

Dear Reviewer,

Thank you very much for the suggestions. We have revised the manuscript as suggested. Below are our itemized responses to the assistant editor's comments on our original manuscript entitled, "Combinations of lemongrass and star anise essential oils and their main constituent: synergistic housefly repellency and safety against non-target organisms" Manuscript: ID: insects-2855137". We thank you, the reviewer for making our paper more readable and useful for readers. If you need us to do anything further, please let us know immediately. Thank you for your attention.

Sincerely yours,

Mayura Soonwera

Professor, School of Agricultural Technology, King Mongkut's Institute of Technology Ladkrabang (KMUTL), Ladkrabang, Bangkok 10520, Thailand.

Comments from Author's Reply to the Review Report (Reviewer 2)	Our response to the comment
Combinations of lemongrass and star anise essential oils and their major constituent: synergistic housefly repellency and safety against non-target organisms. The aim of this study is to present study evaluated housefly repellency and repellent synergy of combined and individual formulations of lemongrass and star anise essential oils (EOs) and their active constituents. The paper is well written, but I do have some questions and concerns. In order of the text and line numbers: 1. More details should be provided how EOs were chosen. What did preliminary data suggest>?	1. Now, we have added it as suggested in lines 100-102.
2. More details should be provided as why concentrations of EO single component and combination formulations were determined. What did preliminary data suggest?	2. Now, the details are in Lines 151-155.
3. How did you determine to use a concentration of 12% DEET? What does this concentration correspond to in terms of repellency?	3. For the repellency test, the only reason that we tested 12% DEET was because it was the concentration that was commercially available as synthetic repellent in Thailand.
4. Line 207- Line 207- please do not have the formula go over 2 lines.	4. Thank you for your suggestion. Now, we have revised it as suggested.
5. Line 240- What concentration does 10,000 ppm correspond to in terms of concentration of repellent?	5. The 10,000 ppm corresponds to 1% (v/v) of repellent, in Lines 256-258.
6. Lines 290-292- please check the order or ranking of compounds with respect to repellent rates. I believe that some of these compounds are not reported in the correct ranking order (e.g., 5% lemongrass should not be ranked ahead of 1% <i>trans</i> -anethole.	6. We have deleted some info in those lines according to another reviewer's comment. Hence, the new info in Lines 313-316 does not have this ranking problem.
7. It is very difficult to follow the listing of repellent rates the way the authors have reported this currently. I would suggest putting this information into a tabular format AND labeling e.g., Figure 2 as Fig. 2A and Fig. 2B (Lines 308-311) to separate single versus combination formulations.	7. Now, Figure 2 is presented as A and B to separate so.
8. Why was DEET data not included in Fig. 2?	8. Figure 2 has already included DEET data.
9. I would suggest including the repellent index values into a tabular format AND labeling e.g., Figure 3 as Fig. 3A and Fig. 3B	9. Now, Figure 3 is presented as A and B to separate so.

(Lines 308-311) to separate single versus combination formulations.	
10. Why was DEET data not included in Fig. 3?	10. The definition of the RI (repellent index) 12% DEET is undefined. These pieces of info are irrelevant to the purpose of the figure to present the repellent index of each formulation.
11. I would suggest including data pertaining to synergistic repellent index and increased repellent values into tabular form.	11. Thank you for your suggestion. Now, we have made Figure 4 easier to follow, so we have not included a table because it would take more valuable space in the manuscript.
12. The data shown in Fig. 4 is difficult to follow. Why is the data pertaining to SRI for compounds not listed in pairs e.g., SRI data for 1% lemongrass EO + 1% <i>trans</i> anethole and IR data for 1% lemongrass EO + 1% <i>trans</i> anethole.	12. The increased repellent (IR) value is calculated as %repellent of a combination – the sum of %repellent rates of the two components/% repellent rate of the combination x 100. Therefore, there can be only one IR value, even for a combination of two components. There is no single IR for a single component. We have described this in the manuscript in Line 219 to Line 222.
13. Why was DEET data not included in Fig. 4?	13. The IR of 12% DEET is one, by definition, and the SRI (synergistic repellent index) of 12% DEET is undefined. These pieces of info are irrelevant to the purpose of the figure to present the synergistic repellent index of each combination.
14. The data presented in Figs. 5 AND 6 need to be re-written in bigger font. There is too much data, and it is impossible to read (e.g., standard error bars, letters to denote statistical levels, LT ₅₀ , etc.).	14. Thank you for your suggestion. We have changed the photos in Figures 5 and 6 so that now, the standard error bars, letters to denote statistical levels, and LT ₅₀ are clear.
15. The letters and arrows denoted in Fig. 7 are impossible to see and the photos are of poor quality, making it impossible to see any abnormal shapes in the antennae or morphological damage.	15. Thank you for your suggestion. We have changed the photos. Now the damages to the antenna parts of the housefly are visibly clear.
16. Putting data into tables (as per above) will help with making references in the Discussion section (Lines 399-516) and the Conclusions section (Lines 518-527).	16. We heed your words. However, we think the pieces of info in the figures are all clear and easy to notice, so we did not change the figures into tables.