

Name: _____ Date: _____ Class: _____

Technical Brief

Natural Dye Technical Brief

This is to serve as a reference to teachers for natural dyes. Some organic materials (plants, fruits, and vegetables) extract dyes better than others. It's important to stress to your students that not all selected organic materials will extract the expected color and some may not adhere to the paper as well as others.

Below is a list of materials the contributors know work well:

Blueberries (blue-purple)	Cherries (pink)
Cranberries (light red)	Raspberries (pink)
Turmeric (yellow)	Blackberries (grey-purple-blue)
Pomegranates (green-grey)	Red cabbages (blue-purple)
Dandelions (yellow)	Beets (red)
Tea (brown-yellow)	
Strawberries (light pink)	

Some of the above are indicators and will change color with acids or bases. Others are acidic and will only change when a base is applied.

There is no need to apply any pre-treatment to the paper prior to applying the dye.

The extraction process using water is as follows:

1. Prepare organic materials by exposing as much surface area as possible. Place material in gallon Ziploc bag wrap with dish towel or paper prior to smashing with hammer or mallet or by using a small food chopper.
2. To prepare the dye, you will need to mix water with the organic material using a 2:1 ratio (tap water to organic material).
3. Mix water and organic material in a beaker and bring mixture to a boil, then simmer (maximum 1 hour or as time allows) on hot plate. Use glass covers on the beakers to prevent splashing
4. Using a glove or oven mitt, strain the dye into a beaker. Be careful, liquid will be hot!
5. Pour dye into storage bag, label with name and store in a dark, cool place for classroom use.