



SDI FINAL EVALUATION FORM 1.1

PART 1:

Journal Name:	British Microbiology Research Journal
Manuscript Number:	Ms_BMRJ_22959
Title of the Manuscript:	OVERPRODUCTION OF XYLANASE FROM MUTANTS OF <i>Bacillus subtilis</i> USING BARLEY HUSK AS THE PRIME CARBON SOURCE IN SUBMERGED FERMENTATION AFTER RANDOM MUTAGENESIS OF ETHYL METHANE SULFONATE (EMS) AND ACRIDINE ORANGE (AO)
New Title:	OVERPRODUCTION OF XYLANASE FROM MUTANTS OF <i>Bacillus subtilis</i> WITH BARLEY HUSK AS THE PRIME CARBON SOURCE UNDER SUBMERGED FERMENTATION AFTER RANDOM MUTAGENESIS USING ETHYL METHANE SULFONATE (EMS) AND ACRIDINE ORANGE (AO)
Type of Article:	Original research Articles

PART 2:

FINAL EVALUATOR'S comments on revised paper (if any)	Authors' response to final evaluator's comments
- There are still many grammatical errors that the authors must correct or the editor will have to deal with. - The authors cannot compare the putative mutants as a group with the wild type!!! - The authors have still not answered the question: Which of MXB1, MXB2, MXB3, MXB4 and MXB5 is actually a mutant with significantly elevated level of xylanase production compared to the wild type and which is not? - The level of Xylanase production in none of the putative mutants is double (100%) that of that of the wild type!!! Given the very low levels of xylanase production, I actually doubt that any of the putative mutants is a xylanase over producing mutant despite the ANOVA result. - Compare the values of the maximum cell counts of: 1.40×10^8 cells/mL for wild type, 1.16×10^8 cells/mL for MXB 1, 1.32×10^8 cells/mL for MXB 2, 1.13×10^8 cells/mL for MXB 3, 1.27×10^8 cells/mL for MXB 4 and 1.21×10^8 cells/mL for MXB 5 were attained at 24 h of fermentation, respectively- ON PAGE 9 AND - Based on Figure 4, the maximum level of extracellular protein secretion from the wild type and mutants of <i>B. subtilis</i> was attained after 24 h of fermentation. In the present study, the mutant strains of MXB 2 and MXB 4 possessed the highest maximum extracellular protein concentration of 0.82 mg/mL with the cell count of 3.36×10^8 cells/mL and 3.13×10^8 cells/mL, respectively. This was followed by the mutant of MXB 3 with its protein production of 0.81 mg/mL from cell count of 3.32×10^8 cells/mL – ON PAGE 13 AND 14 The authors claimed they have corrected them. But the differences have not been resolved or explained. - The conclusion is still too general and still too long	The manuscript has been revised. All mutant strains of <i>B. subtilis</i> were successfully synthesized relatively higher production of xylanase than their parental wild type in submerged fermentation using barley husk as the prime carbon source. Notably, the maximum xylanase activity of 1.76 ± 0.02 U/mL was attained by the mutant MXB 4 of <i>B. subtilis</i> which was approximately 29.4% increase in xylanase activity than the wild type with 1.36 ± 0.003 U/mL. Furthermore, MXB 1, MXB 2, MXB 3 and MXB 5 also exhibited comparatively higher maximum xylanase activity of 1.64 ± 0.009 U/mL, 1.73 ± 0.05 U/mL, 1.74 ± 0.02 U/mL and 1.66 ± 0.02 U/mL compared to their parental wild type. All are mutants, the sequences of the xylanase gene are in the progress of publication in a peer-review journal. The paper has been accepted but still in the progress of editing. The corrections had been performed: Based on Figure 4, the maximum level of extracellular protein secretion from the wild type and mutants of <i>B. subtilis</i> was attained after 24 h of fermentation. In the present study, the mutant strains of MXB 2 and MXB 4 possessed the highest maximum extracellular protein concentration of 0.82 ± 0.02 mg/mL with the cell count of $1.32 \times 10^8 \pm 2.3 \times 10^7$ cells/mL and 0.82 ± 0.03 mg/mL with $1.27 \times 10^8 \pm 2.14 \times 10^7$ cells/mL, respectively. The conclusion has been shorten accordingly.