

Using Earthues, Botanical Colors and Hue & Dye natural dye extracts

Please read our health and safety guidelines before using any of our dyes, mordants, fixers or auxiliaries.

What can I dye?

Our natural dyes will work on any natural fibre 'goods' - yarn, fabric, fibre, fleece etc. They will work on both animal or plant fibres. Natural/synthetic blends will still dye but the higher proportion of synthetic content the less satisfactory the results.

You will need:

Earthues, Botanical Colors or Hue & Dye powdered dye extracts (for suggested quantities see below)

- *For animal fibres:* Alum - between 5g to 15g per 100g dry weight of fibre (5g-10g on fleece, roving and other fibres and also finer yarns such as angora/alpaca and fleece. 10g-15g on wool yarns)
- *For plant fibres:* Aluminium acetate - 5g per 100g dry weight of fibre

You will also need:

- A squirt of washing liquid
- Water
- Plastic bucket for soaking yarn
- A large container with lid, large enough to comfortably hold the yarn, ideally a large stainless steel or enamel pan
- Rubber gloves, dust mask, apron and plastic/newspaper to cover surfaces
- Measuring spoon and jug
- Stirring stick or spoon
- Access to a hob/hotplate

Dyeing instructions

These instructions apply to all protein fibres and most dyestuffs apart from indigo and woad, which require a different method (a separate leaflet for indigo and woad dyeing is available). Plant (cellulose) fibres may also be dyed - see below for instructions on using extracts with plant fibres.

1. Thoroughly wet yarn.
2. Prepare the mordant bath by dissolving alum/aluminium acetate (see above for quantities) in a little boiling water then adding it to a microwaveable dish or a large stainless steel/enamel pan containing enough liquid to allow the goods to move around freely.
3. Squeeze the wetted goods and add to the mordant bath.
4. Slowly heat the goods on the hob, bringing the bath to simmering point over 30-45 mins. Keep simmering (do not allow to boil) for a further 45 - 60 mins. Stir gently every 5 minutes or so. Alternatively, microwave the yarn on full power, 5 minutes at a time, for 30 minutes in total, stirring every 5 minutes.
5. Leave the yarn to cool in the mordanting bath. Once cooled, remove and rinse briefly in warm water. Squeeze gently but thoroughly and put to one side.

6. Make up the dyebath by dissolving 1 level teaspoon of extract in a small amount of warm water. When dissolved add to a dish/pan containing 3-4 litres lukewarm water. (The amount of water is not crucial but the goods should be able to move freely in the dish). Add mordanted goods to the dyebath.
7. To cook on the hob, bring the pan of dyebath and goods to simmering point over 30-45 minutes, then keep the pot simmering (do not allow to boil) for 30 – 45 mins. Stir gently at regular intervals. Alternatively, cook in the microwave on full power, 5 minutes at a time, for 25 minutes, stirring gently every 5 minutes. Once the goods reach the desired colour they can be removed from the heat, bearing in mind that the colour will lighten when it dries.
Note: Madder is sensitive to heat and water pH, so heat slowly and test water pH. For reds, do not overheat and ensure pH 9 or higher. For oranges, pH should be mildly acidic, pH 6 or lower. Once the goods have reached the desired colour, remove from the heat as they may go brown with overcooking.
8. After cooking, leave the goods in the dyebath to cool and set. This can be overnight (or even several days if you want stronger colours), but leave at least a couple of hours.
9. Once cool, squeeze the goods gently, allowing the dye solution to drip back into the dish/pan. Rinse thoroughly in warm water with pH neutral, gentle wash liquid or shampoo. Allow to dry out of direct sunlight.
10. The dyebath can be used again to dye more fibres. The colours will be paler or more extract (or another extract) can be added to create a deeper shade, or, if a different extract is used, a new shade altogether.

How much dyestuff do I need?

Some dyestuffs are stronger than others but as a general guide:

Approx. ½ - 1 level teaspoon dye extract will dye 100g dry fibre to a good strength colour. Cochineal, however, is very concentrated and only ¼ teaspoon is required. You can vary the shade by adding more or less dyestuff to the dyebath. Pastel colours will require less dyestuff, strong colours more. For 500g wool fibre at a medium strength shade we suggest the following amount of extract:

Cochineal 5g • Cutch 25g • Fustic 15g • Lac 25g • Logwood purple 10g
Madder 25g • Myrobalan 25g • Pomegranate 15g • Quebracho red 25g

How do I rainbow dye my yarn/fibres?

For rainbow dyeing, mordant your yarn/fibres as above (steps 1-5). While they are still damp, lay the yarn/fibre out on cling film, in a pan, or in a suitable dish. Make up your chosen dyestuffs in a jar or bottle by dissolving approximately 1 level tsp dye powder/liquid (1/4 tsp cochineal) in 50ml water (powders may need to be mixed to a paste with a small amount of hot water before being added to the bottle). Using a paintbrush, syringe or pouring directly from the bottle, apply the dye to the fibres. Wrap the fibres completely in clingfilm or cover the dish/pan and either microwave in 1 min intervals for around 5-6 mins. Alternatively, steam/cook on the hob for 20 mins. Do not allow the fibres to dry out – add a little water if needed. Allow the fibres to cool, rinse and dry.