

Fascinating results of a Plant

Beets and Turmeric Dye Project

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The dying process is always an entertaining experiment to work on. With my project I have decided to use two different natural dyes. The first natural ingredient I used was beets. They had very high pigmentation to the touch so I believed it would create a beautiful outcome towards the fabric. Using cotton fabrics the pigment was able to transfer well onto the fabric, coming out as a light pink color. The second natural ingredient I used was Turmeric, the actual plant, not the powder. Again using a cotton fabric I was able to get the colors to transfer well onto the white canvas. Before the dying I made sure to use a base, in this case I used vinegar. I also made sure to create some sort of pattern to give it more creativity. At first it was not turning out right so after multiple attempts I was finally able to get the designs that I preferred. After the whole dying process it was time to dry. Taking off the elastics from the fabric and revealing the designs made me feel motivated to do more later on, making sure every detail was perfect and presentable.

Brief History

Color has always been important in self expression and representation in class, especially during the earlier times. Dyes were naturally infused like in this project and continue to be used to this day. These dyes have been inexpensive and often found locally, resources are often found and used to produce as much as they can. For instance, beetroots have been around since Ancient Mesopotamia and were first used as a dye during the 16th century. During the Victorian era (1820 to 1914) the people would use beetroot as hair dye. The value of beetroot increased as it also was used for desserts. Beets are a dark red color but when dyed it turns into a light pink color. Other common colors that can be used from beetroot is white and yellow that come from golden beetroot. Now turmeric. They have been used throughout the centuries as a spice,

medicine, and as fabric dye. According to PGS.org “It was around 500 BCE that turmeric emerged as an important part of Ayurvedic medicine” (Avey 2015). It was most used in Indian culture for centuries. When dyed on fabric it results in a gold color. This color fades away faster than most dyes if washed more frequently.

Before starting anything, I had to make sure I knew what I was doing. That is where research comes in. In order to create a dye i had to gather my ingredients and be aware of what colors they would produce. Also, I had to research what base would work best for the fabrics to attach. Why a base? Think of it as applying makeup. What do you do before applying foundation? Primer. The base functions as a primer, that way the application process is easier for the pigment to apply without much trouble. Now, starting with beets, first grab a pot and have it start boiling, as the water is boiling grab another bowl and add water and a splash of vinegar. With the bowl that contains the mixture, you're going to add the white fabrics of your choice, I personally chose 100% cotton bandanas, to make it easier for the dye application.

As your fabrics are soaking in the mixture and the pot of water is boiling you are going to grab the beets and peel off the skin, using a peeler, knife or whatever you have available, be cautious not to hurt yourself in the process. Once you have peeled off the skin you're going to place it in the boiling water for 40 minutes, or until your desired color is met. You can do this by constantly placing a sample fabric into the dye and seeing what color comes out. After the 40 minutes is up or the time you have chosen you are going to remove the beets and place them side. While the dye is still hot you're to tie up the fabric to a desired design using rubber

bands, which can be found on youtube (link down below) I used two methods, the first was the basic, tie dye method and the second was pleating.

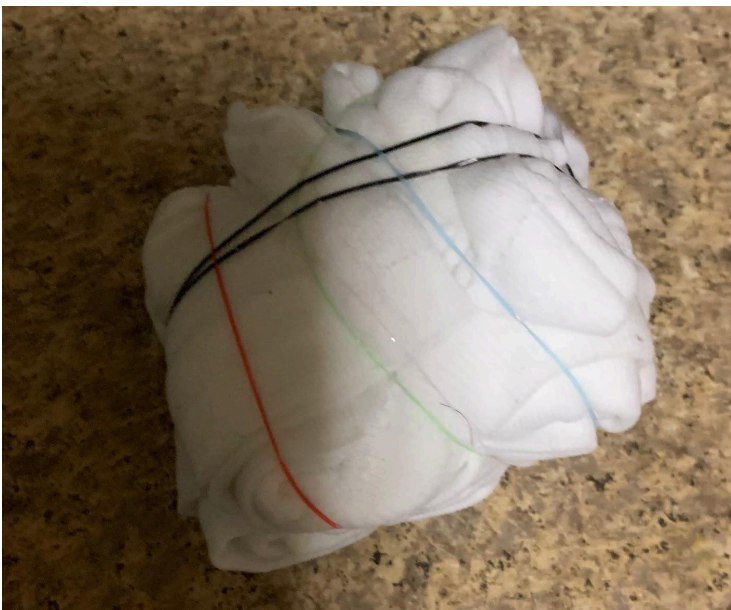
Once you finish with the designs, you're going to add the fabrics into the dye, keep it there overnight or up to 24 hours. Once the fabrics have been soaked for hours it is time to remove them from the dye and remove the rubber bands to reveal the design. Lastly you are going to let the fabrics dry and ready to use after. The same steps go for the turmeric. However, instead of peeling it, you are just going to cut it into small pieces and place about two handfuls into the boiling water, everything else is the same after that.



