
Supplementary Materials: Extraction of Anthocyanin from Rose Petals for Coloration of Biomordanted Wool Fabric

Mahwish Salman ¹, Fazal-ur-Rehman ², Shahid Adeel ^{2*}, Noman Habib ³, Fatima Batool ⁴, Muhammad Usama ¹, Fareeha Iqbal ¹ and Arooj Fatima ¹

¹ Department of Biochemistry, Government College University Faisalabad, Faisalabad 38000, Pakistan

² Department of Applied Chemistry, Government College University Faisalabad, Faisalabad 38000, Pakistan

³ Department of Botany, Government College University Faisalabad, Faisalabad 38000, Pakistan

⁴ Department of Botany, Division of Science and Technology, University of Education Lahore, Lahore 54770, Pakistan

* Correspondence: shahidadeel@gcuf.edu.pk

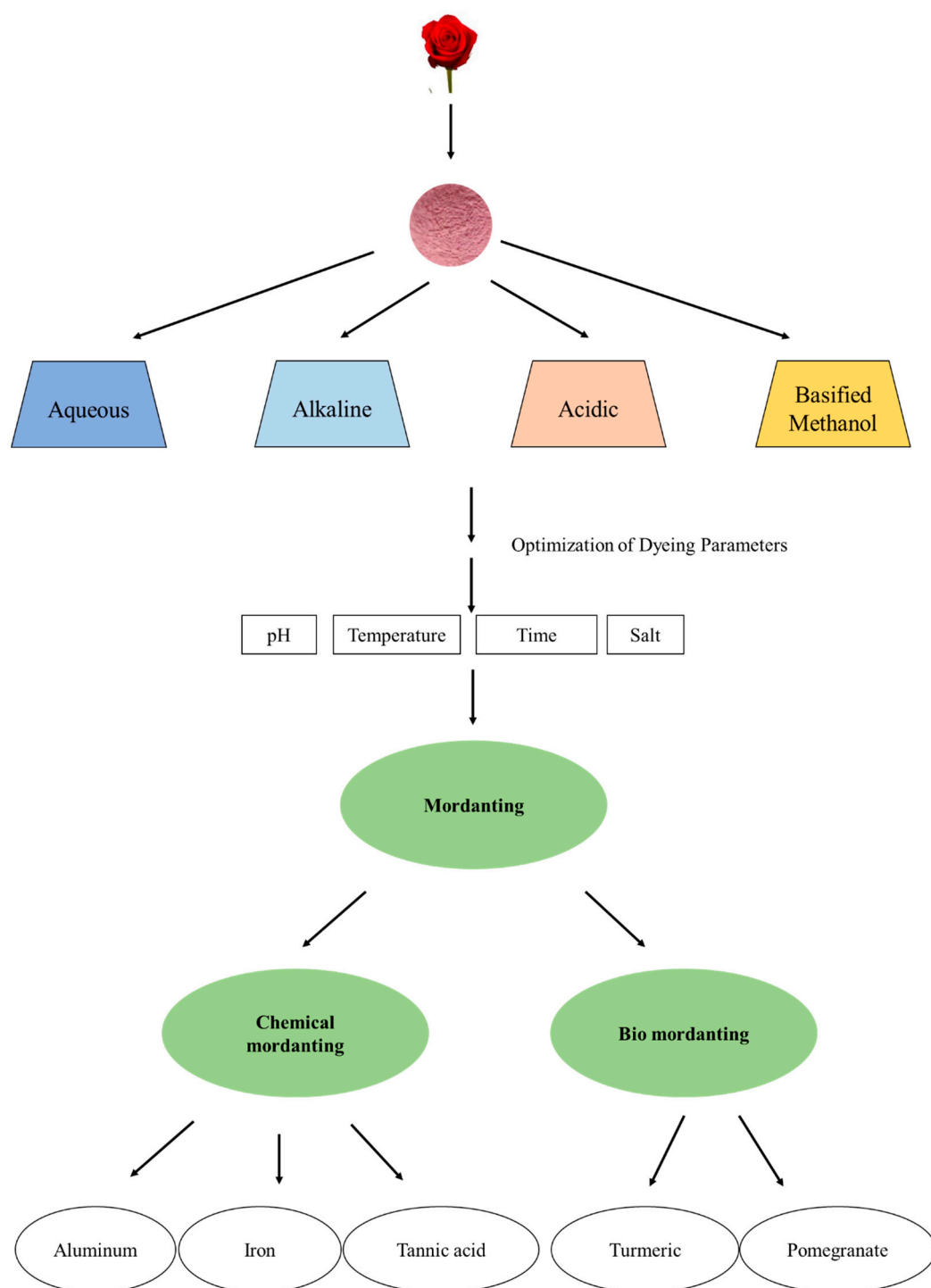


Figure S1. The flow chart of sample preparation and dyeing process.

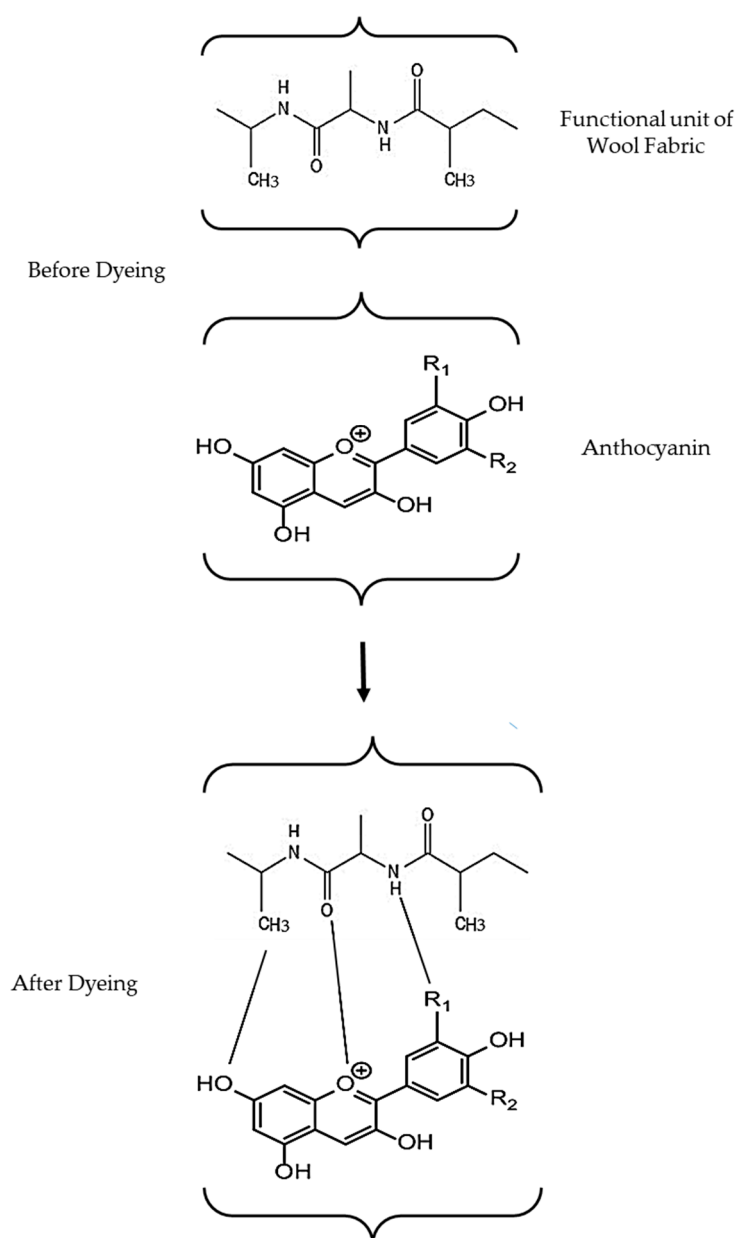


Figure S2. The mechanism diagram of binding between anthocyanin and structural unit of wool fabric during dyeing process.

Table S1. The outcome of current study.

Solvent	Dyeing Conditions				Chemical Mordanting						Bio Mordanting			
					Pre Mordanting			Post Mordanting			Pre Mordanting		Post Mordanting	
	pH	Temperature	Time	Salt	Aluminum	Iron	Tannic Acid	Aluminum	Iron	Tannic Acid	Turmeric	Pomegranate	Turmeric	Pomegranate
Aqueous	3	80 °C	35 min	4 g	5%	5%	7%	5%	5%	1%	3%	5%	1%	5%
Alkaline	1	80 °C	45 min	3 g	1%	1%	1%	3%	3%	7%	1%	9%	1%	9%
Acidic	2	40 °C	35 min	2 g	3%	9%	7%	5%	7%	5%	3%	5%	7%	7%
Basified Methanol	2	80 °C	45 min	4 g	9%	9%	1%	5%	3%	1%	1%	1%	1%	3%