2020

Natural Dye Recipes Book

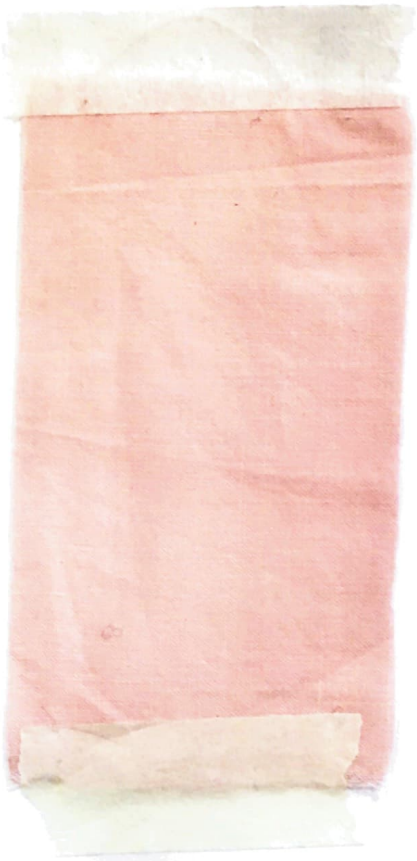
Kate Stewart

NATURAL DYE RECIPES

Madder

[CONTROL]

silk



cotton

rayon

wool

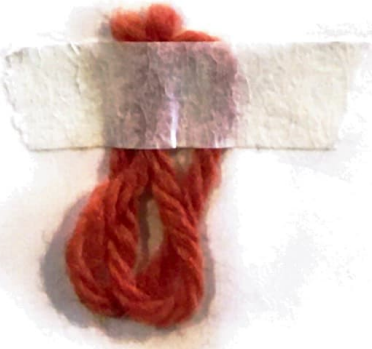
MADDER

[alkaline modifier]

silk

Cotton

rayon

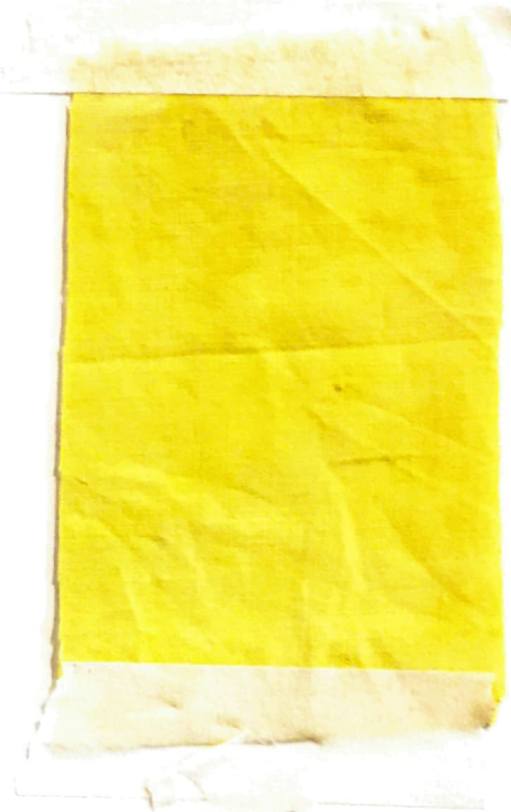


wool

Weld

control

silk



cotton

rayon

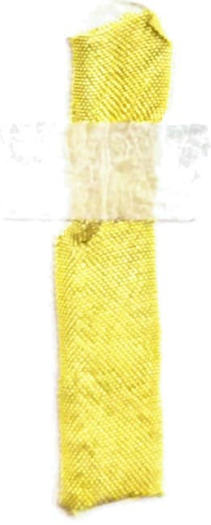
wool

WELD

[copper modifier]

