Sujanya Supontavanid 2006: Optimum Laundering Condition for Natural Dyed Fabrics. Master of Home Economics, Major Field: Home Economics, Department of Home Economics. Thesis Advisor: Assistant Professor Kajijarus Piromthamsiri, Ph.D. 177 pages.
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The objective of this study was to determine the effects of acid-base condition of laundering solution on color change of cotton and silk fabrics dyed with Indigo, Lac dye, and Turmeric. The fabrics were laundered in the laundering solution with pH4, pH7 and pH10. After laundering the L*, a*, b*, c* and h* values were measured and the dL*, da*, db*, dC*, dH* and dE* toward non-laundering fabrics were determined.

Results of study indicated that fabric type, dye type and pH of laundering solution significantly affected the dL*, da*, db*, dC*, dH* and dE* values at 0.01 level. Interaction between fabric type and dye type significantly affected the dL*, da*, db*, dC*, dH* and dE* values at 0.01 level. Interaction between fabric type and pH of laundering solution significantly affected the dL*, da*, db*, dC*, dH* and dE* values at 0.01 level. Interaction between dye type and pH of laundering solution significantly affected the dL*, da*, db*, dC*, dH* and dE* values at 0.01 level. Lastly, interaction between fabric type, dye type, and pH of laundering solution significantly affected the dL*, da*, db*, dC*, dH* and dE* values at 0.01 level.

Overall, the optimum laundering condition for cotton and silk fabrics dyed with Indigo, Lac dye, and Turmeric, was to launder in laundering solution with pH4 or in acid condition. Under this condition, the color of the fabric changed least.

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