2015: An Interesting Mushroom Year

By Chuck Nafziger

We are blessed with our splendid spring rains and the Northwest Mushroomers are kicking off another great year of mushrooms in the beautiful Pacific Northwest. We had a delightful Survivors Banquet on March 19 and look forward to our first general meeting at the Bellingham Library on April 9.

Our new club officers were announced at the banquet. I will continue on for another year as president, Christine Roberts is our new vice president, Linda Magee is our new secretary, and Andrea Miner is our new treasurer. Many thanks to Richard Morrison, Sue Blethen, and Mariepaule Braule for the wonderful jobs they did in those positions, and for their excellent help in making a smooth transition for our new officers. Buck McAdoo and Douglas Bennion are returning trustees and Bruce Armstrong, Richard Mollette, and Saundra Stringer are new trustees. I have to thank the whole club for its participation.

What would we do without Maggie, Vince, Fred, Margaret, Claude, Erin, Cynthia, Jen, Martha, Jim, Nadine, Joel, Harold, Jack, Terry, Terri, Louis and Alyne, Richard, Pam, Nancy, Alex, Martina, Matt, Fien, and all the rest of the club members (please forgive my poor old memory) who so willingly pitch in and make our events run so smoothly. I have to smile thinking about it.

Morel Madness is on Mother's Day weekend, our regular meetings are on the second Thursdays of April, May, June, September, the second Friday of October, and again the second Thursday of November. The 26th Annual Mushroom Show is on Sunday, October 19. There will generally be a foray on the Saturday following each general meeting. We will again have our six week mushroom identification class in the fall.

Our own Fred Rhoades is going to be our guest speaker at our April Meeting where he'll tell us some of the magic behind his fantastic photography, including his 3-D renderings.

It was a very unusual winter, with our only real freeze at the end of fall and then spring weather during winter. It will be interesting to see how the mushrooms respond. This is exciting.
Ferdinand Gunston realized it was delivery time on the microscope. He knew he was confronted with an enigma. He just didn’t know how far it might go. He was self-taught on the microscope, and now he was monumentally frustrated.

All during the morning he had peered into his lenses while the spores swam slowly in and out of view. He had used a pair of probes to put a tiny clump of spores on a slide, applied a drop of KOH, and then the slip cover... just as it said in the book. After the KOH, the spores were all over the glass. He followed one spore cluster tumbling slowly from left to right. When it seemed to stop, he would quickly move his micron measurement bar, but always too late. There was a lot at stake here. The measurements had to be perfect. He’d been at it for an hour and still no measurement.

The spores had then approached the edge of the slip cover. Here had been hope. But instead of fetching up at the edge, they had rotated back out, having caught some micro eddy, and then had traveled all the way back across his lenses.

Only one thing left to do. Ferdinand removed the slide from the platform and took off the slip cover. This in itself was a gamble. He then scratched at his head until dandruff snowed down on the spores.

“If I see you do zat one time more, I deevorce I go file!”

Nguwar was the daughter of a Myanmar general. She spoke in a harsh metallic voice that took no prisoners. Ambushed again. It was hard for her to understand about the spores. Again, for the hundredth time, he had tried to explain the reason for the dandruff.

“Eet ees disgusting! No Myanmar man mek dandruff.”

He had found her in one of those catalogues of Asian women looking for mates in the U.S.A. Although he had come to mycology in his middle years, he had found it a solitary and time-consuming affair. He felt he had no extra time to be going to bars and churches, the usual places where you found them. By marrying her he would be banishing the dreadful loneliness inherent in his vocation and simultaneously increase his stature within the academic community he so needed to reach. He had seen them at NAMA meetings. They seemed to him to be taciturn, meticulous men with that peculiar gate associated with botany. Nguwar could be enticing. She would represent something exotic, something slightly mysterious. Invitations to international conferences were sure to follow.

“Een my country, no dandruff. All men hair clean!”

But something had gone terribly wrong.

His gaze returned to the dried specimens in the cellophane bag. He had emailed the photo a week earlier to Dr. Jonah Haggard, a retired botanist who lived on the outskirts of town. Dr. Haggard had emailed him back immediately. He had found something highly unusual and seotioid, but it would take awhile for Dr. Haggard to be able to come over to observe microscopic features.

Secotioid. He had no idea what that meant. All he could write was that the bases of the caps were sealed tight against the apices of the stems. He had sought spores in vain in that area. The caps appeared to be thimble shaped. Neither had he found spores on the cap surfaces.

“Where are the friggin’ spores! He had shouted.
“All mushroom disgusteen,” she had retorted, “Why you want spores? Only mek teengs worse.”

By the fourth day he realized he was face to face with a peridium. The spores would be locked up inside, not on the capitate white hairs sprouting on the surfaces of mature specimens. These he had mistaken for external asci.

