dry conditions. In each year, we found an interesting, but different, mix of fungi. I look forward to a future foray at Swartswood with more recent rain.

The .pdf file at <https://tinyurl.com/2m3hvahy> contains a list of our identified collections. A note on [page 3](#) explains the layout of the table. We identified just over 70 taxa each year. However, only 18 species were

collected in both 2024 and 2025. (These are highlighted in the left-most column). We have documented 126 species across the two dry years. We also identified two species that are new to our cumulative list in 2025: *Boreostereum radiatum* and *Trichoderma cf. reesei*.

You can also use the MO search function to find all observations for the location “Swartswood State Park”. Observations from our foray will be near the beginning of the observations retrieved.

Thanks to everyone for your many good collections, help with sorting, and efforts to assign names. We appreciate your help in documenting your collections by completing foray tags. Comparing the characteristics of your specimen to the descriptions in the field guides can seem overwhelming at first. We especially appreciate your efforts to take on this task.



PHOTO BY Lyla Meader

*Dendrothele nivosa* at Swartswood State Park

(foray reports continue on [next page](#))

## WELCOME TO THE ONLINE EDITION OF NJMA NEWS

For the great majority of you who are viewing the online PDF of this newsletter, please note that **most web links and email addresses are clickable**. Clicking on a **blue** web or email address will launch your web browser and take you to the specified page or open your email software so you can send an instant email. Just look for the “click finger” when you hover your mouse over these items.

## WAWAYANDA STATE PARK SEPTEMBER 14, 2025

by John Burghardt, NJMA Foray Recorder

The very dry conditions at our forays this year in Sussex and Passaic Counties continued for our foray at Wawayanda State Park. As usual in dry conditions, very few of our collections were mycorrhizal.

The .pdf file at <https://tinyurl.com/3vtjr23t> contains a list of our identified collections. A note on [page 3](#) explains the layout of the table. We identified just over 60 taxa at Wawayanda. The only Mycorrhizal taxa were *Amanita*(2), *Russula* (2), *Lactarius* (1), and *Scleroderma* (2). For the second time this year, we recorded no Boletes and no Chanterelles.

You can also use the MO search function to find all observations for the location “Wawayanda State Park”. Observations from our foray will be near the beginning of the observations retrieved.



*Hygrophoropsis aurantiaca* at Wawayanda State Park

## SCOTLAND RUN PARK SEPTEMBER 21, 2025

by John Burghardt, NJMA Foray Recorder

This year was our fourth visit to Scotland Run Park in Clayton Township, Gloucester County. I look forward to this foray because of the diverse mix of “southern” and “northern” trees, and the nearby flowing water. I especially like to visit the stands of Atlantic white cedar that includes some very “mature” (too large to get your arms around) specimens – as well as many seedlings.

The .pdf file at <https://tinyurl.com/y6nycfkm> contains a list of our identified collections. A note at on [page 3](#) explains the layout of the table. We identified 77 taxa of fungi and myxomycetes. Our finds this week included at least two members of each “form group”.

You can use the MO search function to find all observations for the location “Scotland Run Park”. Observations from our foray will be near the beginning of the observations retrieved.



*Berkcurtia persicina* at Scotland Run Park

## SMITHVILLE HISTORIC PARK SEPTEMBER 28, 2025

by John Burghardt, NJMA Foray Recorder

We had a trifecta at Smithville this year: good food, good company, and more fungi than we could identify. It seemed like the fungi were making up for lost time after a dry summer.

The .pdf file at <https://tinyurl.com/mrypd7bs> contains a list of our identified collections. A note on [page 3](#) explains the layout of the table. We identified 114 taxa of fungi and myxomycetes.

You can use the MO search function to find all observations for the location “Smithville Park”. Observations from our foray will be near the beginning of the observations retrieved.

