

## Natural Dyes: A Global Perspective on Commercial Solutions and Industry Players

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**Abstract :** Environmental concerns are increasing the interest in the potential uses of natural dyes. Natural dyes are more safe and environmentally friendly option than synthetic dyes. However, one must be also cautious with natural dyes, because, for example, some dyestuff such as plants or mushrooms, as well as some mordants are poisonous. By natural dyes we mean dyes that are derived from plants, fungi, bark, lichens, algae, insects, and minerals. Different plant parts, such as stems, leaves, flowers, roots, bark, berries, fruits, and cones, can be utilized for textile dyeing and printing, pigment manufacture, and other processes depending on the season. They may be utilized to produce distinctive colour tones that are challenging to do with synthetic dyes. This adds value to textiles and makes them stand out. Synthetic dyes quickly replaced natural dyes, after being developed in the middle of the 19th century, but natural dyes have remained the dyeing method of crafters until recently. This research examines the commercial solutions for natural dyes in many parts of the world, such as Europe, the United States, South America, Africa, Asia, New Zealand, and Australia. This study aims to determine the commercial status of natural dyes. Each continent has its own traditions and specific dyestuffs. The availability of natural dyes can vary depending on several aspects, including plant species, temperature, and harvesting techniques, which poses a challenge to the work of designers and crafters. While certain plants may only provide dyes during specific seasons, others may do so continuously. To find the ideal time to collect natural dyes, it is critical to research various plant species and their harvesting techniques. Furthermore, to guarantee the quality and colour of the dye, plant material must be handled and processed properly. This research was conducted via an internet search, and results were searched systematically for commercial stakeholders in the field. The research question looked at commercial players in the field of natural dyes. This qualitative case study interpreted the data using thematic analysis. Each webpage was screenshotted and analyzed in reflection on to research question. Online content analysis means systematically coding and analyzing qualitative data. The most evident result was that the natural dyes interest in different parts of the World. There are clothing collections dyed with natural dyes, dyestuff stores, and courses for natural dyeing. This article presents the designers who work with natural dyes and actors who are involved with the natural dye industry. Several websites emphasized the safety and environmental benefits of natural dyes. Many of them included eye-catching images of textiles dyed naturally, and the colours of such dyes are thought to be attractive since they are beautiful and natural hues. The search did not find big-scale industrial solutions for natural dyes, but there were several instances of dyeing with natural dyes. Understanding the players, designers, and stakeholders in the natural dye business is the purpose of this article. The comprehension of the current state of the art illustrates the direction that the natural dye business is currently taking.

**Keywords :** commercial solutions, environmental issues, key stakeholders, natural dyes, sustainability, textile dyeing

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