## **Exploring Natural Dyes**



Natural materials have been used to color objects for thousands of years. Historians and scientists believe that prehistoric cave paintings dating back to 15,000 B.C. were made with plant pigments. Since prehistoric times, humans from across the globe have used plant pigments to enrich their lives.

Natural dyes come from many sources including fruits and vegetables, flowers and plants, roots, bark, moss, leaves, etc.



Have you ever spilled juice on your clothes or maybe got stained from berries? Remember the colorful spots it left?

Anthropologists believe that early ways of coloring may have had their origin in accidental staining. It seems likely that the effects of colored juices from berries, nuts, and roots were noticed by ancient people and copied.





## Let's think about what colors you can derive from fruits or vegetables in your pantry? How about flowers in your garden?

Here is a color guide for some of them:

- RED color range: raspberries, beets, red hibiscus flowers, avocado peel and pits
- ORANGE color range: carrots, orange peels, yellow onion skins
- YELLOW color range: marigolds, sunflower petals, dandelion flowers, turmeric or curry powder
- GREEN color range: spinach, parsley, peppermint leaves, artichokes
- BLUE and PURPLE color ranges: red cabbage, red onion skins, blueberries and blackberries, cornflower petals, hyacinth flowers

The colors obtained from plants are usually very soft and muted. It is not always permanent and often fades beautifully over time in fabrics.



When artificial dyes were introduced in the mid-19th century, their bright colors became commercially available, and mass production replaced the art of dyeing with plants. While natural dyes aren't quite as vibrant as man-made dyes, they greatly reduce the amount of chemicals we leave behind.

It is quite easy to start! Try to use kitchen scraps like fruit peels and vegetable skins or backyard finds like flower petals and acorns as eco-friendly, dye alternatives.





There are a number of different methods for extracting the pigments from plants. Try the following techniques:

- Sun-brewed dye with onion skins
- Stovetop dye with avocado peels and pits



Note that each color experiment is dependent on many factors: the type of fibers you are dyeing, pot and water you use, how long you soak your fibers, how concentrated your dye bath is. That's all part of the fun! Get ready to be surprised and take notes of your experiment so you can make adjustments down the road.

