

Natural Dye With Ecological System And Some Physical Properties

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Abstract- In this study, the production of waste paint natural dye (ISO 1574 / TS 1563) from the sources of human / environment friendly countries has been carried out to determine the use of organic dye obtained from tea plant extract in wood protection industry. Water retention rates (%) from % retention rate and physical properties/amount of substance to be washed were determined. Impregnation has been carried out according to ASTM-D 1413-76, in consideration of the strong holding property of the produced paint. Scotch pine (*Pinus sylvestris L.*), Poplar, Iroko, Larex, Black pine and Oriental beech (*Fagusorientalis Lipsky*) species were used as tree species.

According to the results of the experiment; The highest value for% retention was achieved in beech wood (6.75%) and the lowest in Iroko wood (1.58%). The highest water uptake rate was observed in the rooster control (72 hours/73.98 %), the highest tea treatment (72 hours/95.56%) and the highest washout in the Iroko wood (72 hours / 95.88%).

Keywords- Natural Dye, Wood Protection, Historical Artifacts, Furniture