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Journal Name:	**Advances in Research**
Manuscript Number:	**Ms_AIR_23224**
Title of the Manuscript:	**Equilibrium Isotherm Study for Removal of Mn (II) from Aqueous Solutions by Using Novel Bioadsorbent Tinospora cordifolia**
Type of the Article	**Original Research Articles**

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty'**, provided the manuscript is scientifically robust and technically sound.
To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

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PART 1: Review Comments

	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)*
Compulsory REVISION comments	Remarks Abstract The use of microbial and plant biomass for the detoxification of industrial effluents for environmental protection and recovery of valuable metals offers a potential alternative to existing treatment technologies R:A potential alternative for which side or point of view This research, **study** the removal of manganese from water R: English mistake at the room temperature (27±2°C) R: is this temperature so critical like this ? The results obtained indicated that 1.0gm 50mL^{-1} adsorbent R: what this values mean (1.0gm 50mL^{-1})? The size of the adsorbent particle was 1.18µm R: how you determine the size 1.18µm The optimum pH value for Mn(II) adsorption onto the biomass *T. cordifolia* was found to be 4.0. R: at pH = 4 the bio-materials positively charged and M(II) is also positive so this situation is not good to uptake the ions from water The characterization of the biomass *T. cordifolia* was done by FTIR. R: what was the interest of the FTIR ***Keywords***: Manganese (II), Biosorption, Coal mine waste water, FTIR R : not well selected Introduction At present, a number of technologies can be used to remove heavy metals from the contaminated waste water such as filtration, adsorption, chemical precipitation, ion exchange,	

	membrane separation and electro remediation methods. However, most of this method might not be efficient in removing heavy metals at very low concentrations, and could be relatively expensive. R: you mentioned adsorption as technology to remove heavy metals and your method is also adsorption so what is the difference between your adsorption and the other In the present investigation, the potential of a plant biomass has been assessed for the removal of manganese ion. The effects of various parameters have been studied and the results are presented in this paper. R:The biomass was used to remove heavt metals a long time ago . The majorities of naturals biomass plants fibers contain the chemical functions (-OH,C=O, NH2, COO, etc)so all play the same role by complexion of positive ions In conclusion you don't provide new scientific work Examples **1**-Beom-Goo Lee & Roger M. Rowell Removal of Heavy Metal Ions from Aqueous Solutions Using Lignocellulosic Fibers Journal of Natural Fibers Volume 1, Issue 1, 2004, pages 97-108 **2-** C. Fallico, S. Troisi, A. Molinari, and M. F. Rivera. Characterization of broom fibers for PRB in the remediation of aquifers contaminated by heavy metals Biogeosciences, 7, 2545–2556, 2010 3- **J**amil Rima, Antoine Ghauch, Marwan Ghaouch Cleaning of water contaminated by heavy metals using beetroot fibers as biofilter: Toxicological & Environmental ChemistryVolume 75, Issue 1-2, March 2000, pages 89-97 **MATERIALS AND METHOD** sieved through 1.18µm mesh R: 1.18µm or mesh? After that, the biomass was stay for 30 minutes with HCl (0.1M) solution. R: the attack by acid should disturb the chemical functions of the natural fibers how you show that the acid does not	

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	disturb the biomass? Effect of 121 pH on biosorption R: I have a doubt about this result because when pH is 4 the biomass is positively charged and because the positive charge of the metal the uptake efficiency is not maximum Effect of concentration on the percentage removal of Mn(II) R: between 50 ppm and 500 ppm we cannot observe big differences of the retention efficiency **Effect of Contact Time** R:I think that the removal phenomena is a complexation reaction between the fibers and the ions so we don't need a long contact time because this reaction in instantaneously so the contact time is so fast **COMPARATIVE STUDY OF *TINOSPORA CORDIFOLIA* WITH OTHER ADSORBENTS** R: no need for the comparison because all the natural fibers contain the chemical function and then the uptake efficiency must be similar CONCLUSION -This work is not original . More than several hundred similar work were published a long time ago - Fundamental mistakes are found in the text like pH effect , residential time , bad interpretation -Bad English	
Minor REVISION comments		
Optional/General comments		

Reviewer Details:

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