



Natural Dyeing workshop at CTR (Centre for Textile Research) Copenhagen, Denmark in August 2010.

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As a fashion and textile history buff, always eager to learn, I was on a look out for something that would satisfy my cravings. As luck would have it, in April 2010, I came across the promotional online leaflet of 'Natural Dyeing workshop at CTR in August 2010'. Workshops give you an opportunity to explore the material first hand, and a workshop on archaeological textiles organised by CTR was too tempting to be missed. CTR or Centre for Textile Research is a Denmark based organisation, which specialises in research of archaeological textiles, tools in use for textiles and clothing and all other aspects of textile and fashion history. They have substantial research programmes and are focussed towards research in this field. From 2010, CTR is hosted by the National Museum Denmark and the SAXO institute, University of Copenhagen.

I began preparations, and to cut a long story short, I found myself in the Historical Archaeological Research and Communication Centre, Lejre, Denmark on the 23rd of August 2010. Denmark was beautiful!! Lejre was straight out of the movies of Narnia, deep woods and lush greenery, I was instantly infatuated. The drive to the centre was an experience of a lifetime. I could not thank my lucky stars enough. I was here in a very different world from India, among a group of researchers, most of them women, who shared the love of textiles, history and archaeology.

Dr Eva Andersson Strand and Dr Ida Demant, two researchers from this field were the organizers of this workshop. I met some of the most wonderful people there who are now my very good friends. There were four workshops and one could only opt for two. I opted for 'tool making' and 'dyeing with plants'.

India being a textile rich country, and with abundant natural dyes, as a textile person from India, I was well acquainted with India's natural dyes, indigo, madder and turmeric to name a few. We had studied in detail about them at Lady Irwin College, and in fact I had assisted my friend while she was doing her MSc dissertation on natural dyes. Thus natural dyes were not a new phenomenon, but dyeing in archaeological settings with European natural dyes was a novelty and a treat. The aim of the workshop on dyeing was to give a theoretical and practical introduction to different stages of dyeing with plants. A short theoretical introduction to plants, dyes and dyestuffs, and mordents was given, after which we could begin dyeing

There were fabric swatches of woven linen, woven silk, woven wool and wool yarn of three types, off white wool, light grey wool and dark grey wool. There yarns, fabrics and dyestuffs on the table in figure 2.

As I gazed in admiration at the natural colour of the woollen yarns, I found that the dyes were interesting too. They were Tansy and weld (for yellow), woad (the European substitute for Indigo), and madder (for red). Alum was used as mordant. We were in a place, which looked like an ancient Roman village. The plants grew wild and sheep (our raw material) were all around. For the first time I saw Tansy. Tansy is an herb, with yellow button like flowers (refer to figure 1). This gives a light yellow colour when the base fabric is mordented with alum. We used wool yarn of different colour – off-white, light grey and dark grey and it gave us very interesting results. First we dyed our fabrics and yarns in Tansy; another set of yarns was mordented and dyed in madder. We also dyed yarns in woad, the system was much like indigo, and no mordant was used. Indigo's colour is deeper than that of woad. Weld was another plant, which gave a yellow colour. Weld gives a deep yellow, and the colour comes from the leaves of this plant. It does not have yellow flowers or for that matter it does not have any significant flowers. This plant was used since Roman times to give a yellow colour to the robes.



Figure 1: Tansy plant in water, being prepared to dye yellow colour on silk, linen and wool. Photo Courtesy: Author



Figure 2: Undyed woollen yarn in off-white, light grey and dark grey, with an undyed linen fabric on the table, along with natural plant dyestuffs. Dyed yarn hanging, at Lejre, workshop organized by CTR. Photo Courtesy: Author

Here for the first time I was experiencing experimental archaeology. There were practical introductions into different aspects of textile production based on knowledge from the Roman world and from the Roman Iron Age. It gave us insight into the complex processes that would have been undertaken by the people of these cold climates, hundreds of years ago. The interesting part was there was no cotton to dye (we are so used to dyeing cotton), there was linen, silk and wool. It was very exciting to see the colours develop and to dye in wood fired boilers. Figure 3, is a wood fired boiler that we had used for boiling water and dyestuffs for dyeing. All the equipments were made to match the time period of the Iron Age. They were only made from wood, iron and other natural material.



Figure 3: Wood fired boilers at Lejre, Workshop by CTR, August 2010. Photo Courtesy: Author



Figure 4: Author trying her hands at dyeing with madder at the CTR workshop at Lejre; Photo courtesy: Dr Mary Harlow

The most important part of any dye recipe is water. Lots and lots of water is needed for dyeing, and here I was impressed at the water harvesting. Rainwater was collected in buckets, kept under pipes, which drained rainwater. This abundant resource was collected and used for dyeing. It gave added chemicals and the natural feel to the entire project. It felt as if we were in a time machine, and were living the life of Romans during the Iron Age. It made us discuss and ponder about the lives of those people, and like them probably we thought and created many colours out of the four dyes. We over dyed the yellow with woad to give green, a brand new colour, just like our surroundings. What an achievement the first dyer must have felt! I felt the same (figure -4, the author dyeing with madder) we created multiple colours by permutations and combinations of dyes and coloured wool (figure -5). It was an achievement to be able to see so many colours being made out of a few. This love for colour can be appreciated by natural dyers the world over. This was one of the most memorable workshops that I have ever attended.



Figure 5: Undyed yarns and yarns dyed by the author, with various natural dyes at CTR workshop in Lejra, in August 2010. Photo courtesy: Author