A Study on the Dyeing Characteristics by Reproduction of Hwangsu Spring

In Yong Ahn[1], Hwa Jin Suh[1], Eun Young Song[1], Seon Young Na[1], Ji Ju Park[1], Young Mi Park[2], Jin Young Jung[3], Oh Oun Kwon[1*]

[1]R&D Team Gyeongbuk Natural Color Industry Institute, [2]School of Textiles and
[3]Department of Environmental Engineering Yeungnam University

E-mail : aiy@gnc.re.kr, 054-338-6244

Abstract

To evaluate the Hwangsu spring as natural mordants effect on dyeing. The natural mordants effect of Hwangsu spring were analyzed by pH, temperature, trace elements, organic matter and color fastness. Hwangsu spring having pH 2.42 and 14.4℃ was harvested at the end of September, in Yeongcheon (Gyeongbuk Province, Korea) and left on a 0℃ and 25℃ before use. Hwangsu spring during storage at 25℃ turned brown by photochemical reaction. The Result of ICP analysis, it contained Fe(414.9 ppm), Al(88.9 ppm), Mn(4.9 ppm) and observed character by water analysis. Dyeing and post-mordant procedure; Cotton(KS K 0905) were dyed with clove powder for 30 min at 70℃. Hwangsu spring, Aluminium Sulfate 14-18$H_20(Al_2(SO_4)_3$ · 14-18H_2O), Iron Sulfate · Heptahydrate($FeSO_4$ · $7H_2O$) were used by post mordant at the same ratio. The dyed fabrics were treated with 20% each mordant solution at 25℃ for 10min. Comparison with a reproduced chemical mordant, the K/S values of cotton fabrics dyed with Hwangsu sping were increased.

참고문헌

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