

Eco-friendly Antimicrobial Finish for Wool Fabric

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KEYWORDS Bacteria. Neem. Washing Cycles. Enzymatic Scouring. Treatment and Effectiveness

ABSTRACT Eco-friendly antimicrobial finish has been imparted to the wool fabric using methanolic *neem* extract by exhaust and pad dry cure method in order to reduce the bacterial growth on fabric. Finish was applied in two concentrations (3 and 5gpl) on grey as well as enzymatically scoured wool fabric and compared. The antimicrobial activity of the finish was accessed by quantitatively by AATCC-100 test method in terms of bacterial reduction. Effectiveness of finish was also accessed after pre-determined number of washing cycles. It was observed that *neem* has been found effective against bacterial growth on wool fabric even after 20 washing cycles (79.28%). *Neem* treated scoured wool fabric shows very good antibacterial activity than *neem* treated grey wool fabric. Since the active *neem* ingredient extracted from *neem* leaves can serve as appropriate alternative for eco-friendly antimicrobial finish to conventional harmful chemicals in present use.