

EVALUATION OF MOISTURE MANAGEMENT PROPERTIES OF KNITTED FABRICS DYED WITH CANNON BALL FRUIT EXTRACT

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ABSTRACT

Moisture Management Property of fabrics is the ability to transport the liquid moisture from skin to the outer surface of the garment. Moisture management is of prime importance in present-day context as today's consumers not only look for aesthetics but also comfort in clothing.

The present paper discusses on overall moisture management properties of selected knitted fabrics (Cotton, Modal, Bamboo and Silk) dyed with cannonball fruit extract using alum and pomegranate rind as mordants. Moisture management properties, such as wetting time of top and bottom fabric surfaces, maximum moisture absorption rates of top and bottom surfaces, maximum wetted radii of top and bottom surfaces, spreading speeds of top and bottom surfaces, and cumulative one-way transport capacity and overall moisture management capacity have been considered and correlated to the dyed cotton, silk, modal and bamboo single jersey knitted fabrics. Cotton and Silk show almost similar performance in absorption rate and AOTI is well related to OMMC. Silk shows the higher value of AOTI and its performance is found to be very good. However the performance of all dyed fabrics is rated as very good.

KEYWORDS: Cannon Ball Fruit, Knitted Fabrics, Accumulative One Way Transport Index (Aoti) & Overall Moisture Management Properties (Omcc)

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