

# FUN WITH NATURAL DYES

## A beginner's kit of colours

### SAFE COLOURS for TEENS

(and Children with Adult Supervision)

Presented by The logo for 'AURORA Silk' features the word 'AURORA' in a stylized, multi-colored font (blue, purple, orange, red) with 'Silk' written in a red cursive script above the 'O'.

PREPARED and written by CHERYL KOLANDER, Master Natural Dyer,  
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#### YOUR KIT INCLUDES:

##### Fixer "Mordant" for PREPARATION:

4 oz of ALUM - (enough for 1 pound of natural fibers)

##### Dyes for COLOURS:

BRAZILWOOD extract for RED 1 oz

Fusticwood shavings for YELLOW 4 oz  
and Sage Green

LOGWOOD shavings for PURPLE 4 oz  
and Blue-Grey

To **CHANGE** colours into others, and make them even more fast:

IRON sulphate 1 oz

##### Something special to DYE:

3 SILK lengths - 100% silk, that weigh exactly 1/2 oz. each

# INSTRUCTIONS

## STEP #1: WEIGH THE MATERIAL.

First, before anything, we must weigh the material we are going to dye. All dyework is "proportional by weight", so we must know how much our material weighs. Should you not have a scale, you can weigh material, in a clean plastic bag, at the bulk foods section of any grocery store.

To start with, each silk piece enclosed weighs exactly 1/2 oz.

## STEP #2: PREPARE the material

Clean silk fabric just needs to be "wet out" in warm water. Other material, like a Cotton t-shirt, should be washed in hot soapy water, then well rinsed.

## STEP #3: "MORDANT" the material with the ALUM fixer

The alum binds to the fabric really well. Later the dye will bind to the alum. This is how we make the colour fast. **ALWAYS WEAR "RUBBER" GLOVES WHEN HANDLING MORDANTS AND DOING DYEWORK ! ! ! !**

Use  $\frac{1}{4}$  by weight. That is, if the material, say, a t-shirt weighs 4 oz, we will need to use 1 oz of alum. For each silk square, which weigh exactly 1/2 oz, we will need 1/8 oz. of the alum.

5 teaspoons of alum equals one ounce, so for each silk square, use one "scant" teaspoon of the alum, or one "rounded" half-teaspoon. (5/8 tsp. to be exact)

Dissolve the alum in some warm water in a stainless steel, enamel, glass or aluminum pot. It should be large enough for the material we are dyeing to have plenty of room to move around. For one of the silk lengths enclosed, a 2-quart sauce pan is large enough. For an adult t-shirt, a 14-quart stainless stock pot is usually large enough. If the material is a little "crowded" then the final colour will be a little uneven, with a "tie-dye" look. It is fine to use a smaller pot, if this is your delight.

Fill the pot with warm water and dissolve the alum in it. Add the material, poking out any air bubbles. The material has to be underwater in order to dye, as the dye is in the water. Heat the material till the water is really hot and steaming. It is good to put a lid on it. Keep it hot for an hour, then turn off the heat and let it cool awhile. You can store the solution and the material in a clean plastic bucket, then use the same pot for the dyework.

## **STEP 4: Make the Dye bath COLOURS**

**BRAZILWOOD for RED**

**LOGWOOD for PURPLES and Blue-Grey**

**FUSTICWOOD for YELLOW and MOSSY GREENS**

### **Need advance preparation:**

As you begin the alum-mordanting, also **put some of the dye-wood in a pot to soak.** How much depends on the fabric type, amount and colour depth desired.

For silk - use about half the weight of the fabric.

For cotton - use about equal the weight of fabric. (Most T-shirts are in the 4 oz range)

for wool - depends on the wool and if it has been treated, usually is similar to silk.

for rayon (reconstituted cellulose, sold now as viscose and bamboo) - as for cotton.

### **For the shavings: for one silk length try 1/2 cup shavings**

Cover the wood shavings well with water and leave overnight. Next day, boil up the chosen dye-wood. Slow boil for about an hour. Keep the pot covered so the water - which will be the dye - doesn't boil away.

Strain off the dye. Save the wood and re-boil it with fresh water, as it will still give more dye. Add this to the first, or use for a second project later.

You can always darken a too light shade. If there is dye left over, it will keep for at least a week and can be re-used for another project.

The dry dyestuff keeps well for years; the mordant fixers keep forever. Store in a dry dark cool place.

### **For the Extract: for one silk length try 1 Tbsp extract**

Just mix with water. It will dissolve completely. Extracts are easy!

