The Mushroom Dye-Gest

#11 The Newsletter of the International Mushroom Dye Institute Spring / Summer 2006

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See these mushroom dye stories inside:

From the USA - possible poisoning with *Dermocybes* by Anna Moore

"While talking to the group about the specimens, Anna made a comment about not eating any mushroom that was raw or that you didn't know. Diane then spoke up to say she had eaten one of the red mushrooms on the tray on the table about 10 minutes earlier.... "

From SWEDEN -by Lena Larsen

"In my project I wanted to test color theories and obtain "new" colors by
-mixing different species in making a dyebath
-mixing dyebaths from different species
-over dyeing i.e. dye with one species after another"

From NORWAY -by Betsy Samuelsen

"It will please you to hear that we have had a course on mushroom pigments"

From AUSTRALIA - by Katrina Syme

"I hoped that I'd be able to achieve the same result on cloth by using Indigo over *Pisolithus*, so used silk cloth dyed with *Pisolithus marmoratus*."

(All photos above are by the individual authors)

"COCKTAILS" mixing & over-dyeing with mushrooms

by Lena Larsen, Nacka Sweden

At Dorothy Beebee's suggestion I would like to give you a glimpse of my work, Dye mushroom cocktails or mixing & over-dyeing with mushrooms. A school project work, Dye mushrooms - ecology and species 5p autumn 2005 at Umeå university in Sweden.

Right away I will give you a
Warning!! This is highly addictive - don´t start

I chose this project because It seemed like fairly unexplored territory, though a number of authors urge you to experiment in that area. Maybe it has been tested but not published?

In my project I wanted to test color theories and obtain "new" colors by
- mixing different species in making a dyebath
- mixing dyebaths from different species
- over dyeing i.e. dye with one species after another

My work started of gingerly but as it proceeded I discovered more test possibilities. That plus my curiosity of the afterbaths resulted in that nearly every new test- "cocktail" became more extensive than the previous.

SUMMARY

The purpose, to obtain "new" colors by mixing and over-dyeing, has succeeded very well I think.

My color theories worked in practice;
good for orange and green, violet so so, the rest (I've got a lot of them) needs to be tested more.

Mix or over-dye? That also needs more testing. I found that mixing is less time consuming and I've got some really good mix-results in my study.

I want to obtain clearer "new" colors and test color mixing series i.e. mix a color with another color, where one color gradually decrease and the other increase, to find recipes to favorite colors.

I also want to try and repeat the experiments to see if I can get the same results plus test the light fastness of the mixed & over-dyed colors.

I will continue to test, quite simply because I can't stop! It is addictive (and horribly thrilling) with "cocktails". The warning above is not a joke!!

The cocktails above *(from left to right)* are made by mixing and over dyeing the following species;
Cortinarius sanguineus + Hydnellum caeruleum
Hydnellum caeruleum + Boletus edulis "tubes"
Cortinarius semisanguineus + Hypholoma fasciculare
Hydnellum geogenium + Hydnellum suaveolens
Hapalopilus rutilans + Hypholoma fasciculare

If anybody has tested mixing and/or over-dyeing with mushrooms I would be very happy to learn about your experiences.

I'm looking forward to the next Fungi & Fibre Symposium in the USA, and I will bring all these cocktails and probably a lot of new mix recipes as well.

Lena Larsen

Önskas denna sida på svenska - kontakta mig:
larsen.lena@gmail.com

Mushroom Incident – Eating Dermocybes!

By Anna Moore, Florence, Oregon, USA

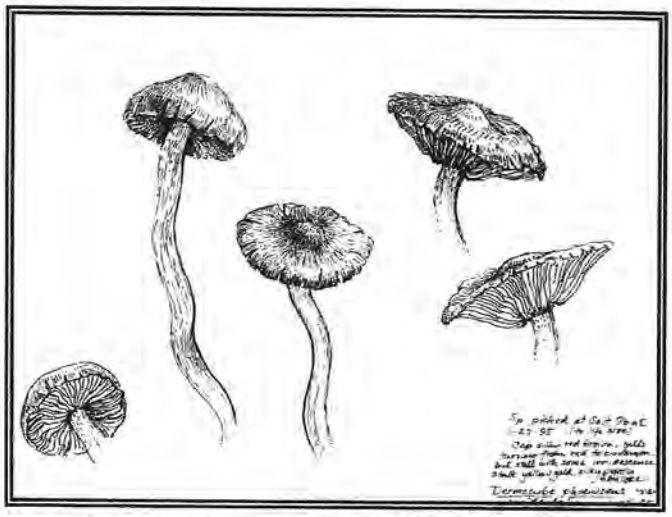
Saturday November 5, 2005
Beginner's Mushroom Event, Florence Adventure Club (FAC) - Leader Anna Moore

Collected specimens, edible and nonedible, were put out on a long table in Anna's home; 12 members of the FAC were present to learn about mushrooms. Diane, age 57, attended. She had spent several hours with Anna the week before, foraying for specimens for a Eugene mushroom event. Anna had lectured her on basic protocol and emphasized not eating any raw mushroom or any mushroom you did not know 100%. She was also told that beginners should focus on one or two mushrooms to learn well before eating any wild mushrooms.

While putting out specimens, Anna had a red plastic tray with about a dozen small *Dermocybe* specimens she was collecting for a friend who uses them for color (dye) – she set the tray on the dinning table while putting some of the better specimens from it out on the long table nearby. No food had been presented to the group and the discussion with the group was about the variety of specimens on the table.

While talking to the group about the specimens, Anna made a comment about not eating any mushroom that was raw or that you didn't know. Diane then spoke up to say she had eaten one of the red mushrooms on the tray on the table about 10 minutes earlier. (This was about 12:30 PM). Anna immediately stopped the discussion of specimens to question Diane. Anna gave Diane two activated charcoal capsules and called Molly from the Cascade Mushroom Society to discuss what should be done. Molly made a number of calls to poison centers.

To the best of Anna's knowledge the mushrooms on the tray were either red or yellow *Dermocybes: Cortinarius phoniceus var occidentalis* or of the *Cinnamomeus* group. All the specimens were small, less than 1-2 cm in diameter and less than a gram in weight. Diane did not know what she wanted to do, although Anna advised her that the mushroom could be toxic and that she would take Diane to the emergency room where they would probably give her



activated carbon. Anna and Molly kept talking as Molly made her way through the medical advisors getting mixed reactions. At about 2 pm Anna and Diane talked to Karen at the Poison Center after Molly had talked to her and explained the situation. Karen talked to Dr. Horowitz who recommended activated charcoal, liquid form, should be given in the first hour, but that it was not useful later. They advised the mushroom could be a kidney toxin and it could take 2 to 3 weeks before any problem could be detected by blood tests. That was if the mushroom was the poisonous *Cortinarius* with chemical orellanine. There could be gastro-intestinal symptoms such as nausea and vomiting, followed by urinary changes such as urinating less or change in appearance of urine. Dr. Horowitz recommended to maintain good fluid intake and get a baseline kidney function test (BUN, Creatine) if one was not on record. Diane had a recent blood test where baseline liver values were a little high. We were also advised that the 2 species we probably had were not ones with known problems.

Anna called Darvin DeShazer and Bill Freedman, both members of California mushroom clubs (SOMA, MSSF) who work with local Poison Centers. Darvin recommended going to the ER and getting activated charcoal. Bill said the dose was pretty small and discussed technical aspects of chemical poisoning. Nether had experience with consumption of *Dermocybes*. Both were more interested in WHY she ate it rather than focusing on how to look at this problem. In the moment the WHY question was not relevant, but we needed to know the best course of action to take immediately. It appeared it would become a wait and see problem, dependent on blood

tests for kidney and liver functions. Anna also called Dorothy Beebee who works with mushrooms for dyeing. (As Dorothy was out of town), she called back sometime later to discuss what she knows about the various species and was very helpful in the identification. Everyone was interested in the followup.

Diane went home about 4 PM, choosing not to go to the ER. She was concerned about her husband not being well and not upsetting him. Anna gave her an herbal laxative to take to clean out her system and also a number of liver support capsules containing sylmarin (milk thistle extract) to take over the next several days until Diane could get in touch with her doctor.
Anna checked in with Diane on Saturday evening, Sunday morning, Sunday afternoon, and Monday morning. Diane was distressed and worried after doing Internet searches on kidney problems. She was not experiencing any problems other than a vague feeling that she did not have her usual energy. No color showed in her urine and her bowel movements were normal (possibly darker). She called her doctor but did not go in to see her right away. She had a blood test in about 2 weeks and a second one 2 days later when she got the results of the first test and her liver functions were slightly elevated. She had a third test a week later and a fourth test in another 2 weeks. The BUN kidney test was 17 (normal range is 9 to 20) and the creatine was .8 (normal is .7 to 1.4). The ALT and AST liver tests were elevated. Normal ALT is 16 to 52. Her baseline was 59. It went up to 70 (first test); to 96 (second test); to 102 (third test); 89 (fourth test). Last AST was 68.

In continuing discussions, Diane has been very agitated and stressed, which could be adding to the problem. She does not have any strong symptoms but reports recurring very minor nausea, low energy and general not feeling herself. During this period she has given up drinking any alcohol from taking a couple of glasses of wine a night. She hurt her knee and stopped taking her daily walks or bike rides, so her normal activity level was decreased.

An email discussion with Dr. Bill Freedman in mid-December suggested that any effects Diane would be experiencing now from the one mushroom are highly unlikely and that the liver values were almost normal. There could be other factors effecting her liver if the values continue to be slightly elevated. Anna gave Diane more liver support capsules and she opted to take them. A final blood test in December showed normal values.

After thinking back on the experience, Anna had these additional words: It is important to be able to try and identify the mushroom and quickly contact a hot line person with mycological knowledge who can then talk to the ER doctors. Phone numbers for experts to consult with should be readily available. An important question to find an answer for is what is the time limit for carbon slurry to be a useful remedy? BE PREPARED!

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Editors Note: I contacted Dr. Michael Beug who oversees the Mushroom Poison registry for NAMA (North American Mycological Association) because I was concerned about the possible confusion of the ingested mushrooms with *Cortinarius orellanus*, with which it has been suggested that older species of *Dermocybe phoeniceus var. occidentalis* might be confused.. I asked him if there been any recorded sightings of this mushroom in Oregon or California. Here is his response:

"The case you mention prompted me to review the entire NAMA registry covering the past 30 years in North America. It took me 2-months and I wrote an extensive summary of all reported mushroom poisonings (to appear within a year in McIlvainea). I found only two reported poisonings for the entire Cortinarius genus and both poisonings were mild. One case involved consumption of 37 cooked caps of Cortinarius semisanguineus which produced cramps and dermatitis. The other case involving Cortinarius violaceous produced sneezing and drowsiness.

There is one small Cort in North America (Cortinarius rainierensis) that contains orellanine. I did find a useful test: mushrooms containing orellanine glow blue under uv light (and tissues from poisoning victims show the same uv fluorescence. Orellanine poisonings have not yet occurred in North America."

For further information about orellanine poisoning, check out the following website:
http://www.emedicine.com/emerg/topic460.htm#section~clinical

Overdyeing Fungi Dyes With Indigo

In January, I attended a two-day workshop to learn paste resist printing on cloth.

Stencils

The stencils were cut from manila cardboard which had been coated with linseed oil, dried for a week then painted with three coats of shellac. The paste was forced through using a plastic spatula. The paste does not fully penetrate the cloth, so the pattern is mostly on one side.

Dye

The workshop followed a 3 day Indigo dye workshop and fresh vats were made to dye the cloth which had been treated with the paste resist.

Pastes

Three sorts of paste resist were experimented with.

Katazome

Katazome is a rather complicated traditional Japanese recipe using glutinous rice flour and rice which has to be mixed into a dough, then cooked by steaming and finally beaten paste with the addition of hot water. A small amount of calcium hydroxide is added at end.

Cornflour

A resist made from cooked cornflour or cassava paste is in various parts of Africa. We experimented with this, but it the least successful.

Manutex

Manutex paste, waterproofed with an alum solution was the most successful resist, but required soaking in water softening solution to remove completely following dyeing.

Dyeing the cloth

In my watercolour painting, I don't buy black paint, but mix my own from brown (Burnt Umber or Burnt Sienna) and blue (Ultramarine). I hoped that I'd be able to achieve the same result on cloth by using Indigo over Pisolithus, so used silk cloth dyed with *Pisolithus marmoratus*. I also experimented with samples dyed pink with caps of *Dermocybe splendida* and dyed light green with *Phellodon* aff. *niger*. The results were excellent, but the one which I found the most interesting was the *Pisolithus*, parts of which were almost black.

Katrina Syme
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LETTERS TO THE EDITOR

Dear Miriam and Dorothy,

It will please you to hear that we have had a course on mushroom pigments by Liza Johanson and Trine Palmer we got very nice colors as you can see. Now I have to learn watercolors, hope to find some time for it. I myself had a course on mushroom dyeing last weekend and the girls wanted to go on with it so I am so pleased with it.
Hope you both are well.
Greetings from Betsy Samuelsen, NORWAY

We used the following mushrooms:

TJÆREKJUKE	*Ischnoderma benzoinum*
SKJELLSTORPIGG	*Sarcodon imbricatus*
GRÅKJUKE	*Boletopsis leucomelaena*
FLØYELSPLUGGSOPP	*Paxillus atrotomemtosus*
OREKJUKE	*Inonotus radiatus*
PELSKJUKE	*Inonotus hispidus*
SENNEPS KANELSLØRSOPP	*C.croceus*
RØDSKIVEKANELSLØRSOPP	*C.semisanquineus*
BLODRØDKANELSLØRSOPP	*C.sanquineus*
KANELKJUKE	*Hapalopillus nudilans*

We used dried mushrooms and we changed the pH by using a little calcium carbonate that gave mostly much darker and stronger colours.

Dear Dorothy Beebee:
I would be very pleased if you would put my inquiry in the International Mushroom Dye Institute newsletter. I am interested in is knowing what can be added in the preparation of making Coprinus ink ? I understand there could be additives that would function as a preservative .

My second question is ; Can you recommend the best fixative that you have found to protect spore dyes? I'm hoping that the answer to these questions will help the conservation work that I am doing with the Elsie Burkman collection of wild mushroom painting : Coprinus comatus ..... I appreciate your kind interest in my research endeavors . Please remember me to Miriam and say hello from me . Thank you again .
with regards,
Beriah Brown, BRITISH COLUMBIA
Klondike2u@aol.com

Hi Dorothy-
I am a combination textiles/fashion major at CCA (formerly California College of Arts & Crafts). I will be graduating in a few months. I enjoy weaving, knitting and screenprinting on fabric, but above all, I LOVE the dyeing process. I am excited to experiment with hunting mushrooms and then playing with the rich and earthy colors they yield. I am also very interested in sustainable /responsible living, and ultimately plan to explore a textile business approach that treads as lightly as possible.
Thanks!
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