

Development of Winter Wears Having Improved Thermal Comfort and Mechanical Properties

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Abstract : More than 4 billion tons of chicken feathers are wasted yearly worldwide which is not environmental friendly. In order to make use of these 4 billion tons of feathers it is necessary to incorporate them to the textile materials. The main objective of this study is to develop the winter wears with improved thermal comfort and mechanical properties. Chick feathers were blended with cotton fibers to spin them into yarn, weave them dye them using reactive dyes. The developed fabric was tested for thermal comfort, tensile and tears strength. The results were also compared with pure cotton fabric of similar GSM. It is observed from the results that chicken feathers and cotton blended fabric was improved thermal comfort and mechanical properties.

Keywords : Alambeta, compatibilizing, permeability, sliver

Conference Title : ICITKE 2015 : International Conference on Innovation, Technology and Knowledge Economy

Conference Location : Paris, France

Conference Dates : October 29-30, 2015