One benefit of the good moisture conditions is that four species are new to our cumulative NJMA list. *Agaricus*

(continues on the [next page](#))

*reducibulbus* and *Hymenopellis limonispora* are saprobes. They draw nourishment from dead plant matter. *Tricholoma brunneoluteum* and *Hortiboletus flavorubellus* are both ectomycorrhizal. They obtain carbon from a host tree. In return the fungi enhance the host's uptake of nitrogen and phosphorus, help the tree transport water, and protect against its pathogens. Thanks to Sue McClary and Brandon Roddy for their i-Naturalist posts. I urge you to check out the photos of our four new species.

## BELLEPLAIN STATE FOREST OCTOBER 4, 2025

by John Burghardt, NJMA Foray Recorder

Belleplain has many interesting small streams and swampy areas. Despite the lack of recent rainfall, some of these were still moist. I went into a swamp where large Atlantic White Cedar trees were coexisting with maturing hardwoods. The ground was covered with moist, healthy moss. Based on the material that came back to the tables, it was clear that most of us had found moist spots with fresh fungi.

The .pdf file at <https://tinyurl.com/2r35wbvn> contains a list of our identified collections. A note on [page 3](#) explains the layout of the table. We identified 63 taxa of fungi.

You can use the MO search function to find all observations for the location "Belleplain State Forest". Observations from our foray will be near the beginning of the observations retrieved.

We had one species new to our list, *Pholiota adiposa*. This appears to be an unusual species complex. I found an interesting description of it at [www.mushroomexpert.com](http://www.mushroomexpert.com).

We also found several species that NJMA has collected infrequently over the years. These include 1) *Cortinarius malachus*, which was new to our list in 2016 and had not been collected since then, 2) *Humidicutis pura*, which has also been collected only once in 2018, and 3) *Suillus pictus* (= *spraguei*), which has been collected in only 9 of the 45 years since it was first identified.



*Humidicutis pura* at Belleplain

(foray reports continue on [next page](#))



*Agaricus reducibulbus* at Smithville Park



*Hortiboletus flavorubellus* at Smithville Park

# BASS RIVER STATE FOREST OCTOBER 19, 2025

by John Burghardt, NJMA Foray Recorder

Our foray at Bass River this year fell on a beautiful fall day. Attendance was lower than usual, and we had the picnic area at Lake Absegami almost to ourselves. But the walk was fun, and our list has a good mix of fall fungi typical of the New Jersey Pine Barrens.

The .pdf file at <https://tinyurl.com/y8z7uf84> contains a list of our identified collections. A note on [page 3](#) explains the layout of the table.

We identified 60 taxa of fungi. One interesting collection is the *Rhizopogon succosus*. Nina collected this in 2022 at Franklin Parker Preserve near Chatsworth. She posted her 2022 collection to [Mushroom Observer](#) as *Rhizopogon* sp. (MO# 494468). That collection was sent for DNA analysis. The DNA analysis confirmed that the collection was *Rhizopogon succosus*, which was described by Alexander Smith in 1966. Nina recognized a collection on the table at Bass River and confirmed that key microscopic features of our specimen matched Smith's original description.

Sue McClary posted several collections to [iNaturalist](#). I believe the group Sue focused on are good examples of what is found at this time of year in the Pine Barrens. Thanks, Sue, for these postings.



*Craterellus ignicolor* at Bass River State Forest

(foray reports continues on [page 12](#))

# FUNGUS FEST 2025

by Lyla Meader

Whether you volunteered, attended, brought specimens for the tables or helped spread the word: THANK YOU, THANK YOU! The 2025 NJMA Fungus Fest (held on October 12) was a joyful success because of YOU! NJMA has held well over 40 Fungus Fests since its beginnings in 1971 and its name change to NJMA in 1975. This tradition has inspired other mushroom clubs to conduct their own fests. What a legacy to be a part of!

Approximately 40 members volunteered the day of Fungus Fest. In the next newsletter, we will include some photos. But briefly, here are some contribution highlights...

