Comment on egusphere-2022-598
Anonymous Referee #1

Referee comment on "Technical Note: Bioaerosol identification by wide particle size range single particle mass spectrometry" by Xuan Li et al., EGUsphere, https://doi.org/10.5194/egusphere-2022-598-RC1, 2022

General:

The authors have explained the general background and previous research on the topic well. However, the last paragraph of introduction are results from the study and should be moved to results and discussion. The aims of the study are not clearly stated and should be included in the introduction section. In the results section, it was sometimes hard to differentiate what was literature review and what were the new results reported by the authors.

Specific:

- Add details for choosing these 15 strains
- State the reasons for choosing blood agar and the incubation periods for both bacteria and fungi. Fungi often takes longer to grow in agar compared to bacteria.
- In section 3.1, how did the authors determine if the biological particles were single cells or clumps?
- Is it probable to add bioaerosols to fig 4?
- Table 2 reports only average. It would be more informational with average ± SD
- In section 3.4, how representative is S. aureus for all bioaerosols? The authors could add a representative fungus or a mixture of bacteria and fungi.

Edits:
Page 4 – The tense is inconsistent for sample determination section.

Line 195 – Serine and alanine needs to be formatted

Table 2 – Species “Fungus” is singular. I believe the authors are referring to a group of fungi.