“I deed’n leave my fodder house for dees!” wailed Nguwar. She had stared out at him with unfeigned incredulity.

But they hadn’t been asci either. Just hairs. Another word for hairs was setae. Important to remember in case he found himself at a conference. Under the microscope they had been thick-walled, sort of like skeletal hyphae in a polypore. He had no idea what the function might be.

“Odder men mek money. You only mek dandruff,” she accused.

He had decided it was a good time to take field measurements. This always seemed to calm her down… temporarily. The act of laying down cap and stem against the millimeter bar, the subsequent jotting down of the measurements, all this gave her a sense of propriety she couldn’t get from the dandruff operation. He had measured the setae first only to discover they were so long that they extended far beyond the micrometer. Another hurdle to get across. The hairs on the lower part of the peridium were coated with an orange-brown powder. He jotted down ‘cinnamon pruinose.’ Those peridia without setae had roughened surfaces. These were tiny concolorous scales just waiting to evolve into setae. All of this, of course, he had had to surmise.

Nguwar was still staring out at him from the kitchen doorway. He had hoped at one point to train her as an assistant. But then he realized that he, too, was untrained. He had spurned the Krebs Cycle as a younger man. Now he was feeling the heat.

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Nguwar returned to the kitchen. The sound of rattling, clanging pots and pans. A scene of furious thoughts. He could expect another ambush any minute now.

‘Stems up to 6 ½ cm long’, he had written down, ‘And 4-7 mm thick.’ Why bother with all this, he had pondered. What herbarium would even care? They wanted established taxa for DNA sequencing, not something he couldn’t get to genus. So far, this was an absolute nightmare. No spores and setae so long they couldn’t be measured.

Ferdinand, on the fifth day, had sliced up a peridium vertically from base to apex. Inside were structures so foreign that he was momentarily staggered. Then he recalled that Dr. Haggard had used the term ‘secotioid’ in his email message. He looked up the term in the Snell & Dick Glossary. It wasn’t there. Mycology on the hoof. There were little cul-de-sacs everywhere. He looked in the glossary in One Thousand American Fungi. Not there either.

“Gleba not good name for daughter!” shouted Nguwar. She had snuck back from the kitchen. That metallic voice again.

She had discovered just last week she was pregnant. ‘Gomphus’ for boy, ‘Gleba’ for girl, he had told her. Both went great with Gunston. But she had done some research, discovered that neither were in the hundred most popular names for Americans.

“Not to worry,” he had told her, “Thanks to you, they will all think it’s a Myanmar name. Very normal over there.”

“You liard!” she had shrieked, “Not Myanmar name, not good Burma name. No name at all!”

Ferdinand was now reaching for Kauffman’s Agaricaceae of Michigan. Here was a mycologist he liked. Surely ‘secotioid’ would be in there. It wasn’t.

“You no eat here until name change,” she announced.

Nguwar was his 9-5 job. Other people had real jobs. He had Nguwar.


“Mushrooms ees sheet! I hate mushrooms!” she wailed, “Next week no mushrooms allowed in house.”

He would have to deal with this later. For now, he would have to find the meaning of secotioid if he wanted to describe for publication. It would be too embarrassing to ask Dr. Haggard. He might check out a more modern glossary. Probably ‘secotioid’ hadn’t been invented in the time of Kauffman.

On the other hand, he couldn’t ignore her completely. Not that there was any threat of silence. Her doctor had advised him not to over excite his spouse. He had found her to be unusually emotional, and anything that
set her off would also disturb the fetus. He had told Ferdinand that it was time to step up to the plate.

Ferdinand crumpled to the floor as if hit by an invisible dart. This was all for her benefit. She would realize she had made a direct hit. He took a quick glance in her direction. She was actually smiling. It was the greatest smile in the world. It just never seemed to come at the right moment.

There were piles of books all over the floor. Ferdinand began rummaging around. He finally picked up a volume entitled The Gasteromycetes of the Eastern United States and Canada by Coker and Couch. And here on page 53, someone named Otto Kunze actually described a secotium.

‘Peridium above ground with a long or short stalk, which extends entirely through the sporiferous portion as a stout columella which is continuous above with the peridium. Gleba spongy, cellular; tramal plates arising from the peridium wall and also connected with the top or greater part of the columella, and filling the space between them, somewhat lamellate, very sinuous with a more or less horizontal direction suggesting an unopened agaric with sinuous gills; capillitium not present. Dehiscence basal and longitudinal, the peridium usually separating slightly from the stem below and in some cases expanding more or less, after the manner of a young agaric. Basidia clavate with 2-4 apical, stipitate, smooth or rough spores.’

“No mushroom in house,” she repeated, “Ver bad for baby. Bad for wife. Next week army man come, tek mushrooms away.”