Thank you to our first-time chef **Nicole Engel** and her crew (her **Mom and Stepdad, Shihong L** and **Nancy A**). Some say food makes a fest – and yours was delicious!

Thanks also to **Tina Ellor** and **Phillips Mushrooms** of Kennett Square, PA for their donation of 24 pounds of fresh mushrooms and three display blocks.

Thanks to **Ayesha Dolasa** of **Noble Mushrooms** and **Jose Calderon** of **Hampton Mushrooms** for providing our mushroom cultivation demonstrations.

Thanks to our vendors **Chris D** and team from **Mainly Mushrooms**, **Stef B** from **Smiling Earth Mushrooms**, **Hailey B** from **The Nature of Reading Bookshop** and **Ayesha D & Jake T** and team from **Noble Mushrooms**.

And thanks also to **Bashira M** for handing out samples of her company's tea (*Golden Hourglass Tea*) at the Medicinal table.

New member, **Ila B**, who attended and wrote an article about the event, had it published in time for International Mushroom Day (October 15). Thank you!

A second thanks to **Noble Mushrooms** for a growing block. It, along with the three from Phillips Mushrooms, were raffled off to volunteers.

Thanks to the diorama creators – **Lin P**, **Katie C**, **Sue M**, and **Virginia T**. The contest was lots of fun, and nearly 70% of attendees voted for their favorite. It was pretty close between two of the dioramas but #1 prevailed. Congratulations to member **Lin P** and her helper **Jose** for the win.

Thanks to **Adriana K** for her donation of keychain beading supplies and expertise at the Children's Corner. Hats off to her and **Lindsey M** for holding the fort, so to speak (Two additional volunteers assigned to this expanded area did not attend at the last moment.)

Acknowledgement goes out to the **Morris County Parks Commission**, **Frelinghuysen Arboretum Superintendent Ann Fahey** and **Ranger Melanie** for supporting our rental. And also to the **Friends of Frelinghuysen** who allowed us use of their demo table and downstairs kitchen equipment. All much appreciated.

Everyone who helped clean up: thank you! We were out of the building by 5:25 PM!

Last, but certainly not least: A special thank you and call out is due to the super-organized **Sue McClary**. Sue took ownership for Fungus Fest back in January and oversaw all aspects of the planning and volunteer coordination. On behalf of all in NJMA, thank you, Sue, for a fantastic job!

As always, I'm humbled and grateful for the skills, generosity and friendship of all affiliated with NJMA. Thank you!



# PLEUROMUTILINS: A NEW CLASS OF ANTIBIOTICS DERIVED FROM CLITOPILUS MUSHROOMS

by Doug Kligman

Mushrooms potentially contain a world of biologically-active substances that, if researched and purified, can have great benefit for human health. Traditional herbalists make extracts from mushrooms to promote a variety of health benefits. Researchers and pharmaceutical companies have in the past, and still today, use knowledge from traditional herbal medicine as they look for compounds with biological activity relevant to human health. Herbal medicine relies on mixtures of hundreds of compounds derived from extracts, tinctures, and dried powders.

The road from observing medical properties in herbal mixtures to developing medications for clinical use can span decades. This article tells the story of one such journey — the discovery and development of a unique group of antibiotic molecules derived from *Clitopilus* mushrooms.

Research began in 1951-52 with a collaboration between researchers at Columbia University and NY Botanical Garden. They used extracts from cultures of saprobic species (*Pleurotus mutliis*, now *Clitopilus scyphoides*, and *Pleurotus passeckerianus*, now *Clitopilus passeckerianus*).<sup>1</sup> They screened the extracts for activity in inhibiting the growth of bacteria known to cause human infections. One extract was highly active in inhibiting the growth of *Staphylococcus aureus*, a gram positive bacterium that is a major pathogen in human disease.


