

**Review Form 1.6**

Journal Name:	<a href="#">International Journal of Plant &amp; Soil Science</a>
Manuscript Number:	Ms_IJPSS_89792
Title of the Manuscript:	Synthesis and Characterization of a Novel Maize Cob Based Nanocellulose
Type of the Article	Original Research Article

**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:

(<https://www.journalijpss.com/index.php/IJPSS/editorial-policy> )

## Review Form 1.6

### **PART 1:** Review Comments

	<u>Reviewer's comment</u>	<b>Author's comment</b> (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)
<b>Compulsory</b> REVISION comments	<p>The article entitled <b>Ms_IJPSS_89792 “Synthesis and Characterization of a Novel Maize Cob Based Nanocellulose”</b>. The authors tried their best to extract Nano cellulose (NC) from Maize cob, using Acid hydrolysis process. The extracted NC was characterized using PSA for particle size, FT-IR for functional groups, SEM and TEM for getting the morphology of NC. The result showed that, the synthesized NC was with a particle size of 213.5nm and a zeta potential of -34.5mV. The FT-IR analysis showed that the functional groups stretching at C-O, C=O, S=O with a wavenumber of 1216cm<sup>-1</sup>, 1737cm<sup>-1</sup>, 1365cm<sup>-1</sup> in NC. The XRD analysis clearly depicts peak around 2θ = 15.80, 22.03, 26.69, 40.44 which shows the structure of cellulose. The SEM and TEM image confirmed the acid hydrolysis process, fiber defibrillation Cellulose and Nanocellulose formation.</p> <p>There are many grammatical errors. The author should want to remove these all mistakes in their manuscript and follow the format of the prestigious <i>International Journal of Plant &amp; Soil Science</i> for possible acceptance and publication in the respective journal.</p> <p><b>Comments to Authors</b></p> <ul style="list-style-type: none"><li>➤ Write complete names of all characterization techniques in the abstract section.</li><li>➤ Keywords; write them in alphabetical order.</li><li>➤ Mentioned purity of all chemicals.</li><li>➤ Fig.6. is not clear. Revise it with clear length and diameter.</li><li>➤ Fig-6. d) Cellulose, Remove it. It makes confusion.</li><li>➤ Fig.7. has the same problem. Make it clear.</li><li>➤ Fig.7. TEM. Is not clear. The amount of NC is so much in the solvent sample, showing agglomeration.</li><li>➤ Write complete name before abbreviation of every subheading.</li></ul> <p><b>Cite the following references</b></p> <ul style="list-style-type: none"><li>❖ <a href="https://doi.org/10.1007/s10904-021-01942-1">https://doi.org/10.1007/s10904-021-01942-1</a></li><li>❖ <a href="https://doi.org/10.1007/s10924-021-02045-1">https://doi.org/10.1007/s10924-021-02045-1</a></li><li>❖ <a href="https://doi.org/10.1515/polyeng-2019-0255">https://doi.org/10.1515/polyeng-2019-0255</a></li><li>❖ <a href="https://doi.org/10.1088/2053-1591/ab4df6">https://doi.org/10.1088/2053-1591/ab4df6</a></li></ul>	<ol style="list-style-type: none"><li>1. Complete names are given.</li><li>2. Keywords are written in alphabetical order</li><li>3. Purity of chemical is mentioned.</li><li>4. Fig 6 is cleared.</li><li>5. Fig 7 is cleared.</li></ol>
<b>Minor</b> REVISION comments		
<b>Optional/General</b> comments		

### **PART 2:**

	<b>Reviewer's comment</b>	<b>Author's comment</b> (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)
<b>Are there ethical issues in this manuscript?</b>	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	