Natural Dyeing with Cochineal

Article & photos by Camille M. Rich, Rio Grande Valley Chapter

With the recent increase in cochineal, I now have plenty of scale insects available to be harvested. This will now afford me the opportunity to pick up with a natural dyeing experiment using cochineal that I put on hold about a year and a half ago. There are many resources, both in print and online, for dyeing with this dried insect. I have a personal favorite, which is a paperback that I purchased many years ago at the Valley Nature Center in Weslaco, Texas, titled "Edible and Useful Plants of Texas and the Southwest: A Practical Guide," by Delena Tull. Ms. Tull gives her reader a synopsis of dyeing with cochineal on page 350 of her book.

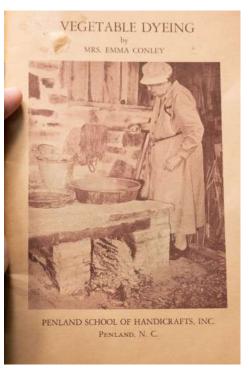
I would like to share a few highlights of her synopsis on cochineal with you here:

"COCHINEAL --- DACTYLOPIUS COCCUS

PINK TO RED TO MAROON: Fresh or dried insect; no mordant, or use alum, tin, chrome, or vinegar mordants, which all yield slightly different shades...Lightfastness and washfastness are good. Various rinses with vinegar, ammonia, salt, and oxalic acid will give different intensities of the colors, even producing some lavender shades...You can order the dried insects from dye supply houses or collect your own from prickly pear pads. Use stiff paintbrush to pick the webs off the cactus. To dry the insects for storage, place the webs in a pan in a hot oven until dry, then seal them in a jar."

Another treasured book on the dyeing process was given to me by fellow Texas Master Naturalist and friend, Nancy "Nan" Cole-Schell Persinger. Nan knew that I wanted to experiment with dyes, so she gifted me a vintage book, which was part of her family's treasures, a few years back. The book is titled, "Vegetable Dyeing, by Mrs. Emma Conley," and it was published by Penland School of Handicrafts, Inc., Penland, North Carolina, on simple brown paper---originally in 1959. (I have the second edition, which was revised by Mrs. Meta Lewis a few years later, although I can find no specific date for the printing of this second edition.)

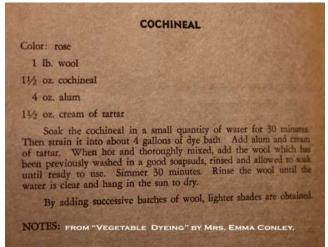
I love everything about this little book, starting with Mrs. Conley's introduction: "As a little girl my mother taught me to card, spin and dye the wool for our clothes. The dyes we got from the plants growing in our neighborhood. We used both the iron and brass kettles and did our work out-of-doors."



Front cover of "Vegetable Dyeing by Mrs. Emma Conley, Second Edition:"

Her general rules for getting an even dye are also appreciated:

"The most important is to have clean wool and to be sure that the fibers are thoroughly wet before putting the wool into the dye bath. Therefore, always wash the wool in good mild soapsuds, rinse, and allow to soak while the dye bath is being prepared. This permits the dye to penetrate the wool evenly and quickly.... Don't be afraid to experiment. Some surprising results come out of it." After spending the last five plus years researching different methods of dyeing with cochineal, I can tell you that I have learned that there are many ways to go about doing this. Countless hours have been spent surfing the internet for instructions and how-to videos on this ancient process. As I stated in my "Cochineal Under the Microscope" article, I even constructed a small nopalry in my backyard and tended it for approximately a year and a half.



One of three of Mrs. Conley's cochineal recipes in her book on dyeing

Regretfully, the historical winter event that occurred in February 2021, wiped out my small nopalry. At that time, I decided not to reconstruct it. Instead, I opted to go back to monitoring the cochineal population at El Mesteño Ranch & Arboretum for a time in which the population of cochineal appeared to be stable enough to withstand a large harvest.



What I can say, with confidence, is that the first step in dyeing with cochineal involves harvesting (or purchasing) some cochineal insects for your natural dye experiment. If you plan to try to harvest this insect yourself, I can report, based on first-hand experience, that there is a significant amount of time and effort required in gathering cochineal, not to mention countless glochid and thorn pricks to your hands and fingers to contend with.

If you wish to forego the initial harvesting and drying steps of the natural dye process utilizing cochineal by purchasing some of these dried insects, you can skip straight to finding recipes and researching methods for using the insects in making dyes for textiles, painting, and other forms of original, imaginative, artistic expression. In my opinion, this is the step where dreams and inspiration mix beautifully as the creative process starts. All the real fun begins!

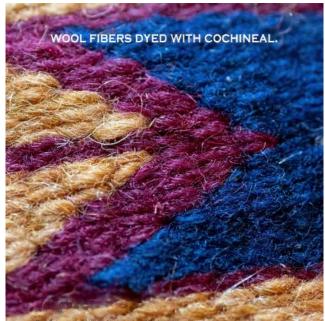
I am excited to try and dye some cotton fabric, linen fabric, and cotton yarn with cochineal. Specifically, I am eager to dye some cotton T-shirts, cotton handkerchiefs, cotton yarn, a cotton tablecloth, and some cotton or linen table napkins. Over the next few weeks, my plan is

to collect enough cochineal so that I will be able to prepare a substantial dye bath to process all the items that I would like to dye.

Based on the current, heavy infestation of these microscopic insects, I am confident that I will finally

be able to harvest enough cochineal for my dyeing experiment. This is the year that I can pick up where I left off in 2021. I am eager to move forward and see what exciting results come from this natural dye experiment.

As my article comes to an end, I would like to show you a few pictures of sections of a beautiful tapestry given to me by my good friend, and fellow Texas Master Naturalist, Mary L. Thorne. She gave me this exquisite tapestry after she, too, learned of my fascination with cochineal and dyeing natural fibers with it. This phenomenal textile work of art was woven at the Centro de Arte Textil Zapoteco Bii Dauu SC de RL in Oaxaca, México. It is 100% wool, and cochineal was used to dye the pinkish maroon fibers in its wonderful pattern.



(Above and below) Pinkish maroon wool fibers have been dyed with using cochineal



In closing, I am looking forward to having more to share with you about the textiles I procure to dye, how much cochineal I end up harvesting, and all the precise steps of the dyeing process that I make my way through over the next couple of months. Meanwhile, I am having more creative thoughts about other craft and artistic uses for cochineal.

- What if I make a natural paint with cochineal and see how it works on watercolor paper, a wood product, or untanned leather?
- What if I make my own paper with recycled paper scraps and dye it with cochineal?
- How about making homemade seed paper with recycled paper and native wildflower seeds and then dyeing it with cochineal?
- What about utilizing the batik method of wax-resistant dyeing of textiles for Easter eggs, ceramics, or stencils on fabric, untanned leather, or paper?

I cannot wait to reach out to Nan and Mary and let them both know that my cochineal experiment is back on track. This natural dye experiment has been on the back burner long enough! Stay tuned!