

## Pre and Post Mordant Effect of Alum on Gamma Rays Assisted Cotton Fabric by Using Ipomoea indica Leaves Extract

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**Abstract :** There are number of plants species in the universe which give the protections from different diseases and give colour for the foods and textiles. The environmental condition of the universe suggested toward the ecofriendly textiles. The aim of the paper is to analyze the influence of pre & post mordanting of alum on radiated cotton fabric with Gamma Radiation of different doses by using *Ipomoea indica* leaves extract. Alum used as mordant with the concentration of 2, 4, 6, 8 and 10% as pre and post mordanting to observe the effect of light and colour fastness of radiated cotton. 6% of alum concentration in pre mordanting gave good colour strength 117.82 with darker in shade toward the greenish tone and in post mordanting 6% concentration gave good colour strength 102.19. The lab values show that the colour is darker in tone and gave bluish effect. Further results showed that alum gave good light and rubbing fastness on gamma radiated cotton fabric.

**Keywords :** Ipomoea indica, gamma radiation, alum, light fastness

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