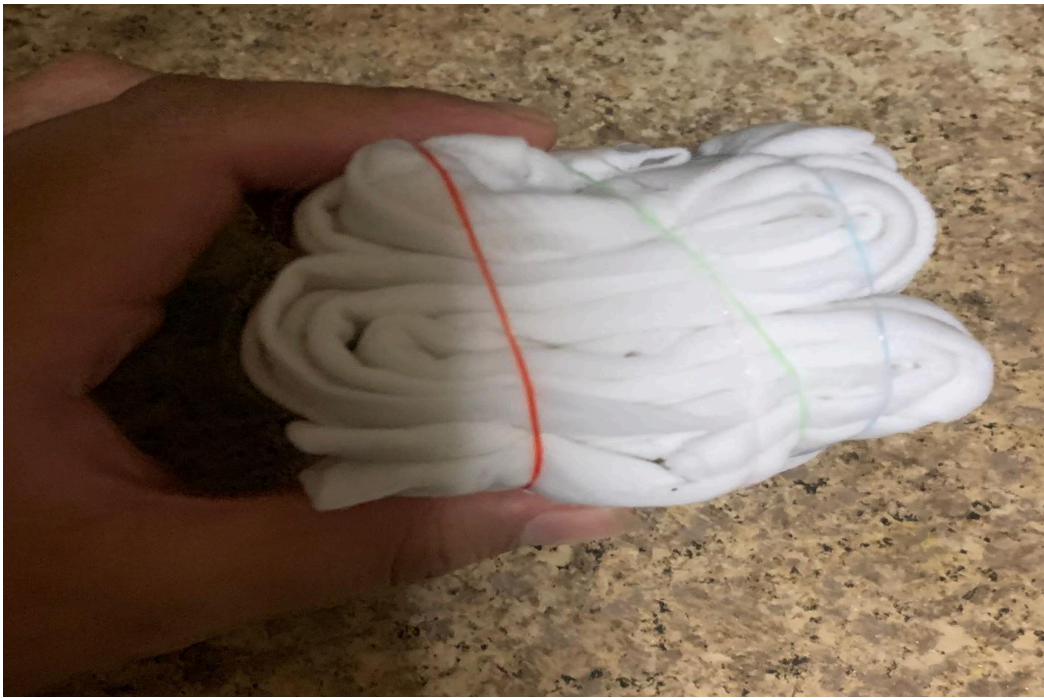
This is the dye after the beets have been boiled for 40 minutes, producing a maroon like color.

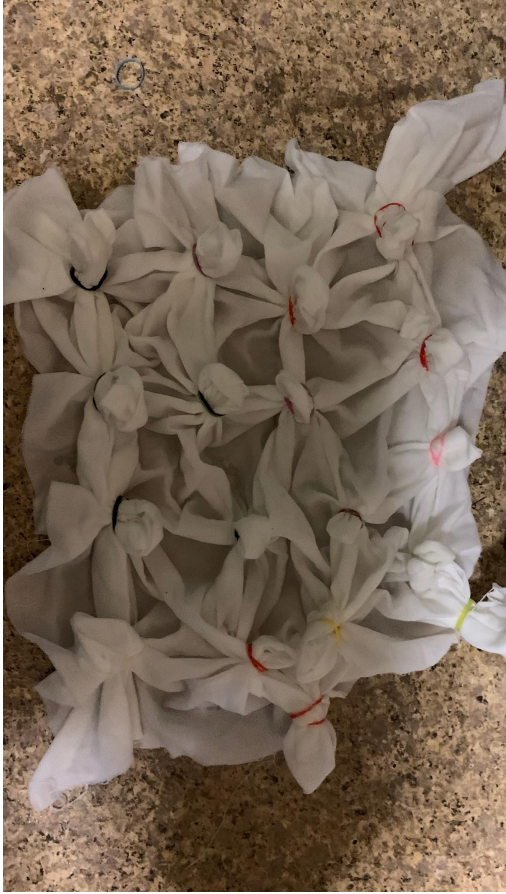


Another image of the dye with the leftover beets



This was the result of my attempt to wrap a tie dye design. With several bands around the fabric to be secure





The image to the top is the fabrics before being set to dye, they are being soaked into the vinegar mixture. The second image is my attempt to a pleated design, as well as being very secure with rubber bands. The last image is a shibori tie dye design that ended up being one of the best ones.



This is the result of the pleated design, the pigment was not as noticeable, which is common coming from beets, but it did produce a very pretty pink color.



This is the result of the turmeric shibori dye design, The turmeric was pigmented enough to be seen with the design



Here is an image of my dog modeling the cotton shirt, it was difficult having him stay still but it fits!



Another image of my dog in my dye project, got him to stay still.

Conclusion

Overall, my project came out pretty well, I was expecting the colors to come out as they did because I believe that vinegar was not a strong enough base for the pigments to stick on. However, that was what was within our budget so I had to use what I had. Next time I am going to try to purchase a stronger substance for the base so the pigment comes out more vibrant. When it came to comparing my results to the video tutorial, the outcome was very similar. I didn't really have the same design because I got a bit impatient from it not coming out right so I made it my way instead.

Works Cited

Avey, T. (2015, March 9). *What is the History of Turmeric?* PBS. <https://www.pbs.org/food/the-history-kitchen/turmeric-history/#:~:text=It%20was%20around%20500%20BCE,that%20is%20still%20practiced%20today.&text=The%20vibrant%20yellow%20natural%20coloring,clothing%20and%20thread%20for%20centuries.>

History of Beetroot - Historical Uses of Beetroots. Beetroot History - Origin and Historical Uses of Beetroot. (n.d.). <http://www.vegetablefacts.net/vegetable-history/beetroot-history/#:~:text=In%20Victorian%20times%20beetroot%20was,so%20beetroot%20became%20more%20available.>

<https://dpi.wi.gov/sites/default/files/imce/school-nutrition/pdf/fact-sheet-beet.pdf>

The Origin And History Of Beetroot And Its Uses. Healthy Beeter. (n.d.). [http://healthybeeter.com/origin-history-beetroot-uses/.](http://healthybeeter.com/origin-history-beetroot-uses/)