

MAKERS MANUAL #1

Lauren MacDonald



TIE DYE SOCKS

INTRODUCTION

This manual will teach you the fundamentals of botanical textile dyes with dyestuffs from kitchen waste as well as some techniques for creating tie dye patterns. We'll use socks as an example here, but you are welcome to try t-shirts, pillowcases and other textile items you have at home — just make sure they are a 'natural' fibre — cotton, linen, viscose, silk or wool, NOT polyester or acrylic. Use white or very pale textiles for the best results. We'll cover scouring, mordanting (optional), tying and dyeing with dye recipes made from onion skins, pomegranate rinds, and avocado pits.

PREPARING YOUR SOCKS

SCOURING

STEP 1

Fill a pot with warm water and add PH neutral soap. Put on the stove at a low simmer with lid on. Leave your socks to soak for two hours. Rinse.

MORDANT (OPTIONAL)

A mordant is metallic salt that helps to bind the dye to the fibre. Adding a mordant is optional, to continue without go to Tying Suggestions.

STEP 1

Alum is the most commonly used mordant. Use Alum at 15% WOF (weight of fibre). Dissolve the alum in warm water.

STEP 2

Add the alum solution to a big pot of water (about 30:1 ratio water to fibre). Stir well. Put your socks in.

STEP 3

Over 30-45 minutes bring the temperature up to a simmer and then gently simmer for another hour with lid on, stirring your socks occasionally.

STEP 4

Let the socks cool in the alum bath for 20 minutes. Take them out and let them dry overnight.

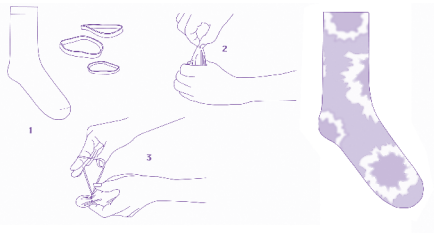
You can make your own iron mordant by putting a few nails or other little iron objects into a jar of vinegar for a few days. The liquid in the jar will start to turn orangey-brown, and that is when you know it is ready. Add to the dye bath.

Iron will increase the fastness of colour, but it will also 'sadden' most colours — darkening them and changing their tone. If used in the mordant process colour changes are more significant than if added to the dye bath. Use at 2-4% WOF, more than this can damage the fibre.

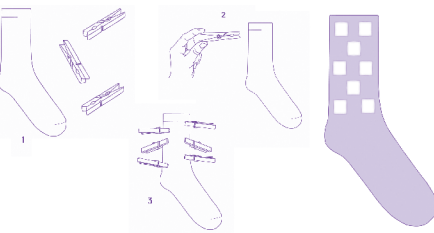
TYING SUGGESTIONS

These are some suggestions to make nice patterns using physical resist techniques.

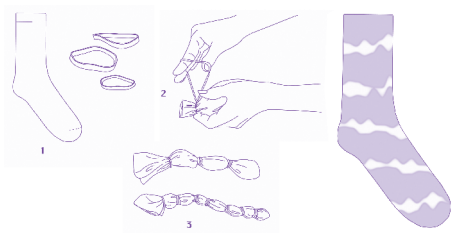
→ Use rubber bands or string to bunch little sections of the socks up, this will create little white circles on your socks.



→ Use clothes pins to pinch the socks in different places. This will result in little squares of white on your finished socks.



→ Gather the circumference of the socks with rubber bands or string. This will create stripes of white when finished.



PREPARING YOUR DYES

These recipes are meant as guides, you may find you prefer more or less dye depending on the strength of colour desired, your local water, and the potency of dyestuffs.

STEP 1

Soak your fibres before adding to the dye bath. Wet fibres will take the dye more evenly and result in more uniform colour.

LIST OF THINGS

- A stainless-steel pot — Use one that you don't plan on cooking food in again. Residual tannins from the dyes can affect the taste of food and if you dye regularly it might become toxic. If you use an aluminium or copper pot the metals will react with the dye and cause the colour to change.
- Tongs or a big spoon
- String, rubber bands, or clothes pins
- A heat source
- PH neutral soap
- Water
- Socks or other textile items
- Rubber gloves

FOOD WASTE

- For rosy pinks: 5-10 Avocado pits and skins
- For orangey golds and yellows: Enough onion skins to fill a pot, these can usually be collected from your grocery store if you ask nicely.
- For yellows and khakis (with Iron mordant modifier): 5 Pomegranate rinds

OPTIONAL

- Vinegar + rusty nails (or other small iron objects)
- Alum mordant

Other things to try: coffee grinds, tea, black beans, tree bark.

SAFETY

Work in a well ventilated area. We recommend using a face mask and gloves when working with a mordant. Dispose of used mordants and dye baths safely.

AVOCADOS

Avocado pits and skins release a surprising soft pink dye. You can freeze the skins and stones for later use, though I find the fresh plants generally give the brightest colour. The colour will vary by season, water PH, and variety.

STEP 1

Fill a large pot two thirds full with water.

STEP 2

Add 5-10 avocado pits and skins, the more you use, the deeper the colour. Bring the water to a low boil, then reduce to a simmer. Gently heat the stones, don't 'cook' them — as this will cause the dye to brown.

STEP 3

Simmer for 1 hour. Rest the dye overnight for deeper colour.

STEP 4

Put your socks in the dye bath and heat gently for an hour. You can leave the socks steeping for longer if you desire a deeper colour.

STEP 5

Remove and rinse the socks until the water runs clear.

ONIONS

Yellow onion skins produce a range of golden tones. They are a great dyestuff for beginners as they are readily accessible and easy to use!

STEP 1

Collect enough onion skins to fill your pot completely.

STEP 2

Add water to cover and simmer for 30 minutes.

STEP 3

Leave the skins to soak in the bath overnight.

LAUREN MACDONALD

BIO OF THE DESIGNER

Lauren MacDonald is a multidisciplinary artist and designer, and the creator of textile studio Working Cloth. Her practice is textile focussed and spans interaction design, installation, sculpture, and two-dimensional stitched forms.

FURTHER READING

- Natural Dyes: Sources, Traditions, Technology and Science By Dominique Cardon
- Wild Colour By Jenny Dean
- Colours from Nature By Jenny Dean



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This project is supported by Coal Drops Yard.

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STEP 4

Strain the skins and add in your soaked socks.

STEP 5

Bring the dye back to the boil and simmer for 30 minutes, monitoring the colour as it develops.

STEP 6

Let the socks cool in the dye bath overnight for brighter results — longer is stronger.

STEP 7

Remove and rinse the socks until the water runs clear.

POMEGRANATES

Pomegranates produce a range of colours, from light tans to bright oranges depending on the mordant, fibre, water and of course the fruit itself.

STEP 1

Fill your dye pot at least half full of pomegranates. You can also dye with just the skins, though this renders a much softer colour.

STEP 2

Cover the pomegranates with water. Bring to a boil and simmer for an hour. Rest the dye overnight for deeper colour.

STEP 3

Strain the pomegranates from the pot and set aside for composting.

STEP 4

Add socks to the dye bath and simmer gently for one hour, monitoring the colour for depth. Let the socks cool in the dye bath for deeper colour.

STEP 5

Remove and rinse the socks until the water runs clear.

