Botanical Printing Mordant

From
The Studio Club

June 2023

Introduction

This is the mordant that I am currently using for botanical prints - it has the advantage of giving strong outlines without distortion. It is however a very strong mordant and I would therefore not use it on silk or wool as I fear that it would damage the fibres. For linen, cotton or paper it is fine though.

For similar reasons you need to wear gloves and I would make it outside if remotely possible.

The amount of fibre that this will mordant depends on the absorbency - unlike other mordants you are coating and pummelling this in, rather than soaking it. It also doesn't keep well so I would make smaller amounts and increase if necessary once you have learned about your fibre.

The process isn't difficult but does take a long time as the fabric or paper needs to be dried in between steps.

Much easier to do in the summer!

Ingredients

- 500 ml white vinegar
- 50g aluminium potassium sulphate (alum)
- between 2 and 8 g ferrous sulphate (iron)
- 25 g sodium carbonate (soda ash)
- 20g calcium carbonate

You need

- Dry scoured cloth
- Pan
- Spoon
- Rubber Gloves
- Non reactive Bowl
- Table
- Old paint or soft scrubbing brush
- Covering for table if needed
- Washing line or equivalent

Method

Pour the vinegar into the pan and gently heat, add in the aluminium potassium sulphate and stir until it is completely dissolved. This is very important as any undissolved grains will spoil the mordanting.

Add in the iron - the less iron, the lighter the printing will be. The less iron the more yellow colours will be present.

Some plants print best with very little iron - for example rosebay willow herb - others can take more iron which lends more definition - for example bracken and sweet cicely.

Iron will also effect the background colour turning it slightly peachy. I tend to work with 2-4g iron. But if you want dark, dramatic prints go higher.

Pour the liquid into a bowl and leave to cool to a luke warm temperature before adding the sodium carbonate a spoonful at a time.

It will froth up as you mix - let the froth die down a little before adding more sodium carbonate to prevent it all overflowing.

Add your fibres to the bowl and, wearing gloves, knead the liquid into the fibre. Every bit of the fabric should absorb the mordant, keep opening it out and refolding in the bowl, kneading and pounding until it is completely impregnated.

It may be easier to lay the fabric out - especially if it is clothing - and use the brush to work the mordant into the seams, nooks and crannies.

If you are mordanting paper you can brush it onto the paper evenly or, if it is small enough, you can dunk the paper in the bowl and squeeze off excess by using two fingers like a wiper.

Once you are happy that the fibre or paper is fully mordanted remove and excess blobs and hang to dry. Make the fabric as taut as possible and try to make sure there is no pooling of mordant.

Leave it to dry naturally.

When it is fully dry have a sniff and see if it smells of vinegar - if it does then iron it or heat with a hair dryer until the smell has gone.

Make up a chalk bath by dissolving the calcium carbonate in water and soaking the fabric or paper in it.

This process is an adaptation (more acceptable in the home) of 'dunging' which uses alkali to set the mordant to the fibres.

Hang the fabric or paper up again to dry and then when it is completely dry, rinse it in warm water to remove the chalk.

Dry AGAIN, label and store.

Mordanted fabric can be stored in a cool, dark, dry place for a year or more. Keep it away from any other naturally dyed items.