

Atmos. Meas. Tech. Discuss., referee comment RC3
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Comment on amt-2020-490

Jing Wang (Referee)

Referee comment on "Comparative characterization of the performance of bio-aerosol nebulizers in connection with atmospheric simulation chambers" by Silvia G. Danelli et al., Atmos. Meas. Tech. Discuss., <https://doi.org/10.5194/amt-2020-490-RC3>, 2021

It is a very interesting paper that compares the performance of three nebulizers for the work of bio-aerosols in atmospheric simulation chambers (ASC). The authors investigated the efficiencies of the nebulizers in association with the airflow and the subsequent viable fraction of the bacterial cells after nebulization into an ASC. The paper points out nicely the advantages and disadvantages regarding the performances of each nebulizer and allows the reader to follow easily by pointing out a clear conclusion in the end.

Just a few remarks from my side:

- Make sure to use the same font, size, ect. to fulfill the format requirements
- It's difficult to understand what the 11% (line 22) refer to exactly. Make it more clear in both the abstract and results section
- Line 39: "non-trivial"
- Line 65: "of the cfu..."
- I think it is very nice how you described the different nebulizers in 2.2, however it would make more sense to move this section to the Introduction section
- Line 142: "sterilization system, too"
- In section 3.1 it would be nice to read a bit more about how it is possible to compare one nebulizer in ml, while the other one is in minutes
- Avoid statements that are vage such as in line 186: "output of viable bacteria turned out to be quite high" and rather write those results with clear statements (eg. by including numbers)
- Use the same units throughout the whole paper