Natural Dyes Manufacturing

(Extraction of Eco-Friendly Dyestuff from Flowers, Leaves, Vegetables for Industrial Applications)

Natural Dye Plants and Dye Plant Products, Plant Dyes to Serve as Colourants for Food and Textiles, Vegetable Dyes from Plant Sources

Introduction

Natural dyes are dyes or colorants derived from plants, invertebrates, or minerals. The majority of natural dyes are vegetable dyes from plant sources—roots, berries, bark, leaves, and wood—and other organic sources such as fungi and lichens. Roots, nuts and flowers are just a few common natural ways to get many colors. Yellow, orange, blue, red, green, brown and grey are available. Natural Dyes are usually used with a mordant to make them "stick" to the fabric, and generally give more muted tones on plant fibers like cotton and rayon, but are brilliant on wools and silks. Natural dyes can provide the much needed alternative to the complex world of chemical dyes. These dyes are environmentally sound and can be grown by organic methods.

They are inherently carbon neutral. Vibrant colors can be produced from natural dyes. The advantages of the new colors were ease and simplicity of use, general reliability with regard to strength and composition, and certainty in reproducing the same color again without trouble. The interest in natural dyes is growing and these dyes are being perceived to provide an environment-friendly dyed fabrics and garments. Natural dyes can give us the feel of a superior quality "sensory" experience.

Dyestuff is used to color a wide range of textile fibers such as polyester fibers, nylon fibers, acrylic fibers, and other fibers. Polyester fiber is the most widely used variety of textile fiber. Hence, it is the largest product segment of the global dyestuff market for textile fibers.

A broad range of textiles produced from these colored textile fibers is utilized in end-user industries such as home textiles, apparels, automotive textiles, and other textiles.

Day by day grows the demand for natural products. This tendency is also true for the dyeing industry. In the last decade not only has progress been made in ethical approaches to the sustainable production of natural dyes, but many new enterprises, of different sizes, have begun to cultivate, extract and apply natural dyes.

Natural dyes are experiencing a great resurgence of interest in the textile world. They are considered eco-friendly and nontoxic, fitting nicely into similar trends of repurposing, up cycling, and local food.

Dyeing is the process of imparting colors to a textile material. Natural dyes are friendly and satisfying to use. They are obtained from sources like flowers, leaves, insects, bark roots etc. however, they are not readily available and involve an extraction process. With the advancement of chemical industry, all finishing procedures of textile materials have been growing constantly and, sustainable and ecological production techniques have become extremely crucial.

This is a single book which has information related to extraction of dyestuff from 19 common flowers, weeds, bark or leaves and its application on cotton silk and wool fabrics for textile industry.

The Handbook describes the step wise methodology of extraction, mordanting, dyeing with photos of the actual plants part used for extraction of Natural dye. Shade cards have been incorporated so that the full gamut of colors can be visualized from each dyestuff.

Major contents of the book are nature of material to be dyed, history of natural dyes, promotion of natural dyes, sources of natural dyes, mordanting the textiles for natural dyeing, quality standards for vegetable dyes, methods of dye extraction, dyeing methodology, chemistry of dye, some recent publications on natural dyes.

This handbook is designed for use by everyone engaged in the natural dye manufacturing and explains different methods of dye extraction. Also contains addresses of machinery suppliers with their photographs.

It will be a standard reference book for professionals, entrepreneurs, those studying and researching in this important area.

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can provide Process Technology Book on

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