Natural Dyes

About Natural Dyes:

Before synthetic or man-made dyes became common in the late 1800s and made it possible to turn fabric into almost any color, people relied on plants to make dyes for fabric and wool. Items that grew in a kitchen garden or were found in the fields were boiled with fabric and left to soak. The colors come from chemical compounds called pigments and some plants produce more pigments than others do. Some plants result in surprising colors. For example, avocado skins make pink dye.

Sources:

- *A Dye Garden: From Plant to Pot, Growing Dyes for Natural Fibers* by Rita Buchanan

Natural Dye Colors

- **Orange**: carrots, onion skins
- **Brown**: dandelion roots, oak bark, walnut hulls, tea, coffee, acorns
- **Pink**: beets, berries, cherries, red and pink roses, avocado skins and seeds
- **Blue**: red cabbage, blueberries, purple grapes, dogwood bark
- **Red-brown**: pomegranates, beets, bamboo
- **Grey-black**: Blackberries, walnut hulls
- **Red-purple**: basil leaves, daylilies, blackberries, red cabbage
- **Blue**: black beans (soak dried beans in water overnight, strain water into bowl, discard beans)
- **Green**: artichokes, spinach, peppermint leaves
- **Yellow**: bay leaves, marigolds, sunflower petals, paprika, turmeric, celery leaves
Instructions for Making Natural Fabric Dye

Supplies
- 2 Large non-reactive pot or Stock pots (plants may stain the pot)
- **Soda ash** (sodium carbonate) optional
- Salt
- White vinegar
- Liquid Measuring Cup
- Large mixing bowls (2)
- Strainer
- Potato masher
- Rubber gloves
- Long handle wooden or metal spoon
- Clean white cotton cloth for dying
- Sealable plastic bags
- Permanent marker
- Fresh Fruits or Vegetables
- Newspaper or plastic sheets to protect work surface

Instructions
Step 1: Prepare your fabric
Fabric should be clean white cotton. Wet your cotton. To be sure your material is prepped for the dye, you may want to add soda ash so the fabric will take the color better. While wearing gloves, use a big stockpot to dissolve a few tablespoons of soda ash and a few tablespoons of regular fabric detergent per 1 gallon of boiling water. Add fabric and reduce heat to a simmer for about 2 hours. Drain and rinse.

Step 2: Prepare your plant matter while your fabric soaks
Chop the fruits or vegetables into small pieces so you expose as much of the plants as possible. Sprinkle with salt and cover with water. Boil and simmer for an hour. Strain the food bits and add them to your compost pile.
Step 2: Dye the fabric

Prepare your fixative, the chemical reaction that will help the fabric hold the dye. There are a couple different ways to “fix” the color to your fabric. You can use salt (for berries) or white vinegar (for most other plants). Use the following ratios to calculate the amount of “fixative” you need: $\frac{1}{2}$ cup of salt to 8 cups of water OR 1 part white vinegar to 4 parts water. Bring to a boil. Place fabric in pot with dye and bring to boil. Turn down the heat and let simmer. Make sure liquid covers all of the fabric and let it soak for at least an hour.

Step 3: Remove fabric from pot

Place fabric in sealable bag for at least 24-48 hours. Label the outside of the bag with the date you sealed it and the plant material used.

Step 4: Remove from bag

Wash in cold water alone as the color will run and could stain other items.

Dry as usual.
On the left is one of the samples we made using blueberries and on the right is an undyed piece of cotton fabric.