

## WEAVING AND DYEING

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Have you ever noticed the glorious colours in real Persian carpet? - how soft and lustrous they are and how they harmonise? Have you ever wondered how these colours are obtained? One hears a lot about aniline or coal tar dyes but very little about vegetable dyes; and it is with these vegetable or natural dyes which I, as a hand weaver propose to deal in this talk.

To my mind half the fun of weaving lies in juggling with colour, and the weaver's aim should always be to produce something which would compel those who see it, to look twice, for fear they have missed some subtle shade or undertone.

It is interesting that the art of dyeing is probably much older than its allied craft of weaving. The Ancient Briton used a vegetable dye called Woad for covering the body. One of England's foremost dyers is Mrs. Ethel Mariet, and she tells us that there is little of the early coloured Textiles in existence now. One of the earliest known is the famous belt of Rameses III. It is still bright in colour - blue, red, yellow and green, dyed with vegetable dyes on fine linen.

Many of the more Important woods and vegetable dyes were introduced into England during the Elizabethan age, when the maritime adventurers visited the South American ports in search of Spanish gold and plunder. When these woods were placed on the English market they met with considerable criticism from the Dyers Company. The craftsman of to-day would be astonished if he were aware of the attitude of the old time dyers to new ideas. They shrouded their trade in a mysticism which seems almost incredible to us of the twentieth century. The methods of dyeing in the Middle Ages were extremely long and costly, and the recipes for colours were handed down as heirlooms from father to son, and were not changed one iota from one generation to another.

It's really a sad reflection on Australia that no one has yet produced a book of recipes of Australian dyes. Take a piece of the bark of the spotted gum which grows prolifically on our coastline, and soak it in water for a day or two. See how the dye discolours the water. If this colour could be extracted just soaking it in cold water, how much more colour could be obtained by boiling it gently! Try It for yourself! You will be amazed at the lovely rich brown which results.

You've all seen that green-grey scaly lichen which grows on rocks and stones. Now this will give a rich rusty brown. "Old Man's Beard" which grows on fence posts will produce soft green. Why not see if you can dye some

wool with some of those everyday things. I'll tell you how to do it.

If you're really serious about dyeing, you should keep a special room as a dye house, even if it's only a small pantry or tool shed. A sink fitted with cold water is the greatest comfort, and saves much time and trouble. If the water is hard, it is worth the trouble to collect rain water for dyeing, and for the washing of wool.

You'll need a large strong table under the window, and one wall fitted up with two or three rows of shelves. You should also have a set of weights and scales, a thermometer a gallon measure, some basins, two or three large enamel or galvanised iron vessels for dyeing in and a draining board. A chopping board and a sharp knife may be very useful.

For the actual dyeing a gas ring on the floor and an old copper supported by some loose bricks are what I use. (Amateur dyers will find themselves very unpopular if they heat dye pots on the kitchen stove, or mix the dyes in the bath).

Some wooden sticks for stirring the dye and for lifting the skeins of wool out of the boiling liquor should be kept handy. Those will want renewing frequently as the sticks become impregnated with the dye and may stain a light coloured skein of wool vary badly. Glass rods are better, but somewhat expensive.

Take care to keep dyestuffs out of the reach of children, and make sure you have everything labelled so that you know the contents of each container. Also don't forget to make a note of everything that you do, as this makes a very handy reference.

Are you ready?

First make sure the yarn or fleece you are going to dye is free from dirt and grease, by washing in warm soapy water, and make sure you rinse all the soap out after you have it clean. If you are going to dye it right away do not bother to dry, as it is always better to place the material in the dyebath, wet. Now prepare your bath. Take half an ounce of Bi-chromate of Potash or one ounce of alum, either of which may be obtained from your chemist quite cheaply, dissolve this in a small quantity of boiling water. Then take the lichen and the wool and let in sufficient hot water to cover the wool, first a layer of wool, then a layer of lichen. Then add the potash or Alum and boil slowly for about one hour, or until you obtain the colour you require. Simple isn't it?

There are hundreds of things in your garden which will give you beautiful colours. Even the skin of the humble onion will give wonderful shades of golden yellow.

Ivy berries and also privet berries will give blues. The common stinging nettle will produce green, and so will the root of the yellow iris. Yellows may be obtained from the roots of the common dock plant. If you have a walnut tree growing near you, the green husks will provide you with a rich nigger brown.

I spoke just now about Bi-chromate of Potash or Alum. The application of these chemicals is called Mordanting and their purpose is to impregnate the pores of the wool fibers with chemicals which form insoluble coloured lakes when acted upon with the various natural dyes. The most common mordants are Alum, Copperas, Tin Chloride, Cream of Tartar, Bi-chromate of Potash and Ferrous Sulphate or Iron crystals. Tin Chloride is used to brighten a colour, and Iron to dull a colour. But do not try to dye cotton with vegetable dyes. Wool, silk and linen are the best materials to use.

A word of advice to those of you who are weavers. Don't be afraid of colour. Try to have your colours bright rather than dull, as one colour crossing another tends to dull both. Most of the dyes we see around us are aniline, not vegetable dyes. Yet it's a fact recognised by painters that harmonies in colour depend on the existence of a quality which is common to all the colours used in creating the harmony; and while vegetable dyes possess this quality, aniline dyes do not.

Pure colour (in the sense of a primary) does not exist in aniline dyes, each colour being obtained by the chemical action of successive colouring matters which may not in themselves be harmonious. In the process of fading, these colours will pass through a series of changes which will entirely destroy the original colour scheme, and result in a succession of uncontrolled discords. In the same circumstances the vegetable dye will fade through a succession of tones of the same colour, leaving the original harmony unchanged, except if we want to preserve the musical metaphor - in pitch.

As a handicraft dyeing is only just becoming popular. There are untold possibilities about the craft which the industrious student may well appreciate. Almost every kind of material used by the craft worker can be dyed or stained a wide range of colours. And technique, whilst it's important, can soon be mastered. In a short time the craftsman will be obtaining really beautiful results, and will be making his own life-experiences more colourful.