



SDI Review Form 1.6

PART 1:

Journal Name:	British Journal of Applied Science & Technology
Manuscript Number:	2013_BJAST_3086
Title of the Manuscript:	ADSORPTION OF PHENOL FROM AQUEOUS SOLUTION BY MAIZE TASSELS

General guideline for Peer Review process is available in this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)

- This form has total 9 parts. Kindly note that you should use all the parts of this review form.



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PART 2: 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)
<u>Compulsory</u> REVISION comments	Not acceptable for publication in any scientific journal from the following reasons: 1) Total lack of novelty, originality. 2) Unreliable experimental data, absence of new findings. 3) Inadequate evaluations of the experimental data, conclusions not supported by the experimental data, very poor discussion containing either trivial or unsupported statements. More details in the attachment below.	Our work is original in that to the best of our knowledge no work has been reported on removing phenol using sulphuric acid –treated maize tassels. Phenol removal has been investigated but not with maize tassels activated carbon. To the best of our knowledge we have analysed our data and discussed it that why adsorption capacities were reported . There was need for the reviewer to point out exactly were the data is wrong. In our discussion we cited relevant literature to support our statements.
<u>Minor</u> REVISION comments	4) TITLE is not correct: Carbon (maybe AC) was the material used for adsorption, not maize tassels as such. 5) This fact should be addressed in Introduction.	Ok the title has been changed to indicate it was not ordinary maize tassels . We have also captured that in our introduction
<u>Optional/General</u> comments		OK

Special Attachment:

The article suffers from a lack of novelty and originality – hundreds of similar materials were used for the adsorptive removal of phenols from waters. The study performed with model aqueous solutions (not with real wastewater) is of limited importance. There is no novelty also in experimental and methodological approaches.



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Experimental data seem to be unreliable. In fact, no significant trends were found in the studies of effects of time, temperature and pH. Utilization of initial pH values instead of equilibrium pH values in the discussion of the pH effect is not acceptable. Adsorption capacity expressed in % has almost no meaning, especially when given in Abstract without additional information (operational conditions).

Evaluation and interpretation of the experimental data is the weakest point of the work. Example: Both Langmuir and Freundlich isotherms suppose that Q_e increase with increasing C_e (approaching a certain limiting value in the case on the Langmuir isotherm). However, the data in Table 1 exhibit a quite opposite trend (!). Thus this model may be hardly used to evaluate the given data! Numerous figures are given without an adequate discussion. It is highly questionable to use the Langmuir or Freundlich plots for an evaluation of contact time (Figs. 7,8), pH (Figs. 9,10) or even temperature (Figs. 11,12) (the isotherm equation is used to evaluate a temperature effect(!)). Even when this would be possible (why not), it seems to me that no significant trend was found (experimentally confirmed) in this work. Compare, for example the values of Q_e in the time interval of 30 – 180 min.; the changes are insignificant, most probably (uncertainties of the results are not given). The only clear tendency is the dependence of the phenol sorption on the adsorbent dose, which is, of course, a trivial finding.