silk

cotton



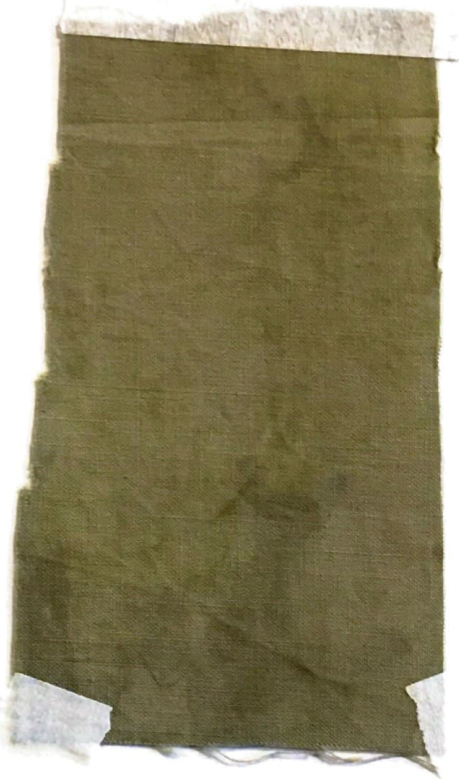
rayon

wool

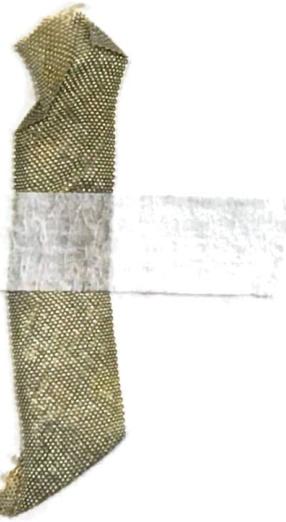
WELD

[iron modifier]

silk



cotton



rayon

wool

Brazilwood

[control]

silk

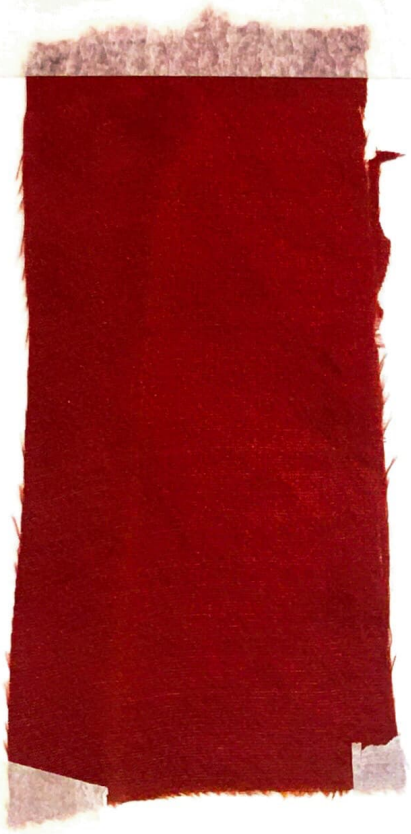
Cotton

rayon

wool

BRAZILWOOD

[acid modifier]



silk

cotton

rayon

wool

BRAZILWOOD

[alkaline modifier]

silk

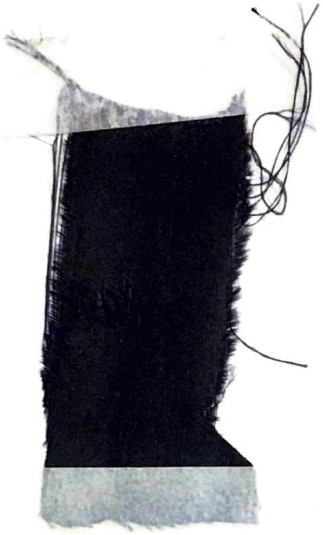
cotton

rayon

wool

Logwood

[control]