**"SOFT WATER" NOTE:** If your water is very "soft" (acid), then the Brazilwood will look orange instead of red, and the Logwood will look red instead of purple. Add a little (start with a teaspoon) of CLEAR NON-SUDZING AMMONIA, which you can get at any grocery store. Add enough to turn the Brazilwood dyebath to a true red, and the Logwood dyebath to a grape-juice purple. If you neglect this, Brazilwood will not dye very dark, and Logwood will dye a dull rust-red, not its special rich purple. Fustic will give a lighter greener colour in acid water, a darker more golden tone if the acid is corrected.

### **Dye the fabric:**

Add enough hot water to the dye bath, and let the pot be big enough, that the material can move around freely. Then heat it some more. The longer it stays hot, the darker the colour.

The more room it has in the dyebath (more water, bigger pot), and the more you stir it, the more even the colour will be. For a random "tie-dye" effect, use less water and don't stir it.

### **Paint- Dye:**

The strong first extraction is the best for paint dye. Mordant the fabric first in the alum, line dry it and lay it out flat on top of a few layers of newspaper to paint. Or stretch it on a frame for greater security and absolute flatness. Any thickener such a gutta resist (or boiled up corn starch) can be used either as a line resist, or as a thickener to the dye solution. A thickened solution will give cleaner edges. I personally use a water-colour technique without thickeners.

Any brush is suitable, according to the effect you want. Also spraying, stenciling, dripping, block printing: all techniques are possible with these strong, permanent natural dyes.

Paint on dry fabric for cleaner edges to the colours, or use a water colour wash for cloud-like effects on a wet fabric. A resist line is the way to make the cleanest edges to colour areas.

Heat setting is not necessary. "What you see is what you get". The shade may lighten slightly if rinsed, but rinsing is not necessary for wall art. Silk will dry lighter as the sheen of the fibre comes back.

### **CHANGE the colour with IRON:**

Turn the purple to a smoky haze with the iron.

Turn the yellow to a soft, mossy green with the iron.

Darken the Brazilwood red to a plum or garnet.

**Use IRON to make the colour even darker:** dissolve a small amount of the iron in warm water. For paint-dye on silk, mix perhaps a quarter teaspoon. To darken the red of a t-shirt (and make it more fast to light and washing), add  $\frac{1}{2}$  teaspoon, well dissolved, to the used dyebath, return the t-shirt, and leave it, stirring occasionally, till it darkens to your liking.

Remember: every colour is lighter after rinsing, and silk is especially lighter after it dries, and the silk gets shiny again.

**Iron as the sole mordant:** to prepare the fabric, use  $\frac{1}{2}$  oz (2 teaspoons) per POUND of fabric. For one  $\frac{1}{2}$  oz piece of the enclosed silk, use  $\frac{1}{8}$  teaspoon of the iron crystals. Dissolve the crystals well in warm water. Do the mordanting as a simple overnight soak, or heat the material in the mordant-fixer for  $\frac{1}{2}$  hour.

Blue-Grey with Logwood  
Maroon with Brazil  
Sage Green with Fustic

**MORE COLOURS:** Make different colours by combining dyes. This can be done either in the pot, or by "overdyeing" one colour over another, each in separate pots. Fusticwood plus a little Brazilwood makes **orange**. Logwood plus Brazilwood makes **violet**. A little Logwood over yellow makes **brown**, or with iron added, a **deep forest green**. Logwood and iron alone makes a lovely blue toned grey.

**RINSE** in clear water, and dry out of direct sunlight. Be sure the different colours don't touch each other when drying, as the red will turn the yellow to an orange, and Logwood will turn it brown.

**SAFETY FOR SMALL CHILDREN:**

While this alum is the same sold in grocery stores for making pickles crisp, and the iron is the same taken by many as a mineral supplement, please keep these and all dyes and assists (like ammonia) **OUT OF THE REACH OF CHILDREN**.

This kit can safely be used with children, under **ADULT SUPERVISION**.  
Completely **SAFE FOR TEENS**, 12 and above.

**ALWAYS WEAR "RUBBER"** (vinyl or latex, thin or thick) **GLOVES** when doing the mordanting and immersion dyework. ( not necessary when painting!) Do not drink or eat the mordants.

The dyewoods as teas are medicinal, currently being tested clinically. However, please use internally only under the direction of a Naturopathic Doctor.

The dyewoods are great Easter Eggs dyes. No mordant needed: the calcium in the eggshells acts as mordant.

Spent dyewoods make great compost. Used solutions can be safely poured down the drain. **ENJOY!**

For further information and supplies: Cheryl Kolander's  
[www.aurorasilk.com](http://www.aurorasilk.com) Portland, Oregon USA 503-286-4149