

Title: Natural indigo cultivation and manufacture – By Balachander Anbalagan

Abstract:

Indigo is cultivated for about 1500 acres in and around the district of Villupuram in the state of Tamilnadu in India. This comprises about 90% of the total Indigo cultivation in India. Indigo plant is primarily used for three purposes: Firstly for green manuring, secondly for textile dyeing and thirdly, hair dyeing, although, earlier times saw its most popular purpose as textile dyeing. The oldest Indigo dyed fabric dating to 6000 years ago was discovered in 2009 at Huaca prieta, Peru.

Indigo seeds are sown for cultivation from the months of November to April every year. Once the plant reaches its maturity in about 90 to 110 days, it is ready for harvest. The production of Natural Indigo dye happens from July to November of every year. The harvested plant is loaded onto a tractor with tipper which is then used as a single extraction unit. Likewise, the entire harvested crop sums up to about four such units at a given time. Each unit functions independently. Initially, the harvested plants are emptied into the water filled tanks and pressed well with wooden logs for fermentation to about 18hrs. This fermented water (Indoxyl water) is then transferred to a lower tank. There it is oxidized for transforming into Indigotin. The next day, the settled Indigotin sediment is taken for boiling and filtering. It is then pressed into cakes and dried. Later it is powdered and supplied to Natural dyeing units.

“Myths like Indigo plant is bad for soil and the workers in the Indigo production unit having health issues due to Indigo ,will be discussed during the presentation”.