In the 1960s, the active molecules were purified and their chemical structures shown to be tricyclic diterpene molecules.<sup>2</sup> The name “pleuromutilins” was given to these molecules because, originally, they were derived from extracts of *Pleurotus mutilis*. In the 1970s and the 1990s, researchers at the pharmaceutical company Sandoz modified these molecules to develop two semi-synthetic derivatives that are used as antibiotics in veterinary medicine to treat gastrointestinal infections in swine and respiratory infections in poultry.

In 2007, another pleuromutilin derivative was approved for topical use in humans for superficial skin infections caused by *Staphylococcus* and *Streptococcus* bacteria. Subsequently, in 2019, the FDA approved a new pleuromutilin molecule for oral or intravenous administration for use in community-acquired bacterial pneumonia in humans caused by several susceptible microorganisms.

Compared to other antibiotics, these molecules have a novel mechanism of action. This is particularly important in that antibiotic resistance is on the rise.<sup>3</sup> For now, little antibiotic resistance against pleuromutilins has

been reported. This class of molecules is under investigation as a treatment for methicillin-resistant *Staphylococcus aureus* (MRSA), a widespread and serious bacterial infection.

The next time you make an extract from medicinal mushrooms such as Chaga or Reishi, think what important compounds you may be holding in your hands. While these home-brewed extracts may have health benefits, it is not possible to know the pharmacological activity of these preparations without accurate chemical analysis and statistically significant double-blind placebo-controlled studies. The methods used for extraction will have a big effect on the yield of active metabolites, and other compounds present in the extracts may affect their absorption and metabolism. This is also true for commercially-made mushroom medicinals, since the FDA does not require any data demonstrating their potency, purity, efficacy, composition, or toxicity before marketing.

This short review illustrates the effort it may take to bring other fungal secondary metabolites with potential medicinal benefits into clinical use. In the case of pleuromutilins, it took nearly 70 years! With the advent of modern genetic screening techniques, this timeline may well be measured in years rather than decades. 

<sup>1</sup> Kavanagh, F., Hervey, A., & Robbins, W. J. (1951). Antibiotic substances from basidiomycetes. *Proceedings of the National Academy of Sciences*, 37(9), 570–574. <https://doi.org/10.1073/pnas.37.9.570>

<sup>2</sup> Arigoni, D. (1968). Some studies in the biosynthesis of terpenes and related compounds. *Pure and Applied Chemistry*, 17(3–4), 331–348. <https://doi.org/10.1351/pac196817030331>

<sup>3</sup> Paukner, S., & Riedl, R. (2016b). Pleuromutilins: Potent drugs for resistant bugs—mode of action and resistance. *Cold Spring Harbor Perspectives in Medicine*, 7(1). <https://doi.org/10.1101/cshperspect.a027110>

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**RENEW YOUR NJMA MEMBERSHIP NOW**

**NJMA wants to thank member Maurizio Russi for donating his book collection.**

*We are happy to help rehome mycological book collections.*

**Do you have just a few books collecting dust?**

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*It will help encourage others to explore the world of fungi.*

## WHO'S IN A NAME?

### *Iodophanus kimbroughii*

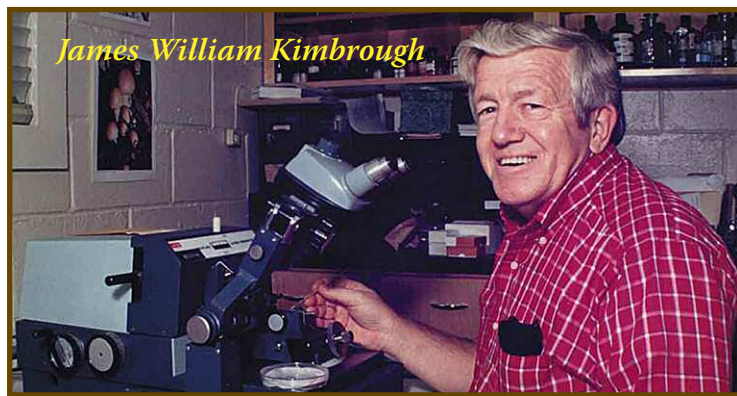
by John Dawson (one hundredth in a series)

