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# Dischargeability Improvements of natural Silk

Wagih A. Abdallah, Abeer I. Fathalla and \*Ashgan A.F.Abdel kerim

## Abstract:

Abstract: Glucose is used as a reducing (discharging) agent to destroy the ground dye in alkaline medium, since it contains an aldehyde group in its molecule which has reducing properties. Sodium bisulphite ( $\text{NaHSO}_3$ ) is also used as an aid substance to improve the dischargeability. Indigo vat dyes are suitable for the dischargeable ground because it contain carbonyl group which can be transformed into the leuco compound by reduction, characterized by the group  $\text{C-OH}$  in which it is water soluble and therefore it can be removed from the fiber. Tensile strength of discharged silk fabric was examined. Key words: Silk; printing; glucose; reducing agent; indigo vat dye; sodium bisulphate; dischargeable ground; Tensile strength.

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