silk

cotton

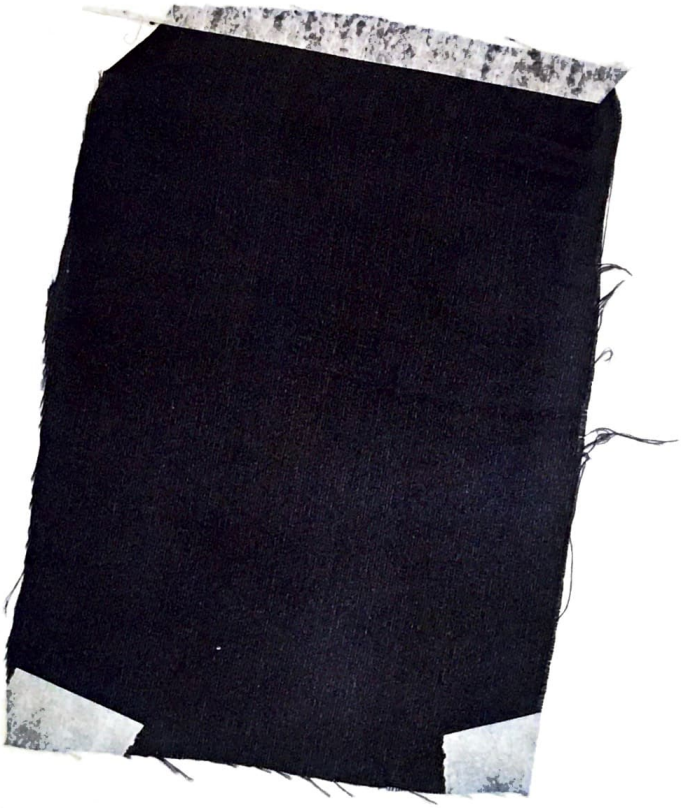
rayon

wool

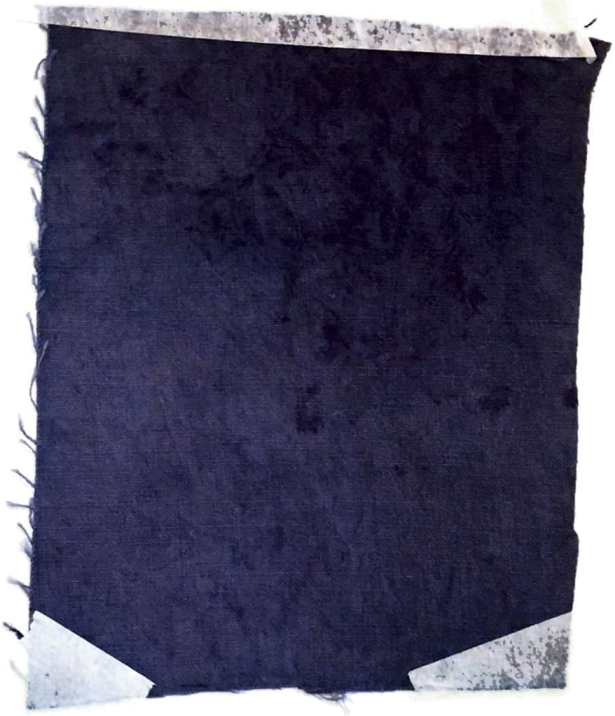
LOGWOOD

WCH

(iron modifier)



silk



cotton

rayon

wool

quick marigold dip (less than 1 min)

15 min

overnight soak

← un-mordanted cotton twine
overnight soak

MARIGOLD LEAVES + STEMS

un-mordanted silk
1 hr. simmer
overnight soak

WOOL - Cotswold Worsted
1 hr. simmer
overnight soak

MARIGOLD FLOWERS { dried heads from 2018 garden

control
alum mordant

cotton-linen-rayon
1 hr. simmer

cotton-linen-rayon
1 hr. simmer
overnight soak

Silk - PFD from TAC
1 hr. simmer
overnight soak

silk + alum mordant
1 hr. simmer
overnight soak

WOOL - Cotswold Worsted
1 hr. simmer
overnight soak

WCH

EXPERIMENTS

WOOL
(Cotswold worsted)

alum mordant

2nd marigold dye bath
+
turmeric (a ton!!!)
+
marigold flowers,
Logwood
+ alkanet
bark/
raw material

