



SDI Review Form 1.6

Journal Name:	British Microbiology Research Journal
Manuscript Number:	Ms_BMRJ_20766
Title of the Manuscript:	CHARACTERISATION OF A PURIFIED LOW MOLECULAR WEIGHT AND THERMO-ALKALINE TOLERANT XYLANASE PRODUCED BY <i>Aspergillus brasiliensis</i> IN SUBMEGED FERMENTATION (SmF)
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:

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



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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)
<u>Compulsory</u> REVISION comments	- The language usage is poor. The manuscript should be corrected throughout. - A photograph of the SDS-PAGE gel obtained with the purified fractions should be included, since the authors state that the enzyme has 38 KDA and nothing is shown. - The references should be fixed, since in some references the name of the journal is written in full while in other references the names of the journals are given as abbreviations. - Concerning the experiments with metal ions, conclusions taken are wrong in my view. With the exception of Al^{3+}, the other metal ions tested had no effect on xylanase activity, which is consistent with the marginal effect of EDTA on enzyme activity. Please review these conclusions.	- English checking was done accordingly. - The SDS-PAGE gel (Figure 6) was inserted into the manuscript as supporting result. - The reference format was revised. - According to the result, all metal ions were proven to act as marginal effectors on xylanase activity. Apparently, Cu^{2+}, Mn^{2+} and Zn^{2+} slightly increased the xylanase activity by 1.3%, 0.9% and 0.4% in 5 mM buffer compared to the control. In contrast, the inhibition on xylanase activity was found in the presence of Al^{3+} by reduction of xylanase activity of 17.6%. In particular, Cu^{2+} was the strongest enhancer whereas Al^{3+} was the strongest inhibitor among the metal ions on xylanase activity in this study. - Besides that, according to Sandrim et al. (2005), EDTA reduced the xylanase activity by 2.7% as compared to its control. Similar study on xylanase activity by <i>A. caespitosus</i> also indicated that 1% to 2% of activity was reduced by EDTA (Reference: Sandrim VC, Rizzatti ACS, Terenzi HF, Jorge JA, Milagres AMF, Polizeli MLTM. Purification and biochemical characterisation of two xylanases produced by <i>Aspergillus caespitosus</i> and their potential for kraft pulp bleaching. Process Biochemistry. 2005;40: 1823-1828).
<u>Minor</u> REVISION comments		
<u>Optional/</u> <u>General</u> comments	The manuscript describes the production, purification, and kinetics characterization of a xylanase from submerged batch cultures of <i>Aspergillus brasiliensis</i> using wheat bran as the sole carbon source. In general, the work is well designed and experiments performed are adequate for the conclusions made by the authors. However, there are some issues that should be addressed by the authors: - The English usage is poor, the manuscript should be revised throughout to improve the language. - The authors claim that the purified enzyme has 38 KDa, as estimated by SDS-PAGE. A photograph of a gel showing the results obtained with the purified fractions should be included. - The References need to be fixed, as some use the complete names of the journals while others use abbreviations only.	The manuscript was revised accordingly. Kindly refer to the comments above.