

Review Form 3

Journal Name:	Journal of Advances in Biology & Biotechnology
Manuscript Number:	Ms_JABB_127896
Title of the Manuscript:	Mutation breeding for genetic improvement and the development of high yielding mutant variety of sesame (Binatil-3)
Type of the Article	Original Research Article

PART 1: Comments

	Reviewer's comment	Author's Feedback <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
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 manuscript holds significant value for the scientific community, particularly in the fields of plant breeding, agricultural biotechnology, and food security. It demonstrates the successful application of gamma-ray-induced mutation breeding to enhance desirable traits in sesame, a crop of high nutritional and economic importance. The development of Binatil-3, an improved sesame variety with superior yield, early maturity, and resistance to major pests and diseases, highlights the potential of genetic improvement to address agricultural challenges. This research contributes to sustainable crop production and has direct implications for improving sesame cultivation in Bangladesh and similar agro-ecological regions, thereby supporting food security and rural livelihoods.	
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.	yes	
Is the manuscript scientifically, correct? Please write here.	yes	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	This manuscript is scientifically robust and technically sound due to its methodical approach and comprehensive experimentation. The research follows a systematic process, utilizing gamma-ray irradiation to induce genetic variability and meticulously evaluating 47 mutants over multiple years and locations. The results are grounded in thorough field trials and statistically validated data, demonstrating significant improvements in agronomic traits, yield, and resistance to biotic stresses. Additionally, the successful registration of the mutant SM-10-04 as Binatil-3 by the National Seed Board underscores the practical relevance and reliability of the findings. The manuscript exemplifies rigorous scientific methodology and adherence to best practices in plant breeding research.	
Is the language/English quality of the article suitable for scholarly communications?	yes	
Optional/General comments		

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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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