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SATIN SILK

Silk is considered as one of the finest and delicate natural fibers suitable for the construction of textile products with elegant look, lustrous appearance, gorgeous glaze, and elegant drapeness likewise with rich quality. However, silk is sensitive for various chemicals so that it could be easily damaged. Hence, it is evident that silk should be protected so as to accommodate the necessary characteristics in the end use products. In this context, in this research work plain woven mulberry silk fabric was chosen which was further processed with basic treatments and treated with polyacrylic acid and chitosan and then dyed with some selected natural sources and reactive dye. The treated and dyed silk fabrics were then subjected for different testing parameters such as measuring physical properties, K/S value, fastness properties, absorbency characteristics, anti-odor behavior, SEM, and XRD analysis. The results obtained from this study convince the suitability for the conventional garment/apparel end-use products including the medical textiles.



















**RAJPATH**  
The Spirit of Style

**SATIN SILK**

Silk is considered as one of the finest and delicate natural fibres available for the construction of textile products with elegant look, lustre, softness, moisture retention, and elegant drapability. However, silk is sensitive to various chemicals as that it could be easily damaged. Hence, it is evident that silk should be protected to so to accommodate the necessary characteristics in the end use product. In this context, in this research work, green natural dyes are used to dye silk fabric which was further processed with laser treatment and treated with argon plasma and titanium and then dyed with some selected natural dyes and mordants. The treated and dyed silk fabric were then subjected for different testing parameters such as mechanical properties, UV radiation, moisture properties, absorbance characteristics, stability to light, pH and SDS solution. The results obtained from this study confirm the suitability of the conventional green-mordant and wet process including the mordant solution.















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**SATIN SILK**

It is considered as one of the finest and delicate natural fibres suitable for the manufacture of textile products with elegant look. It is very soft, smooth, lustrous, and drapes elegantly. It is known as the "Queen of Fibres". It is available in a wide range of colors and patterns. It is used in the manufacture of sarees, shawls, and other textile products. It is also used in the manufacture of home textiles like bed sheets, pillowcases, and towels. It is a natural fibre and is biodegradable. It is also known for its strength and durability. It is a natural fibre and is biodegradable. It is also known for its strength and durability. It is a natural fibre and is biodegradable. It is also known for its strength and durability.

