DYING WITH COCHINEAL AN ANCIENT ART

Myriah Maxwell

THE HISTORY

Cochineal is a beautiful red dye that has been around for hundreds and hundreds of years. Harvested from the cochineal insect, the art of collecting the dye from the insect has been honed by the Central and North American people.

The most coveted red of the time, cochineal was both expensive and depending on the year and your location, very rare. Desired by both artists and people alike, the red produced by cochineal was a marker of wealth, importance, and power. Due to this reason, many nobles wore red, and artists used it to enhance their paintings as well as to possibly advertise.

An example of this is the painting known as "Portrait of a Man in a Red Turban" by Jan van Eyck. Eyck used the cochineal red to create the vibrant red turban displayed in the picture to the right. Through the use of the red in the portrait, Eyck created a shocking and beautiful effect that has lasted for hundreds of years.

THE CHEMISTRY OF DYING WITH COCHINEAL

Though dying with cochineal may have been a guarded secret that very few would ever know in the past, it is now a relatively easy project to take on.

Cochineal has a chemical composition that enables it to cling to fabrics with relative ease compared to many other dyes, but in order to create a colorfast red it is necessary to use a mordant, and if desired a modifier.

The mordant is applied to the fabric that you wish to dye, so that the cochineal dye will better attach to the fabric fibers. The modifier is applied after the fabric has been soaked in the cochineal dye, and allows you to achieve a wider, and often more vibrant range of colors than without the modifier. For example, when an acid modifier is added to the fabric, you can achieve a much darker red than with only the cochineal.

Due to hundreds of years of searching and experimenting, we are now able to create colors that were coveted and worth as much as riches in a matter of moments.



The image to the left is the painting, "Portrait of a Man in a Red Turban" by Jan van Eyck. Painted in 1433 it is now a well known and important piece of art. This image can be found at http://commons.wikimedia .org/wiki/Jan_van_Eyck

The image to the right is my own attempt at dyeing using cochineal. Each color was created using either Copper or tin as a mordant, and an acid, base, or iron solution as a modifier. After dyeing, I gained a respect for dyers of old. Even with modern science I could not create the brilliant red they were looking for

