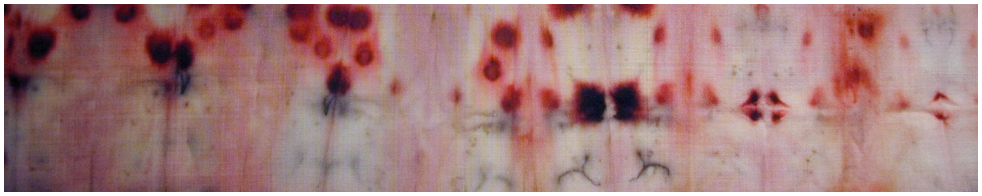
Workshop Plan for
Ice Flower & Berry Dyeing



Introduction

The dyeing phase of the River & Cloth project will focus on obtaining colour from natural materials. The aim of the project is to extract colours from natural materials using a variety of techniques. This worksheet gives information about the extraction of colour by Ice Flower & Berry Dyeing, a method discovered by Textile Artist India Flint. The River & Cloth dyeing workshop plans include eco-dyeing, hapa-zome and solar-dyeing techniques also discovered by India Flint.

Facts

A mordant is a substance used in dyeing to fix the coloured dye on the cloth. The term mordant comes from the Latin word *mordere*, meaning to bite. Mordants also change the colour properties of dyes.

The only mordant used in ancient and medieval times was alum.

In the late 17th century new mordants were developed from the Indian methods, when calico printers were trying to copy the Indian techniques of printing and dyeing. The new mordants were made from iron, copper, lead, tin & chrome. Lead was found to be the ideal mordant for madder (red). Iron was used to produce black.

Many of the mordants used were toxic, especially lead and chrome.

Dyers also used assistants to help the dyeing process, these included vinegar, stale beer, wine, salt, and urine!

Materials Required

- A range of flowers for natural dyes - for ideas on which to use, please see Plants & Colour Sheet.
- A selection of cotton and silk fabrics such as habotai silk (heavy) and calico (light). Allow 0.1 metre per person. Alternatively you can use light coloured clothing made from natural materials such cotton, linen or silk.
- Old tights or socks – one pair per person
- String or rubber bands
- Threads & string for tying
- Buttons
- Water
- 10 ml syringes – can share 1 per four people
- Containers such as buckets or jars - 1 per person

Health & Safety

Rubber gloves and aprons should be worn whenever dyes are being handled.

Some plant materials are toxic. It is most important that you only use plant materials that you can identify and that are not hazardous. Please see Fact Sheets on Plants & Colour and Growing Plants for Dyeing for guidance.

Preparation

The fabric should be pre-mordanted prior to the session. Please see Fact Sheet on Mordants for guidance. Tear the fabrics into strips measuring 0.1 metre, and ensure that each participant has one of each.

Activity

The display of flowers and berries is used as a starting point for a discussion about the colouring of cloth using natural and synthetic dyestuffs. For discussion ideas see Facts section of this workshop plan and Fact Sheets on Plants & Colour.

Ideally the participants will have collected the flowers and berries for the ice flower dyeing experiments from the River & Cloth garden at Deen City Farm or from their school or local garden.

Note: Natural dyeing is unpredictable. The same dyestuff e.g. French marigold flowers, will produce different results depending on the time the flowers are picked (they are best for ice flower dyeing when they are in full bloom), where the plant is growing, how much rain has fallen while it was growing etc. The examples shown on the Plants & Colour sheet are for guidance only.

Step One:
The flowers/berries are put into plastic bags or other containers such as plastic yoghurt pots, sealed and placed in the freezer for at least 24 hours. Freezing causes the moisture in the plant to expand breaking down the cell walls of the flowers and this allows their colour to be extracted more easily.

Step Two:
After 24 hours, the frozen berries & flowers are taken out of the freezer and placed in the toe of an old pair of tights or socks and immersed in lukewarm water. Squeeze the sock or tights to extract the colour and pour into the container. Use approximately one cup of flowers or berries to one cup of lukewarm water.

Step Three:
Take a piece of fabric - experiment - use both wet cloth and dry cloth for different patterns and take-up of the dye. Fold, bundle and tie the fabric - for ideas on folding and tying the fabrics see the following for Shibori (tie-dyeing) techniques:

Weblinks:
http://shiboriorg.workshops.com/traditions/techniques/

Recommended Books:
Shibori: The Inventive Art of Japanese Shaped Resist Dyeing by Wada, Rice & Barton
http://www.amazon.co.uk/Shibori-Inventive-Japanese-Shaped-Resist/dp/4770023995/ref=sr

A Handbook of Indigo Dyeing, by Vivien Prideaux
http://www.amazon.co.uk/Handbook-Indigo-Dyeing-Vivien-Prideaux/dp/0855329769/ref=sr

Step Four:
Place the fabric bundle in the container with the flower/berry dye mixture. Leave for between 24 and 48 hours. Alternatively you can place the fabric bundle in a plastic tray and pour the dye liquid over the cloth or use a syringe to inject the dye liquid into the bundle. But leave for the same amount of time: 24 – 48 hours.

Step Five:
Ask participants to complete the ice flower & berry dyeing record sheet.

Step Six:
Unwrap your bundle to reveal the pattern on the cloth. Ask participants to record the final results on the ice flower dyeing record sheet.