

Dyeing & printing with plants(1)

Materials needed:

- Large pan or roasting tin/tray
- Stove
- Metal or wooden tube/rod and string
- Or two wooden boards to be bound with string or clamps
- Plant materials, flowers, bark
- Mordant
- Paper or fabric for printing/dyeing – best results from fabric with natural fibres
- Try experimenting with rusty iron or steel objects (see sheet #8)

Please take precautions and wear appropriate protection when handling chemicals and hot liquids. Beware that some plant materials can be toxic.

Best to use old kitchen utensils that you will not be using for cooking food, or otherwise make sure that all items and kitchen surfaces are carefully cleaned afterwards.



Dyeing & printing with plants(2)

A **mordant** acts on the fibres of the paper or textile to create the conditions for the dye to bond. The mordant can be used before, during or after the dyeing process.

Different mordants affect the colour of the dye. Mordants include:

Plant galls (contain tannin)

Wood ash

Urine

Crab apple juice

Chemical compounds with metallic ions: aluminium (alum), iron (ferric sulphate), chromium, tin and copper

Use nails or wire wool as a source of iron with white vinegar

Rhubarb leaves (oxalic acid) – but beware as the leaves are poisonous

Common salt can be used to help “fix” colours



Dyeing & printing with plants (3)

Some plant materials to try:

- Blackberry (berries & shoots)
 - Broom (flowers & young stems)
 - Chamomile
 - Elderberry
 - Goldenrod
 - Henna (loosestrife)
 - Ivy
 - Weld or dyer's rocket
 - Rose madder (root)
 - Woad
 - Nettle
 - St John's Wort (hypericum)
 - Scabious
 - Oak bark
 - Beech bark
 - Birch (leaves and bark)
- (chop up mature bark and soak for a few days.)
- Bark often contains tannin and doesn't need mordant



Madder and weld dyes

Try growing your own – we planted some woad seeds to try out in the Autumn



Dyeing & printing with plants (4)

Experiment with plants collected on walks or from the garden



You can also get strong colours using onions skins (golden yellow/brown and red) and avocado stones

Dyeing & printing with plants (5)

Process

Arrange plant materials on paper or fabric, and stack into layers.

Add water at approx. 5l per 100g of fabric/paper



Bind layers together either by rolling tightly around a tube or between two wooden plates and tie up with string or use clamps. It is important that the plant material is in contact with the paper/fabric for dyeing.

Place bound layers into the pan or tin with the water and add mordant.

Boil for at least 1 hour and allow to cool, strain off solids. If preferred, the materials for dyeing and or mordant could be added now.



Onion skins added to the pan

Dyeing & printing with plants (6)



Finally once everything has cooled, carefully unroll the paper/fabric and remove the plant materials.

When dry you can iron the paper or fabric



Dyeing & printing with plants (7)

Some examples:



Using alum as a mordant



Using a ferrous mordant

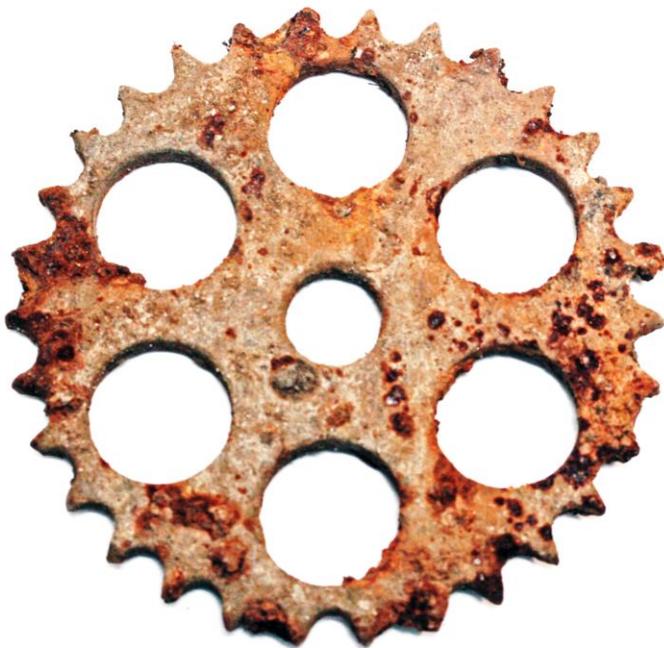
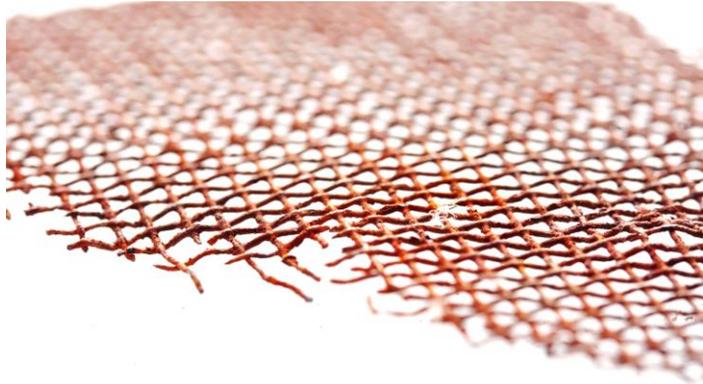


Dyeing & printing with rust (8)

Rusty iron or steel found objects can also be used to dye or print directly onto fabric or paper. Natural fibres are best.

Dampen the fabric or paper with equal parts of vinegar and water. Keep the fabric moist during the process.

The acidic solution causes the metal to oxidise or rust and it is this that is imprinted.



The longer you leave the fabric or paper in contact with the rusty object, the stronger the colour will become.

Once you've achieved the desired colour intensity, you can stop the process by "neutralising" the fabric and fixing the colour by soaking in a saline or salty solution..

Once all is dry, you can iron the fabric or paper.