Turmeric, Dying Sunshine.

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Abstract

Turmeric has been used for well over 4500 years, with its origins found in prehistoric civilizations and cultural uses in India, turmeric has become an integral part of cultural, medicinal, and the economical health of many countries. Turmeric is used in cultural rituals in Hinduism, it's medicinal uses are extremely important in anti-inflammatory and microbial treatments, and the genus of turmeric is well known to provide prominent, rich colored yellow dye for multiple uses. Colors are an integral part of the psychology behind buyers. The coloring process is detailed in the last section of this paper.

Keywords: Dye, Tumeric, Medicine, Mordant, Dyestuff, Scour.

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Turmeric is a historical substance used throughout history from many purposes. Turmeric is one of the most popular dying substances found around the world. With its beautiful rich color, turmeric yields a very strong dye for retailers around the world

History

Dyesuffs are substances that are able to provide a rich colorful dye, especially in an aqueous solution. Turmeric is considered one of the natural dyestuffs that can yield a beautiful, rich, yellow color. With its history ranging into prehistoric times, turmeric was used since the Indus valley civilization. Turmeric in its early origins was used and domesticated in the southern regions of Asia. Historical analysis of pottery found in New Delhi uncover the use of turmeric dating back as early as 2500 BCE (Cooksey 2017). Turmeric is very important not only for dying, but for cultural practices and medicine in ancient times. In India, one of the biggest manufacturers of the yellow spice, uses 6% of all spice production to cultivate turmeric specifically.

The genus Curcuma, a genus known to produce many taxa that are beneficial economically, culturally and medicinally, Turmeric contains the rich yellow dye used all over the world. Its medicinal benefits include many anti's. Turmeric is anti-microbial, infectious, inflammatory, diabetic and works as a protector from many more ailments (Ravindran 2007). turmeric is used in oil or aromatherapy as well as in food as a condiment for dying, but religiously turmeric was made into a paste and believed to repel one's enemies (Sopher 1964). Used drastically in the Hindu culture, turmeric is used in birth and death ceremonies daily, and even believed to prolong the life of newborn babies. During the Hindu celebration of Holi, turmeric is one of the many dye colors used in the festival of colors.

Store bought turmeric can appear yellow or orange in color, turmeric can also be very cheap to buy modernly period. When used in a liquid solution turmeric can bring a very bright yellow or orange color to any fabric. Being a natural food dye, turmeric is very sensitive to the pH levels of its environment. When added to an alkaline or basic solution, turmeric will appear bright red in its color. The presence of tartaric acid causes the color to become a very deep rich red. When washed with soap, turmeric will turn red in the basic solution (Bhatti 2010).

Color In Fashion¹

Color is one of the many tools of perception involved in the buying process. Color is one of the first things our eyes are attracted to, it creates emotional reactions within the buyer.

Dyestuffs Can be used to create a wider range of color, this enables the buyer to pick and choose colors that fit their mood and aesthetic. Choosing colors that match your personality, or simply "feel right" is a part of your image and identity. Color is one of the most important reasons people form attachments to the clothing and have a feeling of memorabilia towards them.

Sometimes clothing items with specific colors can be so memorable, the result of discarding them can cause emotional upset.

My favorite color to where is actually black. The other favorite color I love to wear are primarily pink, or a neutral nude. The black rings feelings of uniformity to my life. Have many times in public, I want to have an Incognito and out of the way look, that doesn't attract very much attention. when I'm extremely busy and have a lot to do I usually wear black sweats or black pants with a black T shirt to get things done quickly without causing interruptions with what I am wearing. The color pink brings a very feminine, happy, soft, beautiful feeling. Even when you wear sweatpants in the color pink, you feel a bit more put together, and admittingly you feel a little prettier. When I feel like I've been doing too much work, I love to spoil myself

by feeling beautiful in a pink outfit and embracing my femininity. The color nude is one I think should be matched with many hues of nude or brown. This colorway is very in style in the minimalistic world currently. Wearing nude outfits makes me feel fashionable, clean, classy, and put together. Like black, nude provides a certain level of invisibility with a neutral tone not attracting much attention. This gives me the opportunity to attract attention at my own pace with accessories and pops of colors.

Personally, I do not take inspiration from any celebrities. I believe one style should come from inspiration you find through many people within your selected style group. I don't believe celebrities are people who should be followed, even though they are by the masses. The fact is, anyone can be a celebrity but some celebrities that have distinct dressing styles that I personally like that fall into specific style categories, which the artist end up creating a line for. One of my all time favorite celebrities include Rihanna, her style is very bold. Everything she wears tells the world that she doesn't care and has business to attend to. Rihanna wears mostly comfortable clothing, that appeases her body type extremely well. Having a similar body type I take some inspiration in Rihanna's dressing style. Certain styles, patterns, colors, and shapes accentuate parts of Rihanna's body and personality within her style (Elle 2022) something I like to do in my own personal style.

Tutorial & Dying Process: Materials

For this project, I ran an experiment by using three different dyeing materials. I utilized natural materials from in my kitchen in order to create three different dye baths. Using natural materials are non toxic and an interesting way to explore your kitchen. My goal was to write this paper on the material that yielded the most color. I used raspberries and strawberries to create

pink, a dark brew of coffee to create a nude/light brown color, and a potent amount of turmeric to create yellow.







The first step is to find and prepare your materials that you want to dye. I used six pieces of cotton rags, as natural the fibers take the colors best. for this project, I will need to use a mordant. A mordant is a substance that acts as a binder. The mordant will attach itself to molecular fibers in the cotton rags, acting as an enzyme, the mordant will allow the color molecules from the dye to stick better to the fiber. for this project I decided to use an alkaline or a basic mordant. I decided to use vinegar.



Before mordanting, you must prepare your towels by folding or tying off any parts you do not want is to get dye on. personally, I looked up shibori techniques and tried a few random ones in order to create different patterns. once my towels were folded and prepped, I submerged them in water in order to absorb the liquid. You can also scour (boil) these as well. You can avoid patchy dying by submerging all your pieces in water first. The water molecules will make it easier for the dyestuff to transfer. After about an hour of soaking, I moved my items to my mordant bath of vinegar and salt and left to sit for another hour.





To prepare your diet, soak each of them in water for at least an hour before adding your fabrics. After adding the fabric, allowed to soak for one hour or overnight, I allowed mine to soak for two to three hours. afterwards, wash and dry your items with a pH neutral soap, remove all the rubber bands or stoppers and enjoy your new dyed cloths! A video tutorial will also be included for this project.



Fndings & Conclusions.

For my project, the turmeric was the strongest yield of color I could achieve. The coffee gave a very light brown color, which I feel can wash away in some time. For the pink bath, I only used about three or four strawberries and a handful of raspberries. This gave a very light pink color, and almost yielded no color at all. If I were to do this project again, I would use a stronger, more potent dye like beets or I would use more raspberries instead of strawberries as they seem to have more color.

The shibori techniques were really amazing once removed from the dye and allow it to dry. The patterns that you can create by creatively tying or blocking off certain parts of your fabric is endless. I noted that tying off fabrics with rubber bands create a very distinct white line through the dyed fabric. Fabric that is folded also creates patterns throughout the entire cloth. the one thing I would do differently, is the shibori designs a lot tighter, and use materials that give a tighter grip like binder clips.

What I noticed as well when watching tutorials and doing my own research on this technique, is that natural dyes will yield a color that seems pastel or washed out. Without using

any chemicals or toxins and the mordant being the only thing used as a natural binder, I don't feel that the colors will hold very well or for long overtime. The turmeric is the only one that gives me the impression of longevity as the color was so very potent when working with this material.

If I were to die again, I would always use some type of powdered, potent dye. The instant coffee was somewhat in a powdered form, the second best yield in color.









References

- Ravindran, P. N., Babu, K. N., & Sivaraman, K. (2007). *Turmeric: the genus Curcuma*. CRC press.
- Sopher, D. E. (1964). Indigenous uses of turmeric (Curcuma domestica) in Asia and Oceania. *Anthropos*, (H. 1./2), 93-127.
- Cooksey, C. J. (2017). Turmeric: old spice, new spice. *Biotechnic & Histochemistry*, 92(5), 309-314.
- Bhatti, I. A., Adeel, S., Jamal, M. A., Safdar, M., & Abbas, M. (2010). Influence of gamma radiation on the colour strength and fastness properties of fabric using turmeric (Curcuma longa L.) as natural dye. *Radiation Physics and Chemistry*, 79(5), 622-625.
- Elle, T. (2022). *Rihanna's orange coat and camo trousers look is the winter style inspiration we all need*. ELLE. Retrieved April 22, 2022, from https://www.elle.com/uk/fashion/celebrity-style/articles/g16505/rihanna-s-style-file/