

**IMPROVING THE DURABILITY OF MOSQUITO REPELLENT
FINISH ON COTTON FABRIC**



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Project Advisor: Mr. UmairMukhtar

Submitted by:

Hafiz M.UsmanDurrani(BS-TXE) 101611-069

Abdullah Hameed (BS-TXE) 101611-052

Syed Jarjeesul Hassan (BS-TXE) 101611-063

Zahid Amin (BS-TXE) 101611-068

Ahmad Ali Waseer (BS-TXE) 101611-073

Bachelors of Textile Engineering

School of Textile & Design

University Of Management & Technology, Lahore

*“In the Name of **ALLAH** The most Gracious, The
most Merciful”*

Abstract

The purpose of this work was to optimize the durability of mosquito repellent finish on 100% cotton fabric as it is always desirable for such protective textiles that they retain their functionality up to working life of garment. Input variables taken were binder types, their concentration, time and temperature of curing finish. Their effect on mosquito repellency and retention of finish after multiple washes was observed.

Effect of these input variables on fabric's mechanical properties such as tear strength, tensile strength, bending length and whiteness was also observed. Optimized recipe was found that showed acceptable results for each output variables.

Another objective of this project was to compare natural and synthetic mosquito repellent finish for all above stated output variables. It was found that although natural finish is more eco-friendly but synthetic finish is more effective against mosquitoes and sustain more washes than natural one.

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