This was likely to be the Myanmar solution. There probably has been no mycologist over there for one hundred years.

“Think beyond the box,” he pleaded, “Our son or daughter, whichever way it goes, might take mushroom study back to Myanmar.”

The face of Nguwar had suddenly crumpled. Her whole body began to shake. And then the sobbing began. It was uncontrolled sobbing. He might as well have announced the end of the earth. He tried to console her, sling an arm around her shoulder, but she pushed him away, slammed a door and went back to the kitchen.

Ferdinand went back to the microscope. He now had real information. He found the tramal plates. The purple-brown gleba was halfway between spongy and powdery. The powdery would most likely represent the mature spores. The dandruff had done the job! Individual spores and even clumps of spores had fetched up against these murky clouds like flotsam and jetsam. The spores were smooth and egg shaped. He could now proceed with measurements.

It was at this point that Dr. Jonah Haggard had arrived at the front door. While not a mycologist sensu stricto, he could be enticed over if something unusual was underfoot. He had taken a couple of mycology courses en route to his doctorate. When he had seen the photo Ferdinand had emailed him, he had not rushed over. He had wanted to get a little feedback from colleagues who agreed to look at the photo.

“Where’s that Weraroa of yours?” he now boomed.

“Weraroa?” asked Ferdinand.

“Why…. my lad. You don’t know Weraroa?”

Dr. Haggard was a big man, and in his own words, a big fan of all things secotioid.

“Weraroa”, he went on to explain, “Was the only genus in history to be named after a remote atoll in the South Pacific. It was a Maori name. A Maori found the first one out there, and not giving a damn about Greek or Latin, named it for the place he found it.”

Jonah Haggard seemed to find this highly rewarding. For a moment he beamed down at Ferdinand. Then a tiny crease appeared in his brow. He began to look a little concerned.

“But you know,” he almost whispered, “They are not supposed to occur in the Pacific Northwest.”

He slid into the chair next to Ferdinand’s.

“See that plant in your photo?” he went on, “The one in the lower right foreground? Looks a bit like the beginning of a May apple, but a little bit off. Where did you find this collection?”

“Where beach meets sea,” Ferdinand replied. He was now tired, emotionally drained from his encounter with Nguwar.

“That could be anywhere,” prompted Doc Haggard.

Ferdinand decided to tell him. Why risk an illegitimate publication.

“You know that small cove on Bellingham Bay, the one just north of Clark’s Point,” he said, “Well, it was
beyond the high tide mark fruiting from some herbaceous debris up against a drift log.”

“Not May apple,” muttered the doctor.

“Spores must have floated in with the tide,” suggested Ferdinand.

“The nearest known Weraroa would be Weraroa cucullata,” mused Dr. Haggard. He pointed out that it was a species that preferred mountains, and that it was much smaller and paler than the one they were looking at here.

“Global warming,” mumbled Ferdinand, “Currents can carry spores anywhere in the world.”

Dr. Jonah Haggard nodded a weary assent. He had Ferdinand switch chairs with him. It was time to look in the microscope.

“The spores are ovate,” he confided, “But what’s all the cloudy material around them?”

Ferdinand froze in his chair. He suddenly realized he had forgotten to remove the dandruff-laden slide from the platform.

“Not sure,” he muttered, “Could be exterior encrustations, maybe even gelatinization. You’re the doc. You tell me.”

“I’ll be damned. The stuff is actually in islands.”

“Encrusted gelatinization,” offered Ferdinand.

Dr. Haggard had to admit he hadn’t heard of that, nor had he seen setae on the outer surface of a peridium before.

“Calls for a new section in Weraroa?” inquired Ferdinand.

“And then some,” winced Haggard. This was going to be more work than he had surmised.

Dr. Jonah went to work on the literature search. After a year and a half he was satisfied no other Weraroa like this had been published. They decided to call it Weraroa cucumagna, the Big Cucu Weraroa, because it was larger than the Late Cucu Weraroa, and didn’t appear as late in the seasons. It finally appeared in the Argentine journal Lilloa in the spring of 2007.

A lot has happened in the time since publication. Nguwar had quietly one evening made a bonfire of Ferdinand’s herbarium. He had gone to a movie and forgotten to lock the cellar door. Twenty-five years of collections up in smoke. She moved back to Myanmar shortly after and sued the Asian matchmaker organization that had put her in the catalogue in the first place. She was suing on the grounds of inadequate disclosure.

As for Ferdinand Gunston, he never published again. The rest of his life was spent trying to extract his daughter Victoria from Myanmar. Even the genus Weraroa took a hit. Thanks to DNA sequencing, all have been moved to Leratiomyces, and another great name in nomenclature was sent packing to the mists of time.