Simmer
1 hour

overnight
soak

SILK

alum
mordant

same
bath as
above
↑

Simmer
1 hour

overnight
soak

THYME

MADDER

PURPLE CABBAGE

PURPE BASIL

DYER'S COREOPSIS

LADY'S BEDSTRAW

WOAD

RHUBARB

SOAPWORT

BLACK HOLLYHOCK

HOPI SUNFLOWER

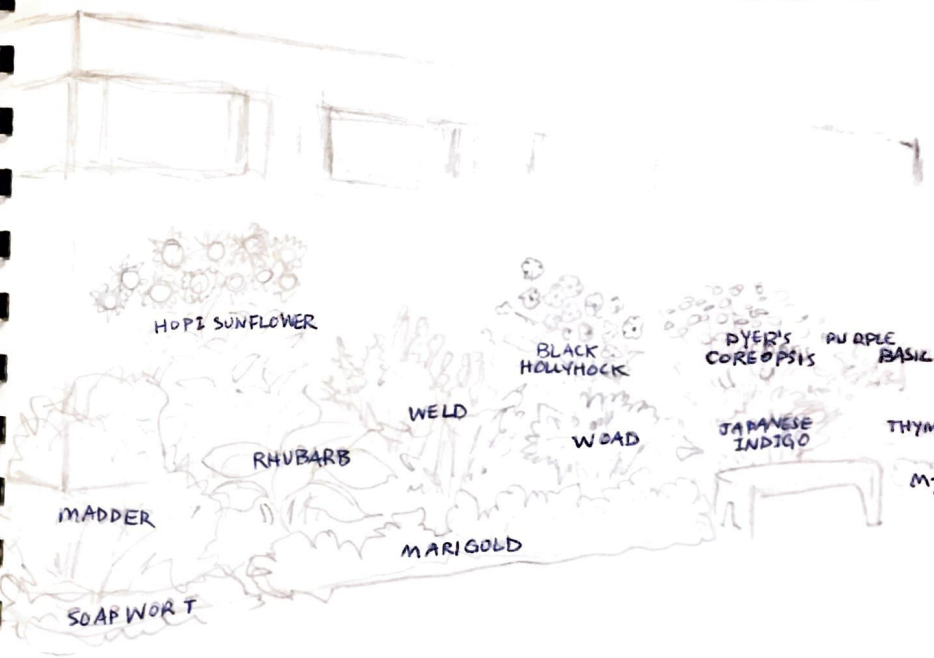
JAPANESE INDIGO

WELD

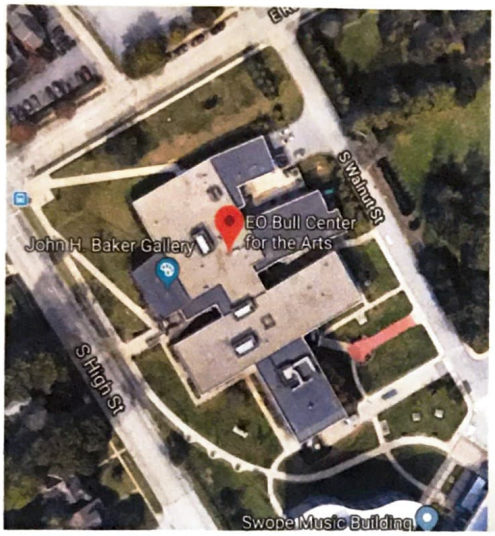
MARIGOLD

WCU

PIGMENT + DYE GARDEN



WCU | PIGMENT GARDEN Notes — E.O. Bull Center for the Arts



Yellows:
Onion skin
Yellow cosmos
Marigolds
Turmeric roots
Saint John's Wort
Weld

Oranges:
Carrots
Giant coreopsis
Brown onion skins
Prickly poppy
Lady's Bedstraw

Sienna Color:
Quince (Cydonia vulgaris) leaves ⇒ Fall

Reds:
Beets
Hibiscus flower
Madder roots

red/brown

daisies
* mums - Fall
- eco dyeing

Pinks:
Lichens
White bedstraw roots
Madder roots

raspberries
blueberries

Rose bush

Purplish Reds:
Dark red hibiscus
Pokeweed berries
Red basil
Red daylilies
~~blueberry~~

• red cabbage
- fall
blackberry - fall?

Blues:
Indigo
Japanese Indigo (for non-fermenting)
Woad
Bachelor's Buttons
elderberry * (2 kinds)

Greens:
Nettle leaves
Yarrow
Black-eyed Susans
Sunflowers

Blacks/ browns:
Iris roots
Black walnut (Gordon?)
Yellow dock
Purple Loosestrife

FRUCTOSE VAT

Start with indigo

1. 120° F → has less oxygen in it.
   Warm water, just before boiling

5 gal. bucket OR tall vat

2. Slurry of indigo

← use jar to make slurry.
← marbles or stones
← 30g of indigo

3. SHAKE + dump into pot.
4. ADD 90g Fructose
5. ADD 60g alkali, Pickling lime

(Lift up wicup, should be yellow when it's olive head as)

VAT DYES

- murex
- indigo
- chambers that are dug into the earth to ferment, cover + keep stable underground

INDIGO

ORGANIC PIGMENT

- 10 plants exist in the world that are best producing
- 10 x less indigo in Woad than other

- Botanical Indigo (powdered is best)

- not water soluable, only able to be extracted through a reduction process (taking oxygen out!)

NON FERMENTATION

1. Indigo
2. Reducing agent
3. alkali

Types of vats:

1. "fructose" vat → $C_6H_{12}O_6$ (antioxident)
   // pickling lime (alkali)
   (bulkfoods.com)
   └ good for protein + cellulose materials)

MAIWA

Foraging:
only take
1 in 10 in a healthy population

- invasives!
  - barberry → yellows from roots
  - osage orange (midwest)
    ↳ warm yellow
  - buckthorn → sap green!

eastern BRAZILWOOD (sappanwood now - more sustainable)
- pinky

LOGWOOD -

Kitchen Scraps for dyeing
- onion skins
  - red + yellow
- turmeric
- tea bags
- avocado pits - peachy → cutup!
- avocado skins - dull (boil for 1-2 hrs)
- carrot family - yellow / green chartreuse
- rhubarb leaves - dull brown
- red cabbage - lime green → purples

COCHINEAL (in Spain... "grana" - grains)
- color of red/pink depends on their type of death

Buying dye ~~stu~~ online

- "ground" plant parts

- "extract" of plant → limiting in color amount
  (already produced ready to throw in water
  - tend to be a bit duller than made by us.
- "plant material"
  (takes much longer to extract

"Mr. Induction" burners

Color Wheel

" Grande tint most light fast

[logwood]
- heart of a tree
  (boggy warm conditions)
- Copies very easy (regrows)
- purple
- good base for blacks
- tannin + iron (tannic solution) = black
  super corrosive
  ... so logwood replaced it w/o corrosiveness..
  17th/18th c. paintings, clothing etc shows up

WELD - grande tint *
~~yello~~ - biennial
- bright yellow

WOAD BLUE

MADDOW RED

Dye