Review Form 3

Journal Name:	**Journal of Advances in Biology & Biotechnology**
Manuscript Number:	**Ms_JABB_130798**
Title of the Manuscript:	**Effect of bee attractants on foraging behaviour of honey bees and seed yield of Aster flowers**
Type of the Article	**Original Research Article**

PART 1: Comments

	Reviewer's comment	**Author's Feedback** *(Please correct the manuscript and highlight that part in the manuscript. 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.	1. The study addresses a critical challenge in Aster seed production by exploring the use of affordable, locally available bee attractants. This has high relevance for small and marginal farmers, particularly in India. **2.** The focus on improving pollination efficiency using natural solutions like sugar and jaggery solutions is timely and practical for sustainable agriculture. **3.** Clear identification and separation of treatment groups (e.g., citral, geraniol, sugar solution, etc.) ensure valid comparison and reproducibility. **4.** The Introduction, though informative, is overly broad in some sections. For example, it spends considerable space on the importance of honeybees in general rather than narrowing down to the specific challenges in Aster pollination. A more concise introduction would improve focus.	
Is the title of the article suitable? **(If not please suggest an alternative title)**	**ok**	

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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.	**ok**	
Is the manuscript scientifically, correct? Please write here.	1. The study demonstrates that sugar and jaggery solutions perform as effectively as commercial attractants, which is an important contribution for cost-effective pollination management in Aster. 2. Linking the enhanced bee activity to improved seed yield is a significant finding with practical implications for other cross-pollinated crops as well. 3. The methodology lacks details about the preparation of the sugar and jaggery solutions (e.g., whether additives were used, pH levels, or other properties). Including these details would aid in replicating the experiment. 4. The duration of bee observations (e.g., number of days or weeks after the final spray) is not clearly justified. It would be helpful to explain why the specific observation intervals were chosen 5. The treatments using citral, geraniol, and lemongrass oil attracted fewer bees compared to sugar and jaggery solutions. While these essential oils contain compounds like citral and geraniol, known to mimic bee pheromones, their lower efficacy in this study may be attributed to their volatile nature or suboptimal concentration. Further research on higher concentrations or blending these attractants with food-based solutions could provide more insights into their potential efficacy. 6. Use bar charts to compare visitation rates across treatments for better visual representation. 7. Tables and figures, though detailed, could benefit from better formatting. For example, large tables with repetitive data may be condensed or presented graphically to improve readability. 8. While the coefficient of variation (CV) is provided, its implications are not discussed. 9. Revised content to be included in the MS : The sugar solution (10%) attracted a significantly higher number of bees, comparable to the jaggery solution (15%), with no statistically significant difference observed between the two treatments. 10. Bee visitation rates were recorded by counting the number of bees observed visiting flowers within a 1 m^2 area during a 5-minute period. Observations were conducted at three-hour intervals, from 9:00 AM to 6:00 PM.	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	1. Some key claims, such as the role of sugar solutions in stimulating bee foraging behavior, rely heavily on older studies (e.g., Waller, 1970). Incorporating recent references would strengthen the paper's credibility.	
Is the language/English quality of the article suitable for scholarly communications?	1. Some sentences are awkwardly phrased. For instance, "Cross pollination can be significantly enhanced by utilizing pollinators particularly honeybees, which are known to be one of the most efficient, cheap and eco-friendly way..." could be rephrased for clarity. A thorough language edit is recommended	
Optional/General comments	**1.** While sugar and jaggery solutions effectively attract honeybees, their potential effects on non-target insect species were not assessed in this study. Future research should investigate the broader ecological impacts of using these attractants in open fields.	

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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:

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