*Iodophanus kimbroughii* is a coprophilous (i.e., dung-loving) member of the order Pezizales whose specific epithet honors the American mycologist James William Kimbrough, best known for his studies of discomycetes, especially coprophilous species. Kimbrough spent his entire 46-year academic career at the University of Florida, during the course of which he published over 150 research papers in peer-reviewed journals, supervised 17 master's theses and 18 doctoral dissertations, taught mycology classes at both the graduate and undergraduate level (including a very popular course for non-biology majors, "Molds, mildews, mushrooms and man") and served as an agricultural extension agent, advising clients on fungal plant pathogens and the health effects of indoor molds and mildews, promoting shiitake cultivation in Florida, helping to identify mushrooms for the Florida Poison Control Center, and serving as director of the mycological herbarium at the Florida Museum of Natural History.

Kimbrough was born 7 November 1934 in the farming community of Eupora, Mississippi, and died of Parkinson's disease in Gainesville, Florida, on 21 January 2017. The eldest of ten children of Felix and Ethel Kimbrough, he attributed his becoming an academic to his desire to escape heavy farm labor. His higher education began at Sunflower Junior College (now Mississippi Delta Community College) in Moorhead, Mississippi, and continued at Mississippi State University in Starkville, from which he earned a bachelor's degree in science education in 1957 and a master's degree in botany in 1960. He then moved to Cornell University to pursue doctoral studies in mycology and plant pathology under the direction of Richard Korf.

In 1964, upon receipt of his Ph.D., he accepted a position in the plant pathology department at Florida. Two years later, he switched to the Department of Botany, then back to plant pathology in 1989, where he remained until his retirement in 2010. In 2001, the University named him Undergraduate Teacher of the Year, and that same year he received the Distinguished Mycologist Award of the Mycological Society of America (from which, five years earlier, he had also received the Weston Award for Distinguished Teaching). Over the years, Kimbrough was very active in the MSA, serving on numerous committees and as its vice-president in 1977–78 and president in 1979–80.

The primary focus of Kimbrough's research was the taxonomy of ascomycetes, especially the Pezizales and



Corneliales. In particular, he was a pioneer in the use of electron microscopy to study the ultrastructure of septal pores and employ differences among them to distinguish among species and lineages.<sup>1</sup> Beyond that, however, his mycological interests spanned a very wide range. On the one hand, for example, he was co-discoverer (with Howard Bigelow) of *Microcybe titans*, the largest North American agaric; on the other, he studied minute fungi in the order Termitariales and the class Laboulbeniomycetes that are external parasites of termites. He also authored a field guide *Common Mushrooms of Florida* that remains an important resource for students, citizen scientists and extension agents in that state.

Apart from his professional endeavors, Kimbrough was active in his local Baptist church. He was devoted to his wife Jane and their three children, who traveled widely with him both domestically and abroad, helping him to collect fungal specimens.

#### Postscript

With this hundredth installment of "Who's In A Name?" I believe the time has come to end this long-running series — not because there are not many more mycological eponyms, but because, as the series has progressed, I have found it increasingly difficult to locate sufficient biographical information in sources accessible to me and in languages I can read to compose profiles of those commemorated in fungal names. (As one example, the bolete genus *Lanmaoa* is named after a Chinese botanist, Lan Mao, who lived from 1397 to 1496 during the Ming dynasty. But no further information about him seems to be available for those unable to read Chinese.)

I have appended a cross-reference list of all the profiles in this series. (see [next page](#)) The texts of all of them have been posted on the Eastern Penn Mushroomers site on groups.io and, on request, I will be happy to send copies of any of them to those unable to access them there. In addition, NJMA has all the back issues of *NJMA News* available to the public online, where the profiles all appeared.



