Charlotte, North Carolina



First Snow on Barren Branches

Kelsie Doty and Sherry Haar Kansas State University, USA

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The purpose of this research in design project was to explore color options of select regional dyewoods through non-mordant, mordant, and post-treatment, and then to apply those findings to the creation of a handwoven textile for use in an apparel product. This was implemented by dyeing 100% cotton yarn using native Kansas black walnut and eastern redcedar sawdust, weaving yardage on a four shaft 23" wide floor loom, and creating a fitted garment from the woven cloth utilizing draping and flat pattern methods, along with machine construction.

The design process began with inspiration from photographs taken of local trees and a wind-fallen twig with intricate fungus growing on it. Walnut and cedar sawdust was used to dye 100% bleached 10/2 cotton yarns. The walnut dye resulted in a medium brown, walnut modified with iron was a dark brown and the cedar produced a light tan color. The dyed cotton yarns were used in combination with 100% organic naturally brown colored cotton in the warp, creating alternating stripes of dark and light value, separated by smaller stripes of undyed cream colored cotton yarn. Cream colored cotton was used in the weft to produce a herringbone weave structure. The final handwoven fabric was a slightly elastic and dense textile with a soft handle.

Fitted jacket and shorts were constructed from the handwoven textile and 100% cotton velour, with princess seams running along the front and back of the jacket and



zipper closure for both the shorts and jacket. The cream cotton velour used for the yoke and sleeves offsets the handwoven textile, reminding one of the first snow on barren tree branches. Page 1 of 2

© 2014, International Textile and Apparel Association, Inc. ALL RIGHTS RESERVED ITAA Proceedings, #71 - www.itaaonline.org The final design output contributes knowledge of regional dyewood properties from black walnut and eastern redcedar on 10/2 cotton yarn. Showing a color range from light tan on aluminum acetate mordanted cotton dyed with cedar, to medium brown on aluminum acetate mordanted



cotton dyed with walnut and dark brown on nonmordanted cotton dyed with walnut and modified with iron. Contributions to weaving and design included the finding that the loosely woven and elastic textile began to pull apart at princess and armhole seams. Future hand woven textiles will be reinforced with a lightweight interfacing to provide stability and prevent damage at the seam lines. Finally, exploring sawdust as a natural dyestuff provides a value-added option to a regional dye source that would otherwise be discarded and contributes to the knowledge of natural dyes from black walnut and eastern redcedar as realized in a handwoven textile garment.

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