

Review Form 1.7

Journal Name:	Asian Journal of Biotechnology and Bioresource Technology
Manuscript Number:	Ms_AJB2T_107805
Title of the Manuscript:	Molecular Characterization and Optimization of Alkaline Protease Production by Bacillus cereus LS23B
Type of the Article	Original Research Article

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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)
<p>Compulsory REVISION comments</p> <ol style="list-style-type: none"> Is the manuscript important for scientific community? (Please write few sentences on this manuscript) Is the title of the article suitable? (If not please suggest an alternative title) Is the abstract of the article comprehensive? Are subsections and structure of the manuscript appropriate? Do you think the manuscript is scientifically correct? Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form. <p><u>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</u></p>	<ol style="list-style-type: none"> Manuscript is important in scientific community although serious major revision is required. Title is suitable. Abstract is okay, can be structured more informatively. Discussion part should be more comparative and comprehensive. There are many issues with the manuscript: <ul style="list-style-type: none"> Authors should follow primary references in materials and methods. All the enzymatic concentration should be expressed as U/mL/min. Please express the result in U/mL/min so that it will be easy for comparison with literature and with different results from research. Expressing protein activity in U/mL/min is more scientific than relative concentration or any other unit. Authors should perform statistical analysis for the results, without the statistical analysis we cannot conclude the results from optimization. This paper shall be reviewed for second round after the result is presented with proper statistical analysis. In agitation optimization, enzyme production is observed less in 100rpm than in static condition; normally production is enhanced under agitation. First, we need to know either this is statistically significant or not. On 16S rRNA identification, please deposit your sequence on genebank (like NCBI), you need to get accession number and present it in paper, don't just write your sequence in paper. Once the sequence is deposited and accession number is obtained, quality of sequence is confirmed. Phylogenetic tree construction would be good representation. Normally bacteria are identified with polyphasic approach (molecular and physiological information), please check this paper: https://doi.org/10.1155/2022/6831092. Also on 16S BLAST result, author's sequence showed 100% similarity to both <i>Bacillus cereus</i> and <i>Enterobacter hormaechei</i>. Authors need to justify on what basis they confirm the organism as <i>Bacillus cereus</i> LS23B? Authors have used OVAT (one variable at a time) approach for optimization, in this approach once one parameter is optimized, the optimal parameter should be used in another optimization experiments. With this author could achieve increasing production on further optimization process. But the experiments and media used on each experiment are not clearly described in materials and method. But if have not incorporated the optimum parameter in further experimentation, please explain why you choose other option? Reference seems to be sufficient, although authors needs to add more comprehensive discussion on each finding. Please compare the findings with more recent articles. <p>Additional comment: Manuscript needs second round of review once the above-mentioned comments are addressed.</p>	
<p>Minor REVISION comments</p> <ol style="list-style-type: none"> Is language/English quality of the article suitable for scholarly communications? 	Some minor revision required.	
<p>Optional/General comments</p>		

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PART 2:

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

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