

# **RECYCLING THE WASTE CELLULOSE**

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## **ABSTRACT**

Sereni is a common plant found in abundance through-out the world as waste biomass. Its stem fiber is rich in cellulose content that was used as backbone for graft copolymerization with different vinyl monomers. Variable graft yield were obtained depending on properties of the monomers and reaction parameters. The graft copolymers were characterized by SEM & FTIR and studied for change in properties like swelling and dye-uptake behavior. The graft copolymerization modified the two important properties of the polymer and made it useful for various industrial and scientific applications.

**KEY WORDS:** Polymer, monomer, grafting, swelling, dye.