<sup>1</sup> For a more detailed, technical account of Kimbrough's septal research, see the obituary memoir of him by Mathew E. Smith, "James William Kimbrough, 1934–2017", in *Mycologia*, vol. 111, no. 3 (2019), pp. 517–524. That article is the source of the information summarized in this profile as well as the accompanying portrait of Kimbrough. It also includes a bibliography of 133 of Kimbrough's publications.

## CROSS-REFERENCE LIST OF MYCOLOGISTS PROFILED IN "WHO'S IN A NAME" SERIES

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# CALENDAR OF UPCOMING EVENTS

Sunday, November 9  
11:59 PM

**2025 PHOTO CONTEST – DEADLINE FOR ENTRIES**

Sunday, November 16  
1:00 PM - 3:30 PM

**GENERAL NJMA MEMBERSHIP MEETING AND LECTURE**  
The Frelinghuysen Arboretum, Morris Township, NJ (*Morris County*)

Saturday, December 6  
1:00 PM - 6:00 PM

**NJMA HOLIDAY PARTY AND PHOTO CONTEST PRESENTATION**  
Unitarian Society, Tices Lane, East Brunswick, NJ (*Middlesex County*)

Thursday, July 30 -  
August 2, 2026

**NEMF SAMUEL RISTICH 2026 FORAY** ([nemf.org](http://nemf.org))  
Mont Alto, PA (*NJMA is one of the hosts*)

## WELLS MILLS PARK OCTOBER 26, 2025

by John Burghardt, NJMA Foray Recorder

Wells Mill Park is always interesting and often surprises. It has an interesting mix of dry pine barrens upland habitat, as well as streams with Atlantic White Cedar trees.

The .pdf file at <https://tinyurl.com/bdfv5p48> contains a list of our identified collections. A note on [page 3](#) explains the layout of the table.

We identified 72 taxa of fungi and two lichens. One especially interesting collection was the *Entoloma indigoferum* that Elizabeth DeCicco found and identified. In early August of 2013, a participant at our Wells Mill foray found a striking Blue Entoloma. Nina sent the specimen to Dr. Timothy Baroni, who eventually determined that our specimen was an *Entoloma indigoferum*. J.B. Ellis had named this fungus in the 1870s based on collections near his home in Newfield, NJ. When we found it in 2016, it had not been collected since Ellis made his original collection. Elizabeth has studied this species and found it in other New Jersey locations. I believe it has also been collected in similar habitats supporting Atlantic White Cedar trees near the Atlantic coast to our north. I was very surprised to see it this late in the season.

A second interesting collection was the *Armillaria solidipes*. Emily Rawlins identified and posted this to [Mushroom Observer](#). For several years, this was thought to be an early name for *Armillaria ostoyae*. However, my understanding is that genetic analysis has established that this is a separate species.



### BYTES, BITS, & BITES

**TASTY LITTLE TIDBITS FROM OUR MEMBERS**

Have you read something interesting concerning mushrooms or foraging? Send it to [njmaeditor@njmyco.org](mailto:njmaeditor@njmyco.org) and share with the rest of our members!

from Jim Barg:

A homegrown food trend has turned into an invasive species crisis:

<https://tinyurl.com/3sxnsy8x>

from Sue McClary:

Most Bitter-Tasting Substance Ever Revealed:

<https://tinyurl.com/yd8kkz7f>

from Gary Makus:

Medicinal mushrooms and *Bacillus* probiotics as an alternative to antibiotics and their effect on broiler productivity:

<https://tinyurl.com/ycyvfmm2>

from Sue McClary:

Delicious but damaging invasive golden oyster mushrooms found decreasing fungal community richness:

<https://tinyurl.com/273m8c9e>

from Sue McClary:

What is a mushroom really? Two titans of the wellness world duke it out:

<https://tinyurl.com/26yrymmj>

from Sue McClary:

Mushroom Metal Contamination: Cadmium and Lead Risks:

<https://tinyurl.com/pyexz9uu>



*Armillaria solidipes* at Wells Mills Park