

My report about [Sustainability] Manuscript ID: sustainability-2765685

It is well known to us, and since I have been a specialist in the sciences of dyeing, printing, and fabric processing for thirty-five years, that cotton fabric does not respond to the dyeing process, especially with extracted natural dyes, except after the mordanting process, which the authors carried out using chitosan not only to complete the dyeing process only, but I am trying to give the fabric some properties, including giving it an active property against bacteria.

Although the idea was developed by many researchers, the method of presentation and the amount of data presented make this work suitable for publication, but only after making important modifications, including, for example:

- 1- The title must replace the word “coloring” with the word “dyeing.”
- 2- On line 214, write in detail, not briefly, about UV Protection of Fabrics
- 3- On line 222, write in detail, not briefly, about Antibacterial Activity of Fabrics, then the word (ATCC 6538) on line 225 must be replaced with the word (AATCC 6538).
- 4- In line 236, it is preferable to write the Kubelkae-Munk equation as follows

$$K/S = \frac{(1 - R)^2}{2R} - \frac{(1 - R^0)^2}{2R^0}$$

- 5- On line 431, Table 3 (L, a, b), you must write as follows: L*, a*, b*
- 6- The English language and grammar must be reviewed more carefully
- 7- I offer advice to the authors and not to criticize the study. Why did you perform the process of extracting the natural color when using 60 minutes? In our published research, we conduct a study of time, meaning that we work at different times. Who knows, when using a time of 90 or 120 minutes, you will obtain a natural color extracted with a stronger color. Therefore, the authors only have to discuss the time factor even though they did not focus on using only 60 minutes in the extraction process.
- 8- References must be added to recent, relevant references. Please put these two references in the references
 - M. El-Asasery, A. Hussein, Mohamed Saleh, Abubaker A Eladasy, Microwave-assisted dyeing of wool fabrics with natural dyes as eco- friendly dyeing method: part I. Dyeing performance and fastness properties, 2021, Egyptian Journal of Chemistry 64 (7), 3751-3759
 - MA El-Asasery, AM Hussein, NM Nour El-Din, MO Saleh, ABA El-Adasy, Microwave-assisted dyeing of wool fabrics with natural dyes as eco-friendly dyeing method: part II. The effect of using different mordants Egyptian Journal of Chemistry 2021, 64 (7), 3761-3766.