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| Name: | [**UTTAR PRADESH JOURNAL OF ZOOLOGY**](http://www.mbimph.com/journal/1) |
| Manuscript Number: | **Ms\_UPJOZ\_5100** |
| Title of the Manuscript:  | **CELLULASE PRODUCTION FROM BACILLUS SUBTILIS CAS PG2 USING LIGNOCELLULOSIC WASTES- A STATISTICAL APPROACH** |
| Type of the Article | **Original Research Article** |

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| **PART 1: Comments** |
|  | **Reviewer’s comment****Artificial Intelligence (AI) generated or assisted review comments are strictly prohibited during peer review.** | **Author’s Feedback** (It is mandatory that authors should write his/her feedback here) |
| **Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.** | **This paper examines a very interesting sector which is related with the sustainable production of enzymes based on microbial biotechnology. Specifically, it studies the vaporization of lignocellulosic waste which is a high-interest substrate, in order to produce cellulase in an optimized way.**  |  |
| **Is the title of the article suitable?****(If not please suggest an alternative title)** | **Yes** |  |
| **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.** | **Abstract has some very important unreasonable mistakes:**1. **Instead of 18S rRNA, author should correct it with 16S rRNA.**
2. **Author refers that used the Plackett-Burman tool in order to increase the protease production which I cannot find connection with the objective of this study. I supposed that he wanted to say cellulase.**
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| **Is the manuscript scientifically, correct? Please write here.** | In order to be scientifically correct, the manuscript needs some important clarifications and improvements:1. In the introduction the author should revise the phrase about the high cost of conventional production technologies of enzymes. This is not true anymore. He could use the problem about the environmental footprint of these enzymes and the need to find alternative production pathways like this which is analysed in the manuscript.
2. The definition of cellulase activity for 1 mol of glucose is in contrast with the convention unit (μmol/min).

Author should clarify why he used these units and revise his results if it is necessary.1. Author should make clear the relationship of cellulase production and cellulase activity.
2. The results related to the cellulase activity is significantly higher than literature values, thus it needs to be explained.
3. Results and discussion section is very short. Better comparison with the literature is required.
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| **Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.** | It's ok.  |  |
| **Is the language/English quality of the article suitable for scholarly communications?** | The language needs improvement. Phrases like this “They are used lignocellulosic material-based for manufacturing of bioethanol “ have grammar mistakes. |  |
| **Optional/General** comments | **There is an important issue related to the objective of the manuscript. Author highlights in the introduction that further research was performed on celullase for the enzymatic saccharification of cellulosic biomass.****Moreover, in the conclusions, author says exactly this phrase “ the results of using bacterial cellulase to saccharify various agricultural resources…”. This is not depicted on the current section of results and discussion.**  |  |

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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)* |  |

**Reviewer details:**

**Passadis Konstantinos, National Technical University of Athens, Greece**