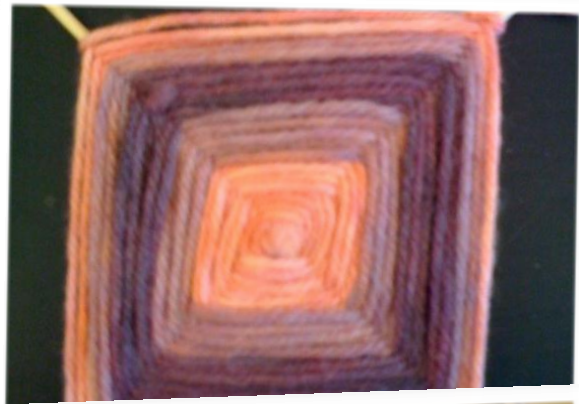


# Cochineal dyeing

Whitney Carter



Many natural dyes require a mordant to promote the colorfastness of the dye. Our natural dye was cochineal. The second picture is an example of cochineal bugs dried out and soaking it in water, turning it red. We used a mordant to help attach the dye to the yarn. The colors that we ended up with varied based on the mordant and modifier combinations that we used. I used Tin ( $\text{SnCl}_2(\text{aq})$ ) as my mordant and the Base ( $\text{Na}_2\text{CO}_3(\text{aq})$ ) as my modifier. This combination produced the coral pink that is the middle and outside layer of my God's eye.



Cochineal dyeing has been around for centuries.

The small bugs have been used to dye fabrics, tint paint, and add shade to cosmetics and food. The picture on the bottom is an example of cochineal, onion skins and tin that was used to dye wool. The color red was incredibly desirable after the middle ages which lead to a huge effort in finding something to produce a deep and colorfast dye. Cochineal was found by the Spaniards in Mexico during the 16<sup>th</sup> century, they had the monopoly on the dye for centuries. Now cochineal is used in "all-natural" dyes and food. However, synthetic red dyes are far more common.

<http://commons.wikimedia.org/wiki/File:Cochineal-dyed-wool.jpg>



My positioning of the colors on my God's eye was very deliberate. I put the lightest color on the inside to represent my youth; I wanted it to show a time when I wasn't struggling and where life was pure. The two darker shades represent growing up and my life getting more complicated and messy with stuff that I walked through. It fades back out to the lighter colors to represent a return to innocence and the carefree attitude that I knew as a child.