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Natural dyeing process for recycled paper from the waste vegetables

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Abstract: Present work is to innovative natural dyeing process using the waste vegetables extract as dyestuff as alternative to chemical dyes. This work consists of three major steps, i.e. extraction, characterization and dyeing processes. In this study, the removal of colour dye by using simple extraction by hot water treatment. The extract from the waste vegetables resulted high colour intensity on the paper. We have used selected few waste vegetables (Grapes, Coffee bean, Turmeric and Tea) was used as a natural dye for recycled paper. Recycled paper's surface, Raman finger prints (vicinity of 1040 cm^{-1}), colour intensity (-0.06 cd) were recorded using SEM, Raman Spectroscopy (532 nm) laser and CIE Lab respectively.

Keywords: Recycled paper, dye and waste vegetables.

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