

Review Form 3

Journal Name:	Journal of Materials Science Research and Reviews
Manuscript Number:	Ms_JMSRR_126355
Title of the Manuscript:	Application of Recycled Plastic Media to Enhance Waste Water Treatment Plant Operation for Subterranean Flow Constructed Wetlands
Type of the Article	Original Research Article

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PART 1: Review Comments

<u>Compulsory</u> REVISION comments	Reviewer's comment	Author's Feedback <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
Please write a few sentences regarding the importance of this manuscript for the scientific community. Why do you like (or dislike) this manuscript? A minimum of 3-4 sentences may be required for this part.	It is a natural process for wastewater to show biomass growth on recycled plastics. There are many studies in the literature on the adsorption properties of plastics. However, the study is an interesting study because it examines biomass growth in the field with real wastewater. Additional analyses, such as the properties of plastics, where they are obtained, surface analyses, etc. are the deficiencies in the study. In addition, information on the structures accumulated on recycled plastics (suspended solids, biofilm, impurities, etc.) are elements that reduce the importance of the study.	
Is the title of the article suitable? (If not please suggest an alternative title)	No. It is too assertive. It may be redesigned with the keywords of an alternative title below. Biomass growth on different plastic specimens applied in a real Subterranean Flow Constructed Wetland.	
Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.	This may be deleted: <i>Increased environmental awareness and the need to advance and develop waste water treatment processes for future challenges is leading to a more environmentally friendly and sustainable process.</i>	
Are subsections and structure of the manuscript appropriate?	Yes.	
Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this manuscript is scientifically robust and technically sound? A minimum of 3-4 sentences may be required for this part.	Although the study is scientifically sufficient, more details are needed in terms of reproducibility. For example, wastewater characterization, which plastic types were recycled from (or which facility they were obtained from), FTIR etc. analyses of recycled plastics, surface images etc. are not provided. These missed details reduce the scientific correctness of the manuscript. Technically, the study is interesting, but it is thought that the changes in the contents such as biofilm formation properties of plastics, surface properties etc. are more important than the polymer type of recycled plastics.	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	No. Almost no discussion was made in results section. No citations of the references (11 to 15) was seen in the manuscript.	
<u>Minor</u> REVISION comments Is the language/English quality of the article suitable for scholarly communications?	The manuscript is written carelessly.	
<u>Optional/General</u> comments	First of all, the study should be read carefully from beginning to end and corrected for typos, deficiencies, errors, etc. The study, which has scientific deficiencies, should be revised with further analyses. When the results of the study were examined with the latest literature. It was seen that PE-LD created more biofilm growth, but in the results section, the authors reported that PET showed more biofilm growth. Therefore, the results of the study are questionable. In this form, it is understood that the study was sent to the journal without a supervisor review. There is not even a sentence about recycled plastics in the method section. There are many errors like: Figure 3 is not specified. The wastewater flow rate is written incorrectly (9000,000 liters/day).	

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PART 2:

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Are there ethical issues in this manuscript?	(If yes, Kindly please write down the ethical issues here in details)	

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