

〈一般論文〉

染毛試験に使用する JIS 白布(毛)の代替資材の調査

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Investigation of Alternative Materials to JIS Wool Fabric for Hair Dyeing Tests

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Abstract

The supply of wool fabric conforming to JIS L 0803 in Japan (abbreviated as “JIS wool fabric”), which was commonly used as the testing material for the hair dyeing test for oxidative hair coloring agents, was discontinued in 2021. There is no case of hair dyeing test that is systematically conducted for each test material other than JIS wool fabric and each displayed color on a product. In addition, different dyeability among test materials, such as the case of insufficient dyeing when using cotton fabric, was reported. Therefore, we aim to find alternative materials to replace the JIS wool fabric for hair dyeing tests.

We conducted hair dyeing tests using 18 commercially available first agents, which are shown in 9 different colors, hydroxy peroxide as a substitute for the second agent, and 8 different testing materials. JIS wool, silk, nylon, cotton, cupra and polyester white fabrics, and goat and yak white strands were used as test materials. The results showed that the hue of nylon fabrics and goat and yak white strands closely resembled those of the JIS wool fabric. Hence, these materials proved to be useful alternatives for conducting hair dyeing tests.

Key words: oxidative hair coloring agents, hair dyeing test, JIS wool fabric, alternative materials.