From the artist's studio

Taras telephoned me once and told me that he had written me a letter. I asked him, with astonishment, what he had written that he couldn't tell me over the phone. He remained enigmatically silent, replying only: "When you receive it, you will see."

That letter arrived several days later, and in it was information Taras had acquired, in the course of his own investigations, about dyeing pysanky with natural (botanical) dyes. This was incredibly exciting, because no books about pysanky contain detailed information on this subject–how to dye pysanky in decoctions (boiled solutions) of grasses, herbs and tree bark. Taras also wrote a similar letter to his friend Sashko Opariyev. We think this information will be useful to many of our readers, who may possibly be searching for it.

From a letter to Vira Manko

It seems to me that you are interested in the dyeing of pysanky with natural dyes? I have done some experiments, but only a few, I will try and explain as best I can.

Generally almost every plant has some sort of dyeing potential. Generally, these are colors ranging from yellow, yellow-green, grayish-green, greenish-brown, and brown to black, with various hues. There is a book entitled "Gifts of the Forests" (1987, Kyiv: "Harvest Press"). In it are described plants that, to various degrees, produce dyes. For example, about St. John's wort (page 140) it says: "The flowers contain the dye hypericin, and, with various mordants they give yellow, green, red, pink dyes, suitable for dyeing wool."

Mordants—that's alum (there are aluminum—an aluminum-potassium compound—iron, and chrome) or some other salt. I have only the aluminum and iron alums. Thus my "experiments" have been only with these two. As a rule, aluminum alum does not change the color of dyes, but only improves dye adherence and slightly lightens the dye solution. Iron alum makes the dye darker. Decoctions should be made according to the directions on the apothecary's packet—in a water bath. The more plant material you use and the less water, the better. I add the alum to the strained decoction. I dissolve the alum first in boiling water, and then add that solution to the dye–so that I don't get crystals of the salt (alum) in the dye itself, because these will cause blemishes on the pysanka.

I place the pysanka into slightly warm or room temperature dye solution and dye for it a long time: 24 hours or longer. It's possible to dye pysanky in a warm dye solution, but only those that have been written with thick lines. In that case, the dyeing process will only take a few hours. Only a very small amount of alum should be added: to a glass of the decoction you would add a lump the size of a match head.

1. *Genitsa tinctoria (*Drik krasyl'nyy *)* Dyer's broom/Dyer's Greenweed: dyes with and without alum. With aluminum alum, it gives a bright yellow color, and without it it gives a yellow color, but not as bright. With iron alum you get a brown color–this is when you use blossoming sprigs, with flowers.
In winter broom puts out bare green shoots. From these shoots you can produce green (with aluminum alum) and dark green (with iron alum) dye.

2. *Persicaria bistorta* (Hirchak zmiynyy) Common bistort, Adderwood, Dragonwort, Gentle dock, Patient dock, Pink pokers, Pudding dock, Red legs, Snakeweed, Water ledges: produces a yellow color both with and without aluminum alum, but not as pure as with broom.

3. *Artemisia absinthium* (Polyn hirkyy) absinthium, absinthe wormwood, wormwood or grand wormwood: green color–with aluminum alum, and dark green–with iron alum.

4. *Origanum vulgare* (Materynka) Oregano: green color–with aluminum alum, dark green–with iron alum.

5. *Alnus incana* (Vil'kha) Alder tree (black or gray): the bark produces a reddish-brown color with aluminum alum, black–with iron alum.

6. *Leonurus quinquelobatus* (Sobacha kropyva) Motherwort, Throw-wort: green color–aluminum alum, greenish-brown–iron alum.

7. *Rhamnus frangula* (Krushyna) Alder Buckthorn, Glossy Buckthorn, Breaking Buckthorn, Black Dogwood: the bark produces yellow (a dirty yellow) color–with aluminum alum, dark brown with a green tint–with iron alum.

8. *Gnaphalium sylvaticum* (Sukhotsvit lisovyy) Wood Cudweed: with aluminum alum–dark green color.

9. *Equisetum arvense* (Khvoshch polyovyy) Field Horsetail or Common Horsetail: with aluminum alum–grayish yellow.

10. *Bidens tripartita* (Chereda) Three-lobe Beggarticks, Three-part Beggarticks, Leafy-bracted Beggarticks, Trifid Bur-marigold: with aluminum alum–yellow, with iron alum–brown color.

11. *Sambuca sp.* (Buzyna) Elderberry: the berries produce a nice, clean gray color with aluminum alum.

Blueberries with alum give a dark blue-black color, but this decoction, even though it dyes very well (and as quickly as chemical dyes), fades quickly in sunlight.

When you crumble fresh flowers of St. John's wort with your fingers, they dye your hand red, but you can't repeat this on a pysanka. The same is true of cornflower blossoms–your fingers are dyed a blue color, but a pysanka (with or without alum) turns a nasty gray color.

I tried using oak leaves–no red color resulted, Viper's Bugloss–the root is supposed to produce a red dye, but I got no such result, and similarly with Asiatic dock–no sort of blue dye was obtained from the roots.

It's possible that I overlooked something–my memory is full of holes. All of the plants which I tried to use for dyeing grow in large numbers. There is much Dyer's broom in our forests, but in Polissya there is simply a sea of it, and it overgrows entire glades. Similarly, we have lots of cudweed, oregano, motherwort, mignonette, bugloss, etc. There is much useful information in the book "Gifts of the Forests" about the dyeing properties of the bark of various trees. But working with bark is fairly frustrating, and it's a pity to destroy trees or bushes.

I've remembered a bit more: Maria Hotsulyak dyes eggs a brown color for her dryapanky using a decoction of green walnut shells. She takes dried husks (those that she collects when the nuts are falling from the trees) and puts as many as she can into a jug. She then pours water over them, adds her emptied egg shells, closes the lid and weighs it down. Maria then cooks the mixture until the eggs are dyed.

It's said that you can buy the root of the Common Madder *(Rubia cordifolia)*, which grows in the south of Ukraine, from traders at the medicinal herbs market. This root was once used for the extraction of red dye. I haven't been able to verify this, because I haven't come upon this root.

Letter to Sasha Opariya
April 5, 2005

Greetings Sasha!

Packets of medicinal herbs from the pharmacy usually give this recipe for preparation: heat the herb (or root) in a boiling water bath for 30 minutes and then allow to cool 10 minutes. Strain the mixture; take the vegetable material that has been strained out, and squeeze it; add that fluid that results to the initial decoction.

I do it this way: when preparing an herb, I stuff it fairly tightly into a glass (300 gm./10 oz.), add enough water to fill the glass, and then do as written above. The result is about 100 gm. (3.4 oz) of a strong decoction.

I then dissolve separately in a small amount of boiling water a bit of alum (about the size of a match head), and then add this mixture to the dye. It is important to avoid getting any crystals of alum into the dye mixture, because crystals may cause spots on the pysanka.

It's best to write pysanky on an emptied egg. Fill the egg later with water (try to make sure no air is left–or the egg will float up out of the dye), and seal the hole with wax, plasticine (a type of modeling clay), or chewing gum. It is best (when using natural dyes) to make a pysanka that has only one color. I soak the pysanka overnight (24 hours) in cold (room temperature) dye. You can use warm dye as well, but only if the lines are thick. The Hutsuls used to put eggs in the warm dye solution and place that on a warm stove. But I prefer to dye in a colder dye–it is then possible to write very thin lines. Alum is of several types: aluminum (potassium), iron and chrome. The aluminum alum does not change the color of the dye, but makes it a bit brighter, and the iron alum gives a darker color. I have never had a chance to use the chrome.

Generally speaking, nice pysanky result from natural dyes, but they are costly–you need a lot of herbs. And no one appreciates them. On the other hand, such pysanky don't fear water and don't fade from the sun.

Red dye can be obtained, among the herbs, from the harmal (or Syrian rue) plant (*Peganum harmala*). The dye obtained from the seeds of this plant was used to color Turkish fezzes red. This plant grows in the North Caucasus, on the steppes of Central Asia and in the foothills of the European part of Russia. It would be good to get the seeds of common madder and this harmala–these plants would also grow well in our area.

With best wishes,

Taras Horodetsky

Some time later Taras did in fact obtain this herb–common adder–and extracted from it a splendid reddish-brown dye, and he gave me a pysanka dyed with it. You, dear reader, can also see pysanky dyed with natural dyes in this album, and feast your eyes on their delicate pastel tones. Additionally, you can benefit from Taras' advice and try to prepare natural dyes and color your Easter pysanky with them.

V. Manko