NATURAL PIGMENT AND NATURAL MORDANT: SPECTROPHOTOMETRIC STUDIES

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Nurul Idayu Binti Abdullah

TABLES OF CONTENTS

ABSTRACT

NATURAL PIGMENT AND NATURAL MORDANT: SPECTROPHOTOMETRIC STUDIES

The natural pigment was successfully extracted from *Lawsonia inermis* leaves and *Allium Haemonatochiton* skin in distilled water at 100 ^{o}C while the natural mordant was prepared of *Terminalia Catappa* and Oryza *Sativa* in distilled water. The crude extract of *Allium Haemonatochiton* gives a red maroon solution while the crude extract of *Lawsonia inermis* gives a reddish orange solution. The *Terminalia Catappa* crude extract produced a yellowish brown color while the *Sativa Oryza* crude extract produced a pale yellow color. In present study, the different mixture of natural pigment and natural mordant produced a difference shade of color. The maximum absorption for all samples was measured by UV-VIS Spectrophotometer. The maximum absorption spectra for mixture of *Lawsonia inermis* leaves with *Oryza Sativa* shows a hyperchromic effect while *Lawsonia inermis* with *Terminalia Catappa* and mixture of *Allium Haemonatochiton* with *Oryza Sativa* shows a hypsochromic shift but the mixture of *Allium Haemonatochiton* with *Terminalia Catappa* shows a bathochromic shift.