



Natural dye from bixa seeds as a potential alternative to synthetic dyes for use in textile industry

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ABSTRACT

Dye is a substance that has affinity to the substrate to which it is being applied such as textile fibers, foodstuffs and powder. From archeological evidence, it is seen that in India dyeing has been carried out for over 5000 y, which were obtained from animal, vegetable or mineral origin. The greatest source of this dye was mainly from plant kingdom; mainly roots, bark, leave and wood. Dye from Bixa (Annatto) seed is one type of natural dye which can be used as dyeing agent for coloring textile fibers like cotton, wool, silk and for making colorful "Gulal" as well as in food industry. Bixin, the pigment extracted from the red-colored seeds, can be used as coloring agent for this purpose. It is non-carcinogenic in nature and so does not affect human body or environment. An attempt is being made in laboratory scale to extract the natural pigment from the Bixa seeds and its application in different fields such as textiles, colourful powder and food industry.

Keywords: Herbal dye; Bixa; Bixin; Synthetic dye; Gulal; Textile fibre

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