

International Fungi & Fibre Federation Newsletter 2011 Issue 1

Dear Fungi Friends ,

thank you to those of you who have contributed and sent images. This is a great start and I am hoping that for our next one in Spring 2012 all 16 countries will send us a sentence or two ! Can you circulate this to everyone in your country who shares our interest in using fungi for dyes, pigment and paper.

USA Adirondack Dyers 2010, Saranac Lake, NY, by Susan Hopkins

When I retired in Sept. 2009 I moved to Saranac Lake in upstate NY, 2 hours from Montreal, Canada. I moved here for the mushrooms, dyers and all kinds too. My cousin Nancy Parker and I have vacationed in the Adirondacks, off and on over the last 50 years. I already knew where some of the best dyers grew and my first full summer or collecting season did not disappoint. This area is mostly conifers and maples with some beech, aspen and both white and yellow birch. What I was used to in NJ was mostly deciduous trees of oak, beech, maple and some hickory and only a smattering of conifers. White pine is a predominate tree here so I knew *Phaeolus schweinitzii* should start appearing in early to mid July if I looked hard enough at the base of the biggest trees. This proved easy even while driving as *P. schweinitzii* is usually large, flat and very yellow at the growing edge- the best stage for dyeing. It can be dried whole so I ignored several rosettes on my screen porch till they fit into my food dehydrator. I was pleased to continue finding *P. Schweinitzii* till Sept 1st when I left for Sweden and the International Fungi-Fibre Symposium for 2 weeks. I had seen *P. Schweinitzii* under Douglas fir both in Scotland and on the West coast of the USA but here in the Adirondacks it was mostly under White pine, once under spruce and once under Tamarack=Larch.

For the first time I could watch my *Hydnellums* and *Phellodons* grow right from tiny standing blobs. This group takes its time growing, taking 2-3 months for the same fruiting bodies to mature. Most of them have a spongy or felt like layer as part of their stem which allows them to retain moisture for a long time while the surrounding area dries out. This allows them to continue growing longer than any fleshy mushroom. As they are all mycorrhizal they will appear in the same place year after year. Over the years one species would be more predominate each time I came up to look in the same place but all species were represented. After only one full season with good rain all summer in 2010, I think this is due more to when I came to look varied from mid Aug to late Sept. Each species comes out to maximum growth at a slightly different time than the others. I found that *Phellodon niger* came out and matured first by Sept. 1 while *P. alboniger* hung on longer. *Hydnellum aurantiacum* and *H. caeruleum* and *H. ferrugineum*=*pineticola* are very close in time and growth and did well in 2010. *H. ferrugineum*=*pineticola*, the poorest dyer, is always the most abundant every year. *H. Caeruleum* matured in early Oct after I first spotted the same fruiting bodies in early Aug. With all the tooth fungi I believe the more mature fruiting bodies have more color than the young ones so it is better, but hard, to let them grow big before picking.

Cortinarius semisanguineus is wonderful for reds and oranges. I had one outstanding year both in the Adirondacks and in NJ in fall of 1996 but every time since then I was looking too early. These mushrooms like it cold and wet and now I know they can fruit over a 6 week period in the Adirondacks from mid Sept till the end of Oct. and even into Nov. Another mycorrhizal fungus up here, they grow in the big CCC stands planted in the 1930s of pure Scotch pine, *Pinus sylvestris*. Kirsti Palmen of Finland taught me many years ago that the red is concentrated in the largest caps, not in the stems and young whole fruiting

bodies. I now sort my mushrooms for drying, separating the caps from the stems and young ones. The stems and young fruiting bodies are still worth keeping for a good strong orange. They were very wet but dried easily in my food dehydrator. I even kept the "sploges" or rotting red blobs that I found while collecting although they must be cooked up fairly quickly. This year I found my first small collection of *Cortinarius malicorius*. I had seen this species in Scandinavia and in Quebec at big forays but it was exciting to find it on my own near where I live. I know it dyes strong yellow-oranges.

Another late fall mushroom good for dyeing is any species of *Boletopsis* for greens and teals with alum. After a recent paper published by Dr Roy Watling of Scotland comparing USA collections to European collections I tend to not put a species name on any *Boletopsis*. Here in the Adirondacks they seem to like balsam fir trees as well as cold and wet. Again the more mature fruiting bodies I think have more pigment. Soaking first, from either dry or fresh, I find makes a big difference as sometimes the 2nd or 3rd bath yield more or a stronger color then the first bath. *Boletopsis* sp are white to gray and very similar looking to *Boletes* but are more closely related to *Hydnellums* and *Phellodons* than *Boletes*. That is one of the reasons they dye in the same color range as the *Hydnellums* and *Phellodons*, which is teals and greens. They can hide in the duff but are also mycorrhizal so will come out in the same place year after year.

This winter has had a lot of snow where I live but I am very much looking forward to this summer and the 2011 collecting season.



Fall 2010- 2 mushroom dyeing classes by Susan Hopkins, Saranac Lake, NY,



Mushroom Dyeing Workshops

I taught 2 workshops on mushroom dyeing, each having 8 students, in October 2010, one for 1 week in North Carolina and the other for 4 days in Penn. Being over several days we were able to use a different group of mushroom species each day and establish some basic procedure for extracting the pigments. The procedure was well known for natural dyeing.

- Decide on a ratio of dry mushroom to fiber- we used wool in both classes
- Break up the mushroom into small pieces- place in cheesecloth bag
- Soak the mushroom overnight and in distilled water if possible
- Cook the mushroom for 1 hour at least at a simmer-not a boil
- Cook the mushroom with pre-mordanted wool-mordants used alum and iron mostly- again no boiling
- Cool down wool before rinsing out and drying – bath is ready to use again if strong enough

The North Carolina class mordanted their own wool at home or within the first day while the Penn class had the wool pre-mordanted by the Manning's studio where the class was held. On the first day each pair of student were able to start with *Phaeolus schweinitzii* and *Inonotus hispidus*. Both are easy to get good strong colors from and for me to replace. I like to use these 2 species while students are learning because they can take a lot of abuse and still produce good results. They can be over cooked, under cooked, ignored, too little used or rinsed out to soon and still dye good strong colors. *Phaeolus schweinitzii* dyes yellows and golds with alum and dark greens with iron. With alum and iron we did get chartreuse in several pots. *Inonotus hispidus* dyes burnt orange and deep golds with alum and khaki browns and dark browns with iron. With each species the color was also dependant on the age of the fungus when it was picked and dried. We were lucky in North Carolina that one of my students, Sandra David, found *Inonotus hispidus* on a huge white oak tree when she first arrived. On the first day of class we all carried plastic bins to the spot where it was growing. The school maintenance man had to use a 20 foot ladder to cut the fruiting bodies off the tree for us. There was 32 lbs. in large pieces just right for dyeing that we cut up into "pork chops" to dry as much as we could before dividing up to take home at the end of the week.



The second day we worked with *Cortinarius* in the subgenus *dermocybe* in small quantities as I did not have a lot and they are precious. A generous collection of *Cortinarius semisanguineus* from Noah Siegel of Mass. USA, allowed me to give one pair of students the caps, one pair stems, one pair whole mushrooms and the last pair worked with *Cortinarius sanguineus* recently bought in Sweden at the International Fungi-Fibre Symposium. Reds and many oranges were obtained and many baths were done over the next few days.

The third day was devoted to the tooth fungi in the *Thelephoraceae* family, several species of *Hydnellum* and *Phellodon alboniger*. Some of you know this is my favorite group so I always have quantities of several species on hand. For good results the amount of mushroom used or ratio of mushroom to fibre must be 2:1 or doubled where possible. Also important with this group is to establish a pH of 8-9 and not to allow the temperature while cooking to rise above 170-180f. We used *Hydnellum aurantiacum*, *H. scrobiculatum*, *H. spongiosipes*, and *Phellodon alboniger* in ratios of 2:1 mostly and got the most beautiful teals and greens.

The fourth day, now with some experience and understanding of procedure, each pair worked with a small amount of *Hapalopilus nidulans* (rutilans in Europe) for purple and another mushroom species not previously used. These included some choice between *Tapinella*=*Paxillus atrotomentosus*, *Boletopsis* sp., *Pisolithus tinctorius* or another *Hydnellum*. Each pair continued to exhaust all previous days baths sometimes combining baths for strength for even more colors. One pot of *Phaeolus schweinitzii* in North Carolina was still producing amazing chartreuse greens with iron late in the week. We now have many more enthusiastic converts to the subject of mushroom dyeing who can not wait to see what fungi they can find this summer for their dye pots.

Sweden from Liza Johanssen

I work with a project in school, I show many things from the mushroom world and have workshops with paper and pigments. Later I also going to work together with the textile teatcher,with mushroom dyeing and felting.

At home I experiment with wool, felting, dyeing as usual and I paint pictures with



mushroom pigment. I also go on school for learning more about wool and felting. I have sent 2 images of my pictures painted with mushroom pigment

Canada from Ann Harmer ,Garden Bay, BC <http://shroomworks.wordpress.co>

I returned home from Sweden at the height of our mushroom season on British Columbia's West Coast and found myself with a plethora of *Phaeolus schweinitzii*. With more mushrooms on hand than I had dyepots or time for, I put several of these Dyer's Polypore outside in a bucket of water, along with a white silk blouse, which I'd mordanted with alum. I left it undisturbed, hoping for a mottled effect.

Two months later, I removed the blouse and found it evenly dyed for the most part, in a rich, deep gold. At no time was the water even warm, and in fact it froze several times when the overnight temperatures dipped below freezing.

Dorothy Beebee sent me several names of other mushroom dyers in Canada, one from Ontario (whose email bounced back - I met her at the symposium in Mendocino) and the rest from British Columbia. I hope to establish an email group before the next dyeing season so that we can compare notes.

Greetings from Norway from Anna-Elise Torkelsen

The Norwegian Mushroom Dyers held their annual meeting on April 2th. Our group has 135 members and 52 of them joined this meeting. The topic for the main lecture was "Alpaca – natural luxury". The lecturer, Line Werner, who owns 27 alpacas, is keeping them for their wonderful fibre which is soft and not itching. The alpaca fibres when mixed with 40 % merino wool give "a nice wool". Preben Graae Sørensen gave a lecture on "How chemical tools can control the dyeing with Dermocybes". The pH is important for the dye result. Dried, crushed and then soaked mushrooms give more (stronger) colour to the fibres than fresh mushrooms. We had also some short "5 minutes". Gry Handberg showed pictures from the 14 IFFS, Ruth Solem told about her dyeing experiments with *Hapalopilus rutilans*. Liza Johansson told how she extracts the pigments for the watercolour drawings that she makes, and Anna-Elise Torkelsen gave a resumé of the fish skin tanning workshop she attended at the 14 IFFS in Gysinge. The board members for 2011-2012 are: Gry Handberg, Eldbjørg Johansen, Ruth Solem, Lise Walter and Anna-Elise Torkelsen (leader).

Experiments with cold mordant

Betsy Samuelsen who could not attend the April meeting is the only Norwegian dyer who has experimented with cold mordant, and she has sent me a few lines on her experiment. She used four mushrooms: *Ischnoderma benzoinum*, *Hydnellum caeruleum*, *Hydnellum suaveolens* and *Hydnellum ferrugineum*. She had one skein of "cold mordant" yarn and one of "warm alum mordant" yarn together in the dye pot. The colours came out differently. The cold mordant yarn gave a slightly darker shade and a softer yarn, than the ordinary mordant yarn. The results: Greenish colours from the Hydnellums and light brown from the Ischnoderma.

France from Lena Iarsen

This report from France is short I'm afraid, due to the fact that I don't know any passionate French dyers.

My own activities have been limited because of my back problem but I did find a *Phaeolus schweinitzii* in October that I have started to experiment with.

It was an earlier discussion with Carla Sundström that gave me the idea for this experiment.

I parted and weighed the fresh mushroom in 4 equal parts. Part 1 was cooked fresh and

dyed with and then without mushrooms remaining in the dye bath. Part 2 was dried. Part 3 was put in the freezer in its raw state. Part 4 was cooked and the strained dye bath was put in the freezer (I did freeze the mushrooms that was strained off as well, to be able to compare results from dyeing with frozen dye bath both with mushrooms and without). I will bring the result of my experiment to our next meeting in Spain. Has anyone else done this experiment already perhaps ??

At the end of April there is a International Symposium for Natural Dyers in France, in La Rochelle. It is actually quite close to where I live but due to my back problem and the high cost I am not participating. But I hope to go there the very last day because then they have an Open house for the public. I believe that some of our Spanish friends will attend so maybe we will get a report from that event from them. Finally I would like to tell you about a french acquaintance of mine, a photographer/mycologist named Benoit Peyre - see his web site <http://www.champi-passion.fr/>

The photos in his books and on his cards/posters are simple wonderful !!! I tried to get him to attend our symposium in Sweden but unfortunately that was not possible for him, perhaps I will be luckier in bringing him along to Spain?

I am not a good photographer but I have one photo just to show you what was the most common species in my forest this autumn 2010. I don't think you can dye with them but they taste great ! Warm regards from France and I look forward to see everybody in Spain!



Scotland from Trisha Gow

Marilyn Caddell and I went on a foray on our return from Sweden to Glen Tress near



Peebles. This area has been extensively developed for cycling and has rough tracks all over the woods. As a result many of the areas we found dye fungi have gone. We found a few *C. semi sanguineus* but went back to the tree line, where no-one now goes, to find some *Paxillus Atromentosus* and *Phaeolus Schweinitzi*. I also found *Phaeolus* in my local woods – a good year for it I think.

This autumn Marilyn and Jeanette are planning a visit to Belfast in Northern Ireland to run a fungi dye workshop. Trisha Gow and Carole Thorpe are going to do a fungi dye demonstration for the Berkshire Guild of Weavers Spinners and Dyers (near Oxford England)



Trisha has been experimenting with solar dyeing using fungi and is just setting up some new jarsThis involves mordanting fibres and layering in the fungi and then they sit in the sun! I am going to try some *Hapilopilus Nidulans* and possibly *Phaelous S* to see how the dye /ammonia mixture works!



I have attached an image of the poster sent by Spain.

Please excuse any grammatical errors it gets to the stage I cannot see the woods from the trees!!! I hope you enjoy reading this